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ATTRACTION, DISCREPANCY, AND RESPONSES TO
PSYCHOLOGICAL TREATMENT.**

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ATTRACTION, DISCREPANCY, AND RESPONSES TO
PSYCHOLOGICAL TREATMENT

DISSERTATION


Presented in Partial Fulfillment of the Requirements for the
Degree Doctor of Philosophy in the Graduate School of
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by

Michael James Patton, B.S. (Educ.), M.A.

The Ohio State University
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Approved by


Adviser
Department of Psychology

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VITA

- July 20, 1936 Born - Chicago, Illinois
- 1958 B.S. (Education), University of Idaho, Moscow, Idaho
- 1958-1960 ... Graduate Resident Assistant, Men's Residence Halls,
The Ohio State University, Columbus, Ohio
- 1960 M.A., The Ohio State University, Columbus, Ohio
- 1960-1963 ... Associate Dean of Students and Instructor in Psychology,
State University College, Oswego, New York
- 1963-1964 ... Program Assistant, The Ohio Union,
The Ohio State University, Columbus, Ohio
- 1964 Psychology Trainee, U.S. Veterans Administration
Hospital, Chillicothe, Ohio
- 1964-1965 ... Student Personnel Assistant, Office of the Dean of Men,
The Ohio State University, Columbus, Ohio
- 1965 Psychology Trainee, U.S. Veterans Administration
Mental Hygiene Clinic, Columbus, Ohio
- 1965 Counseling Supervisor, Department of Psychology
The Ohio State University, Columbus, Ohio
- 1965-1966 ... Teaching Assistant, Department of Psychology
The Ohio State University, Columbus, Ohio
- 1966 Counseling Supervisor, Department of Psychology,
The Ohio State University, Columbus, Ohio

FIELDS OF STUDY

Major Field: Counseling Psychology

Professors Harold B. Pepinsky, Frank M. Fletcher, Francis P.
Robinson, Lyle D. Schmidt, and Maude A. Stewart

Minor Field: Developmental Psychology

Professors John E. Horrocks and George G. Thompson

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CHAPTER I

The Problem in Perspective

In certain social situations where two persons respond directly to each other, it is expected that one or both participants will attempt to modify the other person's behavior. The initial counseling interview exemplifies one such interaction in that one of the participants, the client, is likely to be seeking assistance from the other, the counselor, who is likely to offer to the client whatever assistance he is able. In the general case of which counseling is a particular instance, one of the participants, the client, is thus seen to be dependent both upon his own responses and those of the other person for whatever help the occasion may provide. Whether the social interaction is construed by the client to be helpful will depend in the final analysis upon his view of what has taken place. The interpretation itself may be mediated by the client's evaluations of the other person and of his behavior during the interaction.

An experiment was designed to test predictions about events that are logically related to two such evaluative responses by a client. One of these is the extent to which he is personally attracted to the other person, and the second is his response to what is discussed as more or less discrepant from what he would like to have talked about. It is assumed that the formal properties of the situation are ones to which both the rationales and empirical findings of social psychological research are directly relevant.

Social Influence and Psychological Treatment

More explicitly, the counseling situation is assumed to be a kind of social influence process. In a general sense Secord and Backman (1964) refer to social influence as those psychological processes that shape a "person's attitudes toward aspects of his environment" (p. 95). Pepinsky's (1966) definition of social influence as "any situation in which one or more persons. . . can be interpreted as acting to modify the beliefs or behavior of one or more other persons" (p. 11) implies a class of events in which that of counseling can be expressly included.

The formal properties of a situation in which social influence is instrumental in changing a client's beliefs or behavior, however, can be given even more explicit definition. Pepinsky and Karst (1964) point out that counseling is most often construed to involve two persons, a counselor and a client, who are together long enough for direct interaction to occur between them. It is assumed that the interaction between the two is instrumental in producing in the "client. . . a change in state" (p. 333), and that this change has some of its antecedents in the bias imparted by the counselor and acquired by the client. It is further assumed that the counselor's bias refers to a specific set of beliefs about why and how the client is to change. It is, therefore, the client's acquisition of these beliefs that determines for the counselor the extent to which he has been helpful (cf., Pepinsky, 1966). Through his exercise of social influence, then, the counselor is seen as attempting to indoctrinate the client with his own biases or beliefs.

The counselor's attempt to induce change in his client may be considered to be an instance of a more generic event labeled psychologi-

cal treatment, defined in the following manner: any situation in which one or more persons (A) attempt to modify the beliefs or behavior of one or more other persons (B) so as to make (B) more productive in A's view (cf., Pepinsky, 1966). Given the formal properties mentioned above, it is relevant, therefore, to investigate antecedents that facilitate or hinder a counselor's attempts to change a client.

A Concept of Interpersonal Attraction and Communication Discrepancy

Secord and Backman (1964) note that "one of the prevailing characteristics of human thought and behavior is its tendency to be consistent" (p. 109). In studying attitude change, many social psychologists have treated consistency as an important factor in the formation and change of attitudes (cf., Brown, 1965). This is particularly true of those psychologists whose approaches are generally labeled as "balance," "congruity," or "dissonance" theories (cf., Newcomb, 1953; Osgood & Tannenbaum, 1955; Festinger, 1957; Heider, 1958; Rosenberg & Abelson, 1960).

It is a premise of the current study that this tendency toward consistency also applies to the responses made by a client when confronted in psychological treatment with an inducement to change, and to do so in a direction advocated by the counselor. Special emphasis is given in this experiment, however, to the work of Newcomb (1953, 1961) and Sampson and Insko (1964) because they are practically the only ones who have isolated both communication discrepancy and interpersonal attraction, as factors affecting self-consistency, for study in a single theoretical formulation or experiment. A theoretical modification of

the work of these particular authors has been made and tested, therefore, in a situation corresponding to that of psychological treatment where a subject could attempt to achieve consistency by accepting or rejecting the counselor's influence.

A state of interpersonal attraction, i.e., reciprocated liking among group members, is assumed by a number of social psychologists to increase the influence that group members may have upon each other (cf., Newcomb, 1953, 1956, 1961; Thibaut & Kelley, 1959; Homans, 1961; Secord & Backman, 1964). Among the very few investigators to study the effects of interpersonal attraction upon psychological treatment, Goldstein (1962, 1965, 1966) has provided considerable evidence to support his thesis that this is an important determiner of behavior change in that kind of situation. In a recent review of research on therapist-patient expectancies in psychotherapy, he shows how feelings of attraction affect psychotherapeutic interaction (1962, chapters, 3 & 4). Using an operant conditioning model to explain why a patient may be impelled to accept prognostic expectancies communicated by his therapist, Goldstein incorporates Newcomb's (1953) theory of interpersonal behavior to explain more fully when it is that such an influence will be likely to occur. To illustrate this latter point, Goldstein cites a correlational study by Heller and Goldstein (1961), in which the prediction was supported that over time a patient's attraction to his therapist would be associated in a significant positive manner to the therapist's prognostic expectancies for the patient's improvement.

In a more recent study of behavior related to psychological treatment, Goldstein (1965) attempted to induce either high or low

attraction in a patient toward his therapist in order to determine the relationship between this variable and other kinds of behavior during therapy. Because Goldstein used actual patients in this research, he refrained, on ethical grounds, from attempting to induce strong negative attraction. Hence he was unable to obtain a desired spread in attraction between his high and low attraction patients. Even so, there was a positive relationship between attraction and the patient's "openness to influence," and in general the amount of the patient's attraction toward his therapist was reciprocated in the latter's attraction toward his patient. Though Goldstein provides evidence to suggest that interpersonal attraction is an important variable in psychotherapy, he does not make clear when it is to be considered as an independent or dependent event in such an interaction between persons.

Communication discrepancy is also considered by many social psychologists to be a variable that determines how one person can be expected to exert influence upon another (cf., Newcomb, 1953; Festinger, 1957; Heider, 1958; Rosenberg & Abelson, 1960). Discrepancy between the communicator and the recipient is generally considered to be a state of affairs in which person A receives from person B information about an event that is to some degree inconsistent with A's opinions or attitudes about the event. There has been little agreement among investigators, however, in specifying the conditions under which discrepancy is likely to bring about predicted behavior change (cf., McGuire, 1966). Current research suggests that the greater the communicator-recipient discrepancy, the greater the behavior change. Its effects are modified, however, by the manipulation of the amount of advocated change (cf., Hovland &

Pritzker, 1957), by the manipulation of "involvement" (cf., Zimbardo, 1960), by the manipulation of the degree of perceived choice (cf., Freedman, 1964), and by manipulating perceived communicator credibility (cf., Aronson, Turner & Carlsmith, 1963).

With regard to psychological treatment, Lennard and Bernstein (1960) reported that when discrepancy exists between what the patient and therapist expect the former to talk about in psychotherapy, "manifestations of strain appear in their interpersonal relations" (p. 153). In a study of client role expectancies, Appel (1960) found a client's expectations to have changed the most overtime when they had been originally most discrepant from the counselor's "ideal" expectations for his client (cf., Hovland & Pritzker, 1957).

Newcomb (1953), as mentioned earlier, has incorporated both interpersonal attraction and communicator discrepancy in a single theory of interpersonal behavior. He assumes that in order to behave adaptively, a person strives to maintain a balance or consistency among the various cognitions or interpretations of those events he experiences. Because a person is dependent upon communication with others to validate his view of himself and his world, however, Newcomb argues that the interpersonal situation serves either to maintain or disrupt his cognitive balance. It is in a person's own best interests, therefore, to strive for consistency among the cognitions relevant to his interaction with others. To account for one person's behavior in the interpersonal situation, Newcomb attributes two cognitions to the person which are assumed to be representative of his phenomenal view of the relationship: i.e., the first person's attraction toward another person, and his attitude toward the objects of their communication.

By definition, attraction refers to a person's positive or negative orientation, i.e., like or dislike, toward another, and attitude refers to his positive or negative orientation toward the objects of their communication. If this be so, Newcomb argues, a person will be attracted toward another to the extent that they both hold similar attitudinal orientations toward objects of common interest and importance.

Cognitive imbalance may exist for one person, for example, whenever another person communicates to him information about common and important events that is discrepant from his own attitudes toward these events. In striving to maintain balance in a given situation, the first person may change the nature of his attraction toward the other, or his perception of the other's attraction toward him; or he may attempt to change the other person's attitude, his perception of the other's attitude, or even the nature of his own attitude toward the event. It would appear, then, that the question of "who changes what?" is highly dependent upon situational variables such as the amount of communicator discrepancy, frequency of interaction, status and power differences between the participants and the degree of openness with which one person attempts to influence the other. As Brown (1965) notes, balance theory "does not undertake to specify the particular effect of new information" (p. 550). In any case, Newcomb (1953) proposes that the likelihood of achieving balance increases with positive attraction and with the intensity of the attitudes held by the participants.

A test of propositions implied by a cognitive consistency model is provided in an experiment by Sampson and Insko (1964). These authors focused on one person's judgments of autokinetic phenomena in response

to judgments provided by another person of equal status. In deriving specific predictions from the general ideas of cognitive consistency theory, Sampson and Insko supported their hypothesis that when P (a person) likes O (another person) and perceives discrepancy between their judgments of autokinetic phenomena, or when P dislikes O and perceives similarity between their judgments, P will subsequently change his judgments, and this change will be associated with a significant interaction effect between attraction and similarity. In addition, the authors supported their prediction that attraction would account for the direction of P's change; i.e., that when P changes, it will be so as to decrease his similarity to a disliked O, or to increase his similarity to a liked O.

In accounting for a person's behavior in this kind of situation, the authors formally defined it as "a three-entity interpersonal situation composed of P, O and X, where X is a judgmental position maintained by P and O" (1964, p. 134). It was further argued by Sampson and Insko that this system is balanced for P under the following conditions: (a) where P likes O and perceives that he and O are similar in their evaluation of X; (b) where P dislikes O and perceives that he and O are dissimilar in their evaluation of X.

The general proposition on which the argument of Sampson and Insko is based, therefore, is as follows: a person will strive to achieve cognitive balance by maintaining a similarity of attitudes between his own and those of someone he likes and a dissimilarity of attitudes between his own and those of someone he dislikes.

To attribute the formal properties of balance theory and Sampson and Insko's schema to a psychological treatment situation, it is

necessary to define the conditions under which a client may attempt to maintain balance by accepting the counselor's influence. In doing so it is recognized that there are attributes of the psychological treatment situation not shared by the autokinetic situation or other situations commonly employed in social psychological research. Psychological treatment, for instance, has a greater likelihood of occurrence in everyday life and involves, in addition, not a relationship of peer equality as the work of Newcomb (1961) and Sampson and Insko (1964) imply, but a relationship in which the counselor is legitimately expected to exert influence on a client, who in turn expects to hold a subordinate position in the relationship.

Warrant for assuming the presence and possible effects of counselor expertise in the present study is presented below. Sampson and Insko predicted that when various combinations of attraction and attitude similarity are made to occur together they will effect an attitude change on the part of an S. Aronson, Turner and Carlsmith (1963) point out, however, that the addition of a high degree of communicator credibility will likely serve to accentuate the effects of opinion change. Similarly, Zimbardo (1960) demonstrated that pressures to change one's opinions are augmented when the communicator is perceived to be both credible and personally attractive. Tannenbaum and Gengel (1966) found and unexpected positive attitude change toward a communicator when negative change had been predicted, and they attributed this effect to a "halo" attached to the communicator because of his authority or position.

Hence, to derive predictions from balance theory that would correspond to the psychological treatment situation as defined earlier, the

following general proposition is stated: If person A openly attempts to influence person B and person A is otherwise not known to person B, and if person A is a counselor who is therefore in a legitimate position to attempt to exercise influence but does not have the power to enforce it, and if the objects of influence are the preferences of both for a set of discussion topics that are of important concern to them, then: when person B likes the counselor, he is more apt to be influenced by him than when person B does not like the counselor; and when person B dislikes the counselor, he is more apt to avoid (i.e., move away from) his influence than when he likes the counselor.

In this experiment, a subject encountered a counselor after the S had been induced to be positively or negatively attracted toward his counselor. It then became the counselor's task to influence the S to prefer discussion topics that were, by prior determination, either similar to or discrepant from the S's original preferences. It was the purpose of the study, therefore, to determine the effects of attraction and discrepancy in modifying the S's preferences for discussion topics.

According to the rationales of Newcomb (1953) and Sampson and Insko (1964), the foregoing statements imply that, under conditions of cognitive imbalance, an S will be motivated to make some changes in his preferences for discussion topics in order to achieve balance. Assuming, then, that both the attraction of the S toward the counselor and the counselor's preferences for certain discussion topics are held constant, the changes S makes in striving to maintain balance would be expected to occur in his preferences for the discussion topics. Under these conditions, the S would attempt, therefore, to increase the differ-

once or dissimilarity between his preferences and those of a disliked counselor, or to decrease the difference between his preferences and those of a liked counselor. A summary of theoretical predictions is presented in Table 1.

Table 1
Summary of Theoretical Predictions

	S likes Counselor	S dislikes Counselor
S & Counselor preferences are similar	(1) Balanced situation. Less change expected than in 2 & 3. Less S & Counselor topic preference dissimilarity expected than in 3 & 4	(3) Imbalanced situation. More change expected than in 1 & 4. More S & Counselor topic preference dissimilarity expected than in 1 & 2.
S & Counselor preferences are discrepant	(2) Imbalanced situation. More change expected than in 1 & 4. Less S & Counselor topic preference dissimilarity expected than in 3 & 4.	(4) Balanced situation. Less change expected than in 2 & 3. More S & Counselor topic preference dissimilarity expected than in 1 & 2.

In a situation where attraction and the counselor's preferences are held constant, and in which the dependent event is the difference between the S's preferential ordering of discussion topics before and after his perception of the counselor's preferences, the theory predicts that an S's change in preferences will be associated with a significant interaction effect between the attraction and discussion topic variables. The direction of this change would be toward establishing or maintaining a balanced system. That is, the S will rank his final discussion topic preferences so as either to increase or to maintain similarity between his and the counselor's preferences when the S likes the counselor,

or either to increase or to maintain dissimilarity when the S dislikes the counselor.

CHAPTER II

Method

Design

The S's attraction to the counselor and the extent of discussion topic similarity between the S and the counselor were used as the independent variables in this experiment, and were manipulated within a two-factorial design. Each variable contained two levels permitting four combinations in the experiment.

1. Condition 1: in session 1, the S was induced to be positively attracted to the counselor, and in session 2, was exposed to counselor discussion topic preferences similar to his own.
2. Condition 2: in session 1, the S was induced to be positively attracted to the counselor, and in session 2, was exposed to counselor discussion topic preferences discrepant from his own.
3. Condition 3: in session 1, the S was induced to be negatively attracted to the counselor, and in session 2, was exposed to counselor discussion topic preferences similar to his own.
4. Condition 4: in session 1, the S was induced to be negatively attracted to the counselor, and in session 2, was exposed to counselor discussion topic preferences discrepant from his own.

The sequence of experimental procedures was as follows:

1. Initial determination of the S's three most preferred topics,
2. Induction of attraction set: first experimental manipulation,
3. First procedural check on the S's attraction to the counselor,
4. The S's encounter with the counselor: confirmation of his prior attraction set,
5. The counselor's communication to the S of his most preferred topics: second experimental manipulation,

6. Final determination of the S's most preferred discussion topics,
7. Second procedural check on the S's attraction to the counselor, his willingness to have the counselor in a real counseling situation, and his evaluation of the counselor's helpfulness.

For half the Ss, steps 6 and 7 were reversed to counterbalance for order effects in the presentation of the dependent measures.

Independent variables

The relationship between the S and the counselor was experimentally manipulated by inducing the S to be either positively or negatively attracted toward the counselor. This set was induced prior to the interview and was confirmed during the interview. Thus each experimental situation involved a naive subject, a counselor confederate, and the experimenter.

The manipulation of similarity between the S's and the counselor's preferences for a set of discussion topics was achieved by having the counselor advocate topics that were, by prior determination, either similar to or discrepant from the S's initial three most preferred topics.

Dependent variables

The dependent variables selected to test the predictions derived from balance theory represented the S's responses to the experimental procedures, and fell into two major classes: (1) an analysis of the S's preferential ordering of discussion topics before and after the interview with the counselor, and (2) an analysis of the S's responses to the counselor following the interview.

For the rank ordering of the discussion topics, there were two measures of the S's preferences: The first measure involved the dis-

crepancy between the initial and final ranks assigned by the S to the three topics used to make the counselor appear similar to or discrepant from those topics initially most preferred by the S. This measure reflects the amount of change in the S's final preferences, relative to his initial preferences, for those topics advocated by the counselor, and is relevant to testing the hypothesis (page 16) which predicts that Ss under conditions of imbalance or cognitive inconsistency tend to change their preferences in comparison to Ss under conditions of balance or cognitive consistency. The second measure involved the absolute discrepancy or dissimilarity between the S's final ranks for the three topics advocated by the counselor, and the counselor's ranks (always 1, 2, and 3) for these same topics. This score reflects the final degree of similarity or dissimilarity between the S and the counselor and is relevant to testing the hypothesis (page 16) which predicts that Ss will rank their final preferences so as to maintain or increase dissimilarity to a disliked counselor, or maintain or increase similarity to a liked counselor.

The measures of the S's responses to the counselor were determined by a postinterview questionnaire on which the S rated his willingness to have the confederate for a real counselor, and his evaluation of the confederate's helpfulness as a counselor during the interview.

Hypotheses

The predictions tested in this study define the conditions under which interpersonal attraction and communication discrepancy mediate an S's responses to the experimental situation. In a more generic sense, they relate the events of psychological treatment to events prescribed

by the propositions on page 10, and to the propositions of Newcomb (1953) and Sampson and Insko (1964). Hypothesis 1 below predicts that an S's change in discussion topic preferences will be accounted for by an interaction of the attraction and discussion topic variables. Hypotheses 2, 3, and 4 predict that attraction, as a main effect, will account for whether the S moves toward or away from the counselor's influence, and for the S's evaluative responses to his counselor.

1. It is predicted that Ss will change their three most preferred discussion topics more under the conditions of topic discrepancy-positive attraction (condition 2) and topic similarity-negative attraction (condition 3) than under the conditions of topic similarity-positive attraction (condition 1) and topic discrepancy-negative attraction (condition 4).

1.1 If an S responds to the three topics he most prefers as discrepant from those most preferred by the counselor, and if he is positively attracted to that counselor, then he will change the ranks he assigns to the counselor's topics more than will an S who responds to his three most preferred topics as similar to those of a liked counselor, or an S who identifies his most preferred topics as discrepant from those of a disliked counselor.

1.2 If an S responds to the three topics he most prefers as similar to those most preferred by the counselor, and if he is negatively attracted to that counselor, then he will change the ranks he assigns to the counselor's topics more than will an S who identifies his three most preferred topics as similar to those of a liked counselor, or an S who identifies his most preferred topics as discrepant from those of a disliked counselor.

2. It is predicted that for an S in the conditions of topic similarity-positive attraction and topic discrepancy-positive attraction there will be less dissimilarity between the ranks that he and the counselor assign to their most preferred topics than for an S in the conditions of topic similarity-negative attraction and topic discrepancy-negative attraction.

3. It is predicted that an S under the condition of either topic similarity-positive attraction or topic discrepancy-positive attraction will evidence more willingness to have the confederate for a counselor than will an S in either of the remaining conditions.

4. It is predicted that an S under the condition of either topic similarity-positive attraction or topic discrepancy-positive attraction will evaluate the confederate as having been more helpful as a counselor during the interview than will an S in either of the two remaining conditions.

The Sample

The 72 Ss who volunteered to participate in this experiment were undergraduate males at The Ohio State University, and were drawn from the following two groups: (1) 61 Ss from the several sections of an educational skills course offered by the Department of Psychology, and (2) 11 Ss from two sections of an educational psychology course taught by the experimenter. The educational skills group is typically composed of freshmen from the undergraduate colleges of the University who are experiencing academic difficulty. The educational psychology group is composed primarily of freshmen and sophomore students enrolled in the College of Education.

Though the Ss ranged in age from 18 through 26, their average age was 18; and they had been enrolled in the University for an average of two quarters. In order to control for the possible effects of sex differences, only male Ss and male experimenters were used.

Measures of the Dependent Variables

The following methods and instruments were used to assess the Ss' reaction to the experimental procedures.

Change and direction of change in
the S's preferential ordering of
discussion topics

To obtain repeated measures of these dependent variables it was necessary to construct a list of discussion topics on which, before and after having encountered the counselor, the S could rank order his preference for each topic. A population similar to that from which the Ss were drawn was used in developing the list, to give greater face validity to the items and the Ss' task of ranking them.

Prior to the quarter in which the experiment was conducted, the E asked 20 male students enrolled in sections of an educational skills course to list those topics they would prefer to discuss if they were going to talk with a counseling psychologist (appendix 1-B). The several topic areas elicited in this manner were then combined with selected topic areas from the 1950 revision of the Mooney Problem Check List (Mooney, 1950). From these two sources a fifteen item Topic Preference Rating Scale (appendix 1-C) was constructed and administered to approximately 275 students in other sections of the educational skills course.

This second group of students was asked to rate each topic on a thirteen point scale indicating the extent to which they would prefer to talk about each one if they were to see a counseling psychologist. This rating task was intended only to familiarize the students with the topics because after a student had finished, he was instructed to go back and rank, from 1 through 15, the topics he would most through least prefer to discuss. These latter ranks were used in selecting the final topics for the study.

In analyzing the ranks given to the topics, only data obtained from the 137 male students who responded to the list were used. Nine of the fifteen topics were selected because this figure was considered large enough to allow the S some range of choice, and under appropriate conditions, to allow his choices to appear clearly discrepant from those of the counselor. A final selection of topics was made after placing the means and the S.D.'s from the final ranking of the fifteen topics in ascending order, where the lower means represented those topics most preferred by the students (Table 15 of appendix 3). Three topics from each extreme and from the middle of the list were then selected.

So that the counselor could be made similar to or discrepant from the S's three most preferred topics, the S ranked the nine topics on the Experimental Opinion Form (appendix 1-D) from most to least preferred. To ensure greater reliability, the S was instructed to alternate his ranking by first locating his most preferred topic, next his least preferred topic, then his next most preferred topic, and so on.

The S's final topic preference ranking was made with the same nine topics now placed in what was represented to him as a Personality Preference Test (appendix 1-E). Measures of the amount of change were limited to the S's initial and final ranking of the three topics that had been used to make the counselor appear to be similar to or discrepant from the S. Differences between the initial and final ranks assigned to these topics were summed to obtain the measure of change. This procedure is given illustration in Appendix 1-F.

The scores interpreted as direction of change, i.e., toward or away from those topics advocated by the counselor, were determined by summing the absolute differences between the S's final ranks for the three topics advocated by the counselor, and the counselor's ranks (always 1, 2, and 3) for these same topics. This meant that when the counselor was made to be similar to the S, he advocated those topics to which the S had initially assigned the ranks of 1, 2, and 3 (i.e., most preferred). Hence, if the S, in assigning his final ranks, gave any or all of these three topics a rank lower than 1, 2, or 3, it was interpreted as movement away from the counselor's preferences. By contrast, when the counselor was made to be discrepant from the S, he advocated those topics to which the S had initially assigned the ranks of

9, 8, and 7 (i.e., least preferred). This meant that if the S, during his final ranking, gave any or all of these three topics a rank higher than 9, 8, or 7, it was interpreted as movement toward the counselor's preferences (appendix 1-F).

The S's willingness to have the confederate for a counselor, and his evaluation of the counselor's helpfulness

A postinterview questionnaire (i.e., Final Interview Rating Scale, Appendix 1-G) was constructed with each of 7 items on a 13 point scale, and was used to obtain scores on these two dependent variables. Responses to items 6 and 7 were used for this purpose and all other items served as buffers, except item 3 which served as the second procedural check on the attraction set.

Selection and Training of Counselor-Confederates

Three male graduate students in Counseling Psychology at The Ohio State University were selected to perform as confederate counselors in the study. Each confederate had completed his Master's degree and was working toward his Ph.D. In addition, each had had considerable experience working with a variety of clients in a number of different professional settings. They were interviewed by the E to determine their availability, interest in gaining research experience and willingness and ability to play a simulated counselor role which called for expressions of liking and disliking for any S.

An explicit set of directions about how he was to behave and what he was to say during the interview was given to the confederate. Experience in playing the appropriate roles was gained with actual Ss during

extensive pilot research, and through practice sessions in which the E and the confederate rehearsed in each other's presence. Tape-recordings were used throughout the pilot interviews and training period.

Suggestions on how to elaborate each topic were provided to the confederate. Because it was anticipated that he might have to speak about any of the nine topics over the course of the experiment, he was asked to familiarize himself with these instructions. In addition, the confederate was rehearsed to act as if he liked or disliked the S and was again given explicit suggestions and directions for this task (Appendix 2-A).

Experimental Setting

The study was conducted, throughout, in the University's Behavioral Science Research Laboratory. This modern facility was ideally suited to the study in that all interviews were conducted in rooms equipped with two-way reversible mirrors and high fidelity sound monitoring systems. The experimenter observed all 72 interviews through the reversible mirror from an adjacent observation room.

Procedure

Selection of subjects

Personal contact was made with all Ss who participated in the experiment by the E who made an oral appeal for volunteers in their classes (Appendix 2-B). Following this appeal, those Ss who volunteered were administered the Marlowe-Crown Social Desirability Scale merely to add later face validity to the induction of the attraction set. Since it was not intended that the S's scores be determined, no further use

was made of this instrument. The Ss were assigned to appointment times that were available and which matched their own schedules. They were also given appointment reminder slips, which instructed them on how to locate the Laboratory. About two days prior to his appointment, the S's instructor orally reminded him of his appointment, and on the evening prior to his appointment, as a further reminder, the E called the S.

All Ss were made aware at the time of the E's request for volunteers, and just prior to their encounter with the confederate, that the purpose of their participation was for research on counseling. They were not led to expect actual counseling assistance on this occasion.

Session 1

The script followed by the E during his contacts with the S may be found in appendix 2-C. Each S was met by the E in the Laboratory's reception area where the S was asked to fill out the Experimental Opinion Form (appendix 1-D), on which he ranked his preferences for the nine discussion topics. This task took approximately 3 to 5 minutes. The S was led to believe that this ranking was for the purpose of helping the E devise an instrument to be used with actual clients at some future time and was not to be an integral part of his interview with the counselor. Pilot research had indicated that when an S was allowed to focus exclusively on these topics during the interview, he appeared to attend less to his relationship with the counselor. The S was asked, therefore, to make his ranking in a room other than that in which the interview with the counselor was to be conducted.

When the S had finished this task, the E took him to the interviewing room to brief him about his interview with the counselor. Every

S was told that the E was studying ways of improving interview efficiency by using methods similar to those of the time-and-motion studies carried on in industry. Therefore, the E, S was told, would be interested in who talked when and how much. The S was further told that, to help him prepare, he could expect that the counselor would probably treat their encounter much like that of an actual intake interview. Every S was made aware that the E would be observing and listening to the interview but was assured that the S's comments would be held in strict professional confidence.

The S was then informed that in order to increase interview effectiveness, attempts had been made to match Ss and counselors who had highly similar personalities and who should enjoy talking together. Credence was given to this procedure by telling each S that this had been accomplished by matching the S group with the counselor group, on the basis of their scores on the opinion form that the S's had filled out in their classes and of demographic data available from University records on both groups.

To induce the positive attraction set, the S was told that he and the counselor to whom he had been assigned were the closest match that had yet been achieved, and how pleased the E was to tell the S they would get along very well together. Further, the E stated that he knew the counselor and the type of student he worked best with, and this type appeared to be someone very much like the S. The E also mentioned that the counselor, after reviewing the S's background folder, believed that he could work very well with the S and was looking forward to meeting him.

The negative attraction set was induced by telling the S that his assigned counselor had called in to cancel his appointment because he had had to handle an emergency that had arisen in his professional work setting. The S was then informed that in order to carry on with the research he had been assigned to a counselor who was available to help at that hour. The E apologized profusely to the S for this state-of-affairs because he did not think that the S would get along very well with this counselor. The S was then told that the E wanted to treat him fairly by informing him fully of what he knew about this counselor and the type of student he worked best with; that is, this type of student appeared to be someone very different from the S. Finally, the E stated that he felt the counselor might irritate the S a little, but hoped that the S would make the most of it, anyway.

Following both types of induction, the S was asked to keep all preceding information in confidence with the E so that it would not bias the counselor's interviewing style. The E's actual reason for this request was to insure that the S would not disrupt the interview procedures by calling directly into question his relationship with the counselor.

The S was then asked to fill out the Pre-Interview Rating Scale (appendix 1-A) in order to obtain the first procedural check on the attraction set induction. The E then left the room to meet the counselor.

Session 2

The E proceeded to a nearby office and according to the random assignment of the experimental manipulations, briefed the counselor on

which three discussion topics (i.e., either the S's first or last three preferences) he was to emphasize with the S, and whether the counselor was to act as if he liked or disliked the S. Returning to the room, the E introduced the S to the counselor and went next door to the observation room.

The S and the counselor were left alone for a 25-30 minute interview. During the first 20 minutes, the counselor played a positive or negative role according to the random assignment of this experimental manipulation. He attempted to get the S to talk about his general background according to his interview script (appendix 2-A).

About 5 minutes prior to the close of the interview, the counselor informed the S that if he and the S were actually going to see each other in real counseling, they should agree on what they would talk about. He stated that in the S's case, he would prefer the S to talk about three topics, which he then briefly elaborated. These topics were those that the E, according to random assignment, had intended to be either similar to or discrepant from the S's initial three most preferred topics. The counselor then reinforced his statement that these topics were the ones he would definitely prefer the S to talk about if they were to meet again. This procedure was included to ensure that the S would attempt to achieve balance, if imbalance existed for him, by changing his own attitude toward the topics and not by changing his perception of the counselor's attitude toward the topics.

In closing, the counselor told the S that he had confirmed his original impression of him, and that to be fair, he felt (or did not feel) that they would get along very well if they were to see each

other for real counseling. This procedure was intended to ensure that the S would not attempt to achieve balance by changing his perception of the counselor's personal attraction toward the S. The E monitored each interview to be sure that the confederate reliably performed his role.

When the counselor had departed, the E returned to the interviewing room and immediately administered postinterview questionnaires. To one half of the Ss, he administered the Personality Preference Test (appendix 1-E) first, and then gave the Final Interview Rating Scale (appendix 1-G). To counterbalance for any possible order effects that might arise through the S's responses to the two different classes of dependent measures, this order was reversed for the remaining half of the Ss (cf., Luchins, 1957).

The Personality Preference Test, a measure of the amount and direction of change in topic preferences, was presented to the S by telling him that the E needed more information about the extent of any personality similarity between him and the counselor. The directions, read aloud to the S, attempted to convey the impression that the closer the S's topic preference ranks were to the counselor's, the more similar the two persons were in personality structure. In order for the S to believe the counselor had also responded to the test, the E had previously drawn at random, red circles around a rank number for each topic, except for making certain that the three critical topics used to make the counselor similar to or discrepant from the S received the ranks of 1, 2, and 3. The S also answered a short self-descriptive adjective check list, which was appended to the topic list to add

"face validity" to the instrument as a measure of personality.

The decision to give the S's final ranking of the discussion topics the aura of personality testing was based on the E's observation during pilot research that the Ss had not responded to the topics as though they were personally concerned about them. The procedure finally used during the experiment appeared to increase the Ss' involvement with the topics (cf., Zimbardo, 1960).

On the Final Interview Rating Scale the S recorded his responses to the counselor (appendix 1-G).

Debriefing

During the final debriefing session, each S was asked about his reactions to having participated in the experiment (Debriefing Script, appendix 2-D). The extent of the S's awareness of the experimental procedures was determined by asking him to describe what he thought was going on. At no time was the E able to elicit any information from the S that indicated the S's awareness of the procedures.

When the E was satisfied that the S had given as complete a report as possible on his phenomenal responses to the situation, he was fully informed of the purpose and methods used in the study. His reactions to this information were then solicited and discussed. In closing, the S was requested to keep his experience in strict confidence for the duration of the study and was informed that the E would be happy to arrange a counseling referral if the S so desired.

Analysis of Data

Two Negro Ss were eliminated from the data analysis in order to

keep the cultural background of the experimental groups as homogeneous as possible. For the same reason, no foreign Ss were run. Data for 72 Ss were analyzed, with 18 Ss in each of the four experimental conditions. Each confederate saw 24 Ss, six in each of the four conditions. A total of 86 Ss had originally volunteered for the study, but in spite of the precautions taken, 16 did not keep their appointments. To complete the numbers needed to finish the study two replacements were required.

To test predicted effects of the experimental manipulations upon the dependent measures (see hypotheses 1-4, pp. 15-16), an analysis of variance program for replicated and non-replicated designs, devised by Naylor and Estep (1965) was used in preparing the data for computer analysis. This program was used to analyze the extent of main and interaction effects of the following variables:

- A - discussion topics (2 levels)
- B - attraction (2 levels)
- C - counselors (3 levels)
- D - order (2 levels)

In addition, the program was used to obtain difference tables that permitted an ordered arrangement of all means associated with each variable or combination of variables.

Analyses of the following dependent measures were performed: (1) of scores representing the amount of absolute change in the S's initial and final ranking of the three critical topics; (2) of scores representing the extent to which the S moved toward or away from the counselor's first three choices (i.e., direction of change); (3) of the S's willingness to have the confederate for a counselor; and (4) of the S's evalua-

tion of the counselor's helpfulness during the interview. Finally scores on the second attraction measure could be analyzed in this way, as the check on the experimental procedure.

The major test of each hypothesis was an F test to determine any predicted main or interaction effect. When the F was significant, a comparison of all means was also required. The latter analysis was made by means of the Newman-Keuls test, which determines the significance of the difference between any two means in an ordered set (Winer, 1962).

Hypothesis 1 called for testing on the amount of change variable the difference between the means of Ss in the positive and negative attraction conditions. Since these were combined means, and not single means in an ordered set, a t test was used in this case (Guilford, 1956). As a check on procedure, a t test was also used to analyze preinterview attraction scores, to determine whether there was a significant difference between the means of Ss who were supposed to be positively and negatively attracted toward their counselors.

CHAPTER III

Results and Discussion

The experimental and control manipulations, and the number of subjects exposed to each are presented below:

- A₁ - discussion topic similarity; n = 36
- A₂ - discussion topic discrepancy; n = 36
- B₁ - positive attraction; n = 36
- B₂ - negative attraction; n = 36
- C₁ - counselor-confederate no. 1; n = 24
- C₂ - counselor-confederate no. 2; n = 24
- C₃ - counselor-confederate no. 3; n = 24
- D₁ - presentation order of the dependent measures where the S responded first to the topic preference list, and second to the counselor evaluation scales; n = 36
- D₂ - presentation order reversed; n = 36

Prior to analyzing the dependent measures, two procedural checks were made on the attraction set in order to determine the validity of the experimental procedures. It will be recalled that the first check was made during session 1 after the E had attempted to induce the S to be either positively or negatively attracted to the counselor. The second check, to assess the S's reaction to his counselor, was made following his encounter with the counselor in session 2.

First Procedural Check on Attraction

It was assumed that Ss randomly assigned to the two attraction conditions would respond, in the expected directions, to the E's attempts to induce the attraction set, and would indicate the nature of their attraction toward the counselor on the Pre-Interview Rating Scale (appendix 1-A). This scale was composed of three items each on a thirteen point scale, where a higher rating represented a more favorable response to the counselor. Only item 2 which stated, "as far as I can tell at this moment, I am inclined to feel that I . . .," was used for this check on the induction procedure. The results in Table 2 suggest that the assumption of an initial attraction set is warranted.

Table 2

Comparison between Means on the First
Procedural Check on Attraction

Positive Attraction	Negative Attraction	Diff.	t	.p
M = 9.31	M = 6.36	2.95	7.98	<.01

The difference of 2.95 between the means for Ss in the two attraction conditions is significant at the .01 level. It should be noted, however, that Ss under the negative attraction condition seem to have been less willing to be as extreme in their ratings as Ss under the positive attraction condition. This finding reflects the hesitancy of several Ss to commit themselves to an expression of dislike for the counselor, and underscores the difficulty involved in attempting to persuade an S that he is not going to like someone he has not yet encountered.

When questioned about this hesitancy, several Ss informed the E during the debriefing that although they believed the E's induction overtures, they were still confident of their ability to get along well with the counselor because they never actively disliked anyone. This behavior appears to follow from a cultural bias against risking strong commitment toward a stranger, particularly in the form of openly expressed dislike.

Second Procedural Check on Attraction

This check was obtained from the S's response to item 3 of the Final Interview Rating Scale (appendix 1-G). The item was placed on a thirteen-point scale where a higher rating indicated more favorable attraction. The following question was asked: "As far as you can tell, did you like this counselor?" The analysis of variance reported in Table 3 reports the check made on this procedure.

Table 3

Analysis of Variance of the S's Attraction Toward the Counselor

Source	df	MS	F
Discussion Topics (A)	1	3.13	
Attraction (B)	1	741.13	329.39***
Counselors (C)	2	14.60	6.49**
Order (D)	1	3.13	
A x B	1	.35	
C x D	2	8.38	3.72*
A x B x C	2	11.01	4.90*
Error	48	2.25	

***p < .001

**p. < .01

*p. < .05

Table 3 indicates that the intended attraction effect has again been induced ($F_A = 329.39$, $p < .001$). It should be noted, however, that the second attraction score is also significantly affected by the counselors (C), the interaction between counselors and order (D), and that among attraction (B), discussion topics (A) and counselors. These results will be discussed further in reference to Tables 4 and 5.

A difference of 6.42 between the means of the attraction variable (i.e., positive = 11.03 and negative = 4.61) suggests that each S had correctly responded to his counselor as liking or disliking him, and had acted as though the effects of session 2 had confirmed and accentuated the effects of session 1. The finding that an S under the condition of topic discrepancy-positive attraction rated his attraction toward the counselor as favorable is at variance with the arguments of Newcomb (1961) and Byrne (1961) who contend that perceiving the other person as holding discrepant attitudes should make you less attracted to him.

As shown in Table 4 the significant main effect of the counselor variable ($F_C = 6.49$, $p < .01$), however, implies that the Ss also may have responded differentially toward their counselors. Evidence for the differential effects of the various counselors is presented in Table 4.

Table 4

Comparison between Means for
the Counselor Factor (C)

	\bar{c}_1	\bar{c}_3	\bar{c}_2
Ordered Means:	7.25	7.50	8.71
Differences:	\bar{c}_1	.25	1.46**
	\bar{c}_3		1.21**

** $p < .01$

The mean of 8.71 for confederate no. 2 in Table 4 is significantly greater than the means for the other two confederates, and suggests that he was able to elicit more favorable responses from the Ss, possibly by presenting himself in a manner that increased the S's attraction toward him. Since, however, the order variable (D) co-varied with the counselor variable (C), it is quite possible that order served to accentuate the individual counselor's effect.

Indeed, data in Table 5 further imply that not only was counselor no. 2 able to elicit more favorable responses from the Ss, but also when the S responded first to the counselor evaluation scales in interaction with counselor no. 2, the effect was accentuated. In fact, the differences between the counselor no. 2-order no. 2 interaction and all his other interaction combinations are significant--the only significant differences in Table 5.

Table 5

Comparisons between Means on the
Counselor-Order Interaction (CD)

	$\overline{C_1D_2}$	$\overline{C_3D_1}$	$\overline{C_1D_1}$	$\overline{C_3D_2}$	$\overline{C_2D_1}$	$\overline{C_2D_2}$
Ordered Means:	7.00	7.50	7.50	7.50	7.83	9.58
Differences:	$\overline{C_1D_2}$	.50	.50	.50	.83	2.58**
	$\overline{C_3D_1}$	.00	.00	.00	.33	2.08*
	$\overline{C_1D_1}$		.00	.00	.33	2.08**
	$\overline{C_3D_2}$			.00	.30	2.08**
	$\overline{C_2D_1}$				.00	1.75**

** p < .01

* p < .05

Inspection of the data from the A x B x C interaction (not reported here) also indicates that counselor no. 2 receives the highest mean ratings. These ratings, as might be expected, are received under the positive attraction condition.

It is evident that an S's liking for his counselor was due more to positive than to negative attraction. This over-all effect, however, was augmented considerably for those Ss who responded to counselor no. 2, and more particularly, when the response to counselor no. 2 was made prior to the final topic preference assignments. One may conclude, then, that the S's liking for his counselor is related to the prior attraction set, the counselor's confirmation of this set, and the S's opportunity to respond first to the counselor evaluation scales.

Change in the S's Preferential Ordering of Discussion Topics

Hypotheses 1, 1.1, and 1.2 on page 16 predicted that more change in discussion topic preferences would occur for Ss under conditions of topic discrepancy-positive attraction, and topic similarity-negative attraction than for Ss under conditions of topic similarity-positive attraction, and topic discrepancy-negative attraction. An interaction effect between discussion topic preference and attraction was predicted, therefore, in hypothesis 1. Table 6 presents the analysis of variance appropriate to testing this hypothesis.

Table 6 indicates support for the interaction prediction ($F_{AB} = 32.88, p < .001$), and Table 7 reveals that the mean amounts of change for condition 1, topic similarity-positive attraction (i.e., A_1B_1), and

Table 6

Analysis of Variance of the S's
Change in Topic Preferences

Source	df	MS	F
Discussion Topics (A)	1	1073.39	62.25***
Attraction (B)	1	2.72	
Counselors (C)	2	34.11	
Order (D)	1	16.06	
A x B	1	566.72	32.88***
A x D	1	102.72	5.96*
B x C x D	2	89.06	5.17*
Error	48	17.24	

***p < .001

*p < .05

condition 2, topic discrepancy-positive attraction (i.e., A_2B_1) appear to deviate markedly from chance, thereby contributing heavily to this interaction effect. These means suggest that positive attraction was more potent in determining whether an S changed or maintained his original preferences than was negative attraction.

Table 7

Comparisons between Means
for AB Interaction

	$\overline{A_1B_1}$	$\overline{A_1B_2}$	$\overline{A_2B_2}$	$\overline{A_2B_1}$
Ordered Means:	.28	6.28	8.39	13.61
	$\overline{A_1B_1}$	6.00**	8.11**	13.33**
Differences:	$\overline{A_1B_2}$		2.11	7.33**
	$\overline{A_2B_2}$			5.22**

**p < .01

The difference between the mean of .28 for condition 1 (topic similarity-positive attraction) and 6.28 for condition 3 (topic similarity-

negative attraction) suggests that when a disliked counselor advocates the same discussion topics preferred by his S, a "boomerang" effect occurs such that the S changes his attitude about his original preferences.

The difference between the mean of 13.61 for condition 2 (topic discrepancy-positive attraction) and 8.39 for condition 4 (topic discrepancy-negative attraction) suggests, however, that contrary to balance theory predictions, when a disliked counselor advocates topics that are discrepant from his S's, he will induce the S to make changes in his preferential ordering. Perhaps these data reflect the S's response to the counselor's credibility or expertise. If this is so, then balance theory does not fully account for the effects of a supervisor-subordinate relationship in this particular situation.

The mean of 13.61 in condition 2 (topic discrepancy-positive attraction) suggests that the counselor is able to induce more change when positive attraction is made to occur with topic discrepancy than when negative attraction is made to occur with topic similarity (mean of 6.28 for A_1B_2). While the means of these two conditions serve to support balance theory predictions, the theory implies that the changes here will be more equal. Since this was not the case, the results are again suggestive that the S responded to the expertise of the counselor by making more change in the positive condition and less change in the negative condition. That is, counselor expertise appears to accentuate the effects of positive attraction and attitude discrepancy, and to attenuate the effects of negative attraction and attitude similarity.

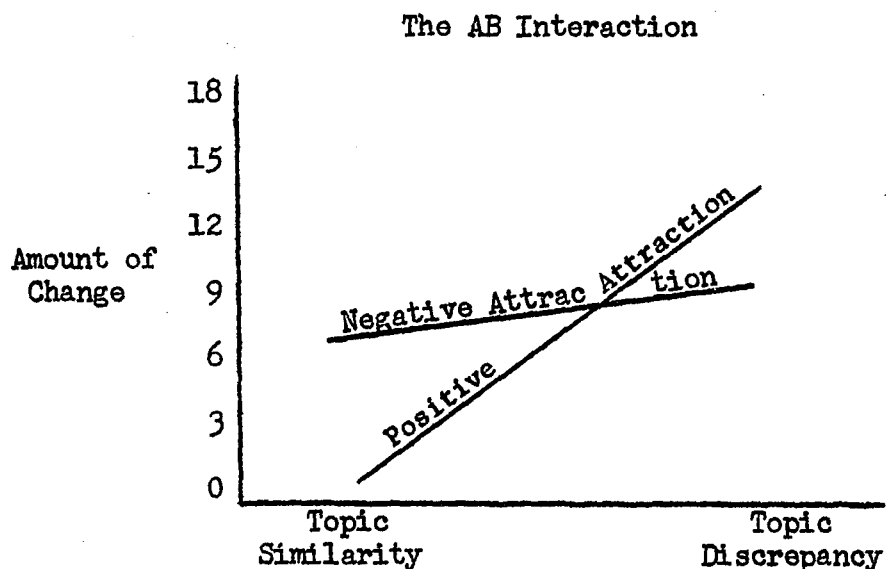
Further support for hypothesis 1 is offered in Table 8, where the

Table 8
Comparison between the Means of
Conditions 2 + 3 and 1 + 4

Conditions 2 + 3	Conditions 1 + 4	Diff.	t	p
M = 9.94	M = 4.00	4.94	3.42	<.01

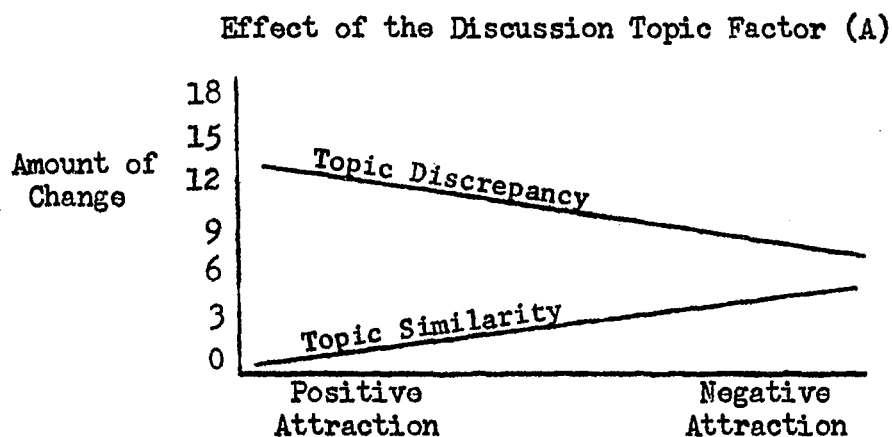
t test between the means of (a) the topic discrepancy-positive attraction and topic similarity-negative attraction (i.e., $A_2B_1 + A_1B_2$) conditions and (b) the topic similarity-positive attraction and topic discrepancy-negative attraction (i.e., $A_1B_1 + A_2B_2$) conditions is shown to be significant at the .01 level. That is, the greatest change between initial and final discussion topic assignments occurred for those Ss in conditions 2 and 3: either the S likes his counselor and their preferences are discrepant; or the S dislikes his counselor, and their preferences are similar. The effect of the discussion topic-attraction interaction is depicted graphically in Figure 1

Figure 1



The significance of the discussion topic variable (A) in Table 6 is to be noted ($F_A = 62.25, p < .001$). While this effect is not central to the prediction made in hypothesis 1, the Ss in the two topic discrepancy conditions (2 & 4) show more change than the Ss in the two topic similarity conditions (1 & 3). The large mean of 13.61 in condition 2 implies that the effects of discrepancy are more attributable to positive than to negative attraction. As would be expected from the significant F for the discussion topic factor, the mean of 3.28 for the topic similarity conditions (1 & 3) is significantly different from the mean of 11.00 for the topic discrepancy conditions (2 & 4) at the .01 level as indicated by the Newman-Keuls test. Apparently, when the counselor's preferences are made to be discrepant from those of the S, and when the S has opportunity to respond, he does so by changing his own topic preferences more than when the counselor is made to be similar. These data support the contention that greater communicator-recipient discrepancy is associated in a linear fashion with greater attitude change (cf., Zimbardo, 1960; Aronson, Turner & Carlsmith, 1963). By way of contrast with Figure 1, the main effect of the discussion topic variable is shown in Figure 2.

Figure 2



The analysis of variance reported in Table 6 also indicates that the interactions between topic and order, and among attraction, counselors, and order, are significant at the .05 level. Additional effects of the discrepancy-order interaction are displayed in Table 9 which reports the means for this (discussion topic x order) interaction.

Table 9
Comparisons Between the Means
for the AD Interaction

	$\overline{A_1D_2}$	$\overline{A_1D_1}$	$\overline{A_2D_1}$	$\overline{A_2D_2}$
Ordered Means:	2.55	4.00	9.33	12.66
	$\overline{A_1D_2}$	1.44	6.77**	10.11**
Differences:	$\overline{A_1D_1}$		5.33**	8.66**
	$\overline{A_2D_1}$			3.33*

**p < .01

*p < .05

The data in Table 9 suggest that the effects of order generally accentuate the above noted discrepancy effect, particularly when discrepancy interacts with the second presentation order of the dependent measures (i.e., counselor evaluation scales first, topic preference list second). The data from the B x C x D interaction (not reported here) suggest that the effects of change in topic preferences are attributable to two particular counselors in interaction with the attraction and order factors. Inspection of these data indicates that when confederate no. 1 interacts with negative attraction and order no. 1, he is associated with the least change for this condition; when this same counselor interacts with negative attraction and order no. 2, however, he is associated with

the most change for all combinations of conditions. When counselor no. 2 interacts with positive attraction and order no. 1, he is associated with the least change for all combinations of conditions.

Although the prediction that the most absolute change in topic preferences would occur for those Ss in the two imbalanced conditions (2 & 3) relative to those in the two balanced conditions (1 & 4) was sustained, the effects of discrepancy and its interaction with the second presentation order must be noted. Perhaps it is reasonable to expect that when the S is confronted by a counselor who has been made to be discrepant from him, the S has more reason to change and will change more when presented with the opportunity to do so.

In hypothesis 1.1 (page 16), it was predicted that Ss under condition 2 (topic discrepancy-positive attraction) would change their topic preferences more than Ss under conditions 1 and 4 (topic similarity-positive attraction and topic discrepancy-negative attraction). Data in Table 7 provide support for this prediction in that the mean of 13.61 in condition 2 (A_2B_1) is significantly greater than the means of .28 for condition 1 (A_1B_1) and 8.39 for condition 4 (A_2B_2). As mentioned above, when the counselor is made to be discrepant from the S and when the S is made to be positively attracted to the counselor, the counselor is more able to induce the S to change his topic preferences.

Only partial support for hypothesis 1.2 was achieved, as reference to Table 7 indicates. This hypothesis (page 16) predicted greater change for Ss in condition 3 (topic similarity-negative attraction) than for Ss in conditions 1 and 4 (topic similarity-positive attraction and topic discrepancy-negative attraction). The mean of 6.28 for condition no. 3 (A_1B_2) is significantly greater than the mean of .28 for condition no. 1

(A_1B_1), suggesting that the results of change here are due more to negative attraction than to topic similarity. Because the mean of 8.39 for condition no. 4 (A_2B_2) is significantly greater than the mean of 6.28 for condition no. 3 (A_1B_2), these data fail to support this aspect of hypothesis 1.2. On the face of it, this result would suggest that change is more attributable to topic discrepancy than to negative attraction. As an alternative to balance theory, however, it appears more feasible to suggest that, independent of balance considerations, counselor expertise serves to attenuate negative attraction by inducing the S to make less change when he is similar to the counselor, and more change when he is discrepant from the counselor.

Direction of Change in the S's Discussion Topic Preferences

This dependent variable was measured by determining the amount of dissimilarity between the S's final ranks for the three topics advocated by the counselor, and the counselor's ranks (always 1, 2 & 3) for these same topics. The scoring procedures ensured that for Ss in the topic similarity conditions (1 & 3) there would be a high positive correlation between their scores on measures of the amount and direction of change, and that for Ss in the topic discrepancy conditions (2 & 4) there would be a high negative correlation between these scores. It is recognized that in the case of topic similarity there is redundancy between the amount and direction of change measures. Since the first of the two dependent measures indicated the amount of absolute change relative to the S's initial position and without regard to sign, however, the additional dependent measure was employed to indicate the directionality of the S's final ranks relative to the invariant position advocated by the counselor.

Hypothesis 2 (page 16) predicted that when the S likes the counselor (conditions 1 & 2) he will rank his final topic preferences so as to be more similar to the counselor than will the S who dislikes the counselor (conditions 3 & 4). Therefore, it is expected that attraction will be shown to exercise a significant main effect. The analysis of variance relevant to testing hypothesis 2 is presented in Table 10.

Table 10

Analysis of Variance of Direction of Change
in the S's Discussion Topic Preferences

Source	df	MS	F
Discussion Topics (A)	1	272.22	20.04***
Attraction (B)	1	490.89	36.14***
Counselors (C)	2	18.01	
Order (D)	1	46.72	
A x B	1	3.56	
A x B x C x D	2	59.60	4.39*
Error	48	13.58	

***p < .001

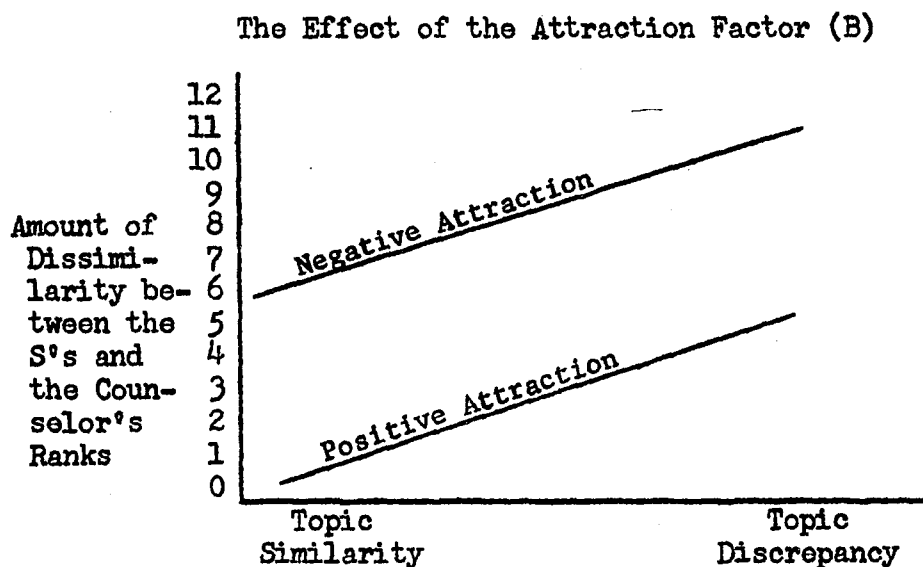
*p < .05

Before examining those effects relative to hypothesis 2, the significance of the discussion topic factor (A) should again be noted ($F_A = 20.04$, $p < .001$). The effect of discussion topics on this dependent measure is primarily a result of the design used in the experiment, in that there were two conditions in which the counselor was made to be discrepant from the S, and two in which the counselor was made to be similar. The invariance of the counselor's topic preference position relative to the S's contributes spuriously to a main effect by ensuring that the scores of those Ss for whom the counselor was made to be similar remain similar to the counselor by comparison with those of the S's for whom the counselor was made to be discrepant.

Table 10 indicates strong support for the predicted main effect of the attraction factor ($F_B = 36.14, p < .001$), and, as can be seen, other significant effects were obtained only for the $A \times B \times C \times D$ interaction ($F_{ABCD} = 4.39, p < .05$).

The difference between the means for the Ss in the positive (i.e., 3.39) and negative (i.e., 8.56) attraction conditions for factor B is as expected, significant at the .01 level by the Newman-Keuls test. These data suggest that (1) where topic similarity was made to occur with positive attraction the S ranked his final preferences so as to maintain his similarity to the counselor; (2) where topic discrepancy was made to occur with positive attraction the S ranked his final preferences so as to increase his similarity to the counselor; (3) where topic similarity was made to occur with negative attraction the S ranked his final preferences so as to increase his dissimilarity to the counselor; and (4) where topic discrepancy was made to occur with negative attraction the S ranked his final preferences so as to maintain dissimilarity to the counselor. It appears, then, that movement away from the counselor is related more to negative than to positive attraction, suggesting that the counselor is more able to induce the S to accept his topic preferences when the S is positively, rather than negatively attracted to his counselor. The effect of the attraction factor on this dependent measure is represented graphically in Figure 3.

Figure 3



Willingness to Have Confederate for a Counselor

To obtain a measure of this dependent variable, the S was asked for a reply to the following question: "If you wanted to get some real counseling help, how willing would you be to have this person for your counselor?" The S made his response on a thirteen-point scale where a higher score represented greater willingness. Hypothesis 3 (page 16) predicted that the S who was positively attracted to his counselor would manifest greater willingness to have the confederate for a counselor than an S who disliked his counselor. Therefore, a significant main effect of the attraction factor was predicted. The analysis of variance appropriate to testing this prediction is given in Table 11.

Table 11 indicates the effect of the attraction variable to be highly significant ($F_B = 209.45$, $p < .001$), and also demonstrates the lack of significance for any of the other variables or their interaction. The difference between the mean of 11.64 for the Ss in the positive

Table 11

Analysis of Variance of the S's Willingness
to Have the Confederate for a Counselor

Source	df	MS	F
Discussion Topics (A)	1	6.13	
Attraction (B)	1	1096.68	209.45***
Counselors (C)	2	3.35	
Order (D)	1	.68	
A x B	1	7.35	
Error	48	5.24	

***p < .001

attraction condition and that of 3.83 for the Ss in the negative attraction condition suggests that the counselor is considerably more able to induce the S to think favorably of a future relationship with him when the S likes his counselor than when the S dislikes his counselor. Thus, in deciding whether to have the confederate as a counselor, it appears that the S did so on the basis of his personal attraction toward the counselor, which was most likely reinforced by the counselor's statement that he felt he could or could not get along very well with the S (cf., Byrne & Rhamey, 1965).

Evaluation of the Confederate's Helpfulness

This dependent variable was measured by the S's response to the following question: "How helpful do you feel this counselor has been to you?" The S made his response on a thirteen-point scale where a higher score represented more helpfulness. Hypothesis 4 (page 16) predicted that an S who is positively, rather than negatively attracted to the counselor will also indicate the counselor to have been more helpful. Hence, a significant main effect of the attraction variable was predicted. Table 12 reports on the analysis of variance for the test of this hypothesis.

Table 12

Analysis of Variance of the S's Evaluation
of the Counselor's Helpfulness

Source	df	MS	F
Discussion Topics (A)	1	16.06	
Attraction (B)	1	544.50	114.63***
Counselors (C)	2	18.50	3.89*
Order (D)	1	2.00	
A x B	1	10.89	
A x D	1	46.72	9.84**
Error	48	4.75	

***p < .001

**p < .01

*p < .05

The significant F for the attraction variable ($F_B = 114.63$, $p < .001$) and the resulting significant difference between the two means of the Ss under each of the attraction conditions implies that the S's interpretation of the counselor's behavior as helpful is more dependent upon positive than on negative attraction. However, the counselors and an interaction between topic and order also contribute to the variance of the S's "helpfulness" scores and, thereby, serves to attenuate the predicted effects of hypothesis 4 as shown in Tables 13 and 14.

Table 13

Comparison Between the Means for
the Counselor Factor (C)

	\bar{c}_3	\bar{c}_1	\bar{c}_2
Ordered Means:	6.17	6.92	7.92
Differences:	\bar{c}_3	.75	1.75*
	\bar{c}_1		1.00

*p < .05

Results shown in Table 13 again suggest that counselor no. 2 receives the highest mean and is significantly different from counselor no. 3, though not from counselor no. 1. That counselor no. 2 contributes substantially to the significant counselor effect is evidence perhaps of his ability to present himself in such a way that he elicits more favorable response from the Ss than do the other counselors.

Table 14

Comparisons Between the Means for the
AD (topics x order) Interaction

	$\overline{A_2D_1}$	$\overline{A_1D_2}$	$\overline{A_2D_2}$	$\overline{A_1D_1}$
Ordered Means:	5.66	6.83	7.50	8.11
Differences:	$\overline{A_2D_1}$	1.27	1.94*	2.55**
	$\overline{A_1D_2}$		.66	1.27
	$\overline{A_2D_2}$			.61

**p < .01

*p < .05

Results in Table 14 suggest that when topic similarity is associated with order no. 1 (topic preference list first, counselor evaluation scales second) the S is prone to rate the counselor as more helpful (i.e., $M = 8.11$) than when topic discrepancy is associated with order no. 1 (i.e., $M = 5.66$). In this instance, the highest ratings are due more to topic similarity than to topic discrepancy. When discrepancy is combined with order no. 2, however, the counselor is rated as significantly more helpful (i.e., $M = 7.50$) than when discrepancy is combined with order no. 1 (i.e., $M = 5.66$).

When an S is asked to assess how helpful the counselor has been to

him, therefore, his response is seen to depend most importantly upon his attraction to the counselor. Yet the S's response is also dependent upon the manner in which the measure is presented to him in interaction with a counselor who has been made to be similar to or discrepant from him, and as well as upon the manner in which the counselor has presented himself to the S.

Discussion

The results of this experiment suggest that the S's acceptance or rejection of influence depends both on his attraction toward the counselor and on the extent to which the counselor's preferred discussion topics are made to be congruent with his own. In changing their discussion topic preferences, the Ss appeared to be responsive to both experimental manipulations in the two imbalanced conditions: topic discrepancy-positive attraction and topic similarity-negative attraction; these findings lend support to Newcomb's (1953) and Sampson and Insko's (1964) conceptions of the relationship between cognitive balance and interpersonal behavior.

In this study, for example, when the S was positively attracted to his counselor and learned that the counselor held an attitude toward events of common relevance that was discrepant from his own, the S responded by changing his own attitude about these events so as to be more similar to that of the counselor. The same phenomenon occurred when the S was negatively attracted to a counselor who held attitudes similar to his own; in this case, however, he changed away from the counselor's preferences.

The data further suggest that the obtained changes are attributable not only to the interaction of the attraction and discussion topic variables, but also to the effects of discrepancy between the participants, regardless of the attraction condition. More change did occur, however, when the S responded to the discrepancy in combination with positive attraction and the second presentation order of the dependent measures. That is, when the S likes the counselor and finds himself discrepant from him, he is induced to change his preferences more if he responds first to the counselor evaluation scales, and then to the topic preference list. Perhaps responding in this way served to increase his involvement with the topics since they were presented to him as a measure of how similar he was to the counselor in terms of personality.

One may infer from the data on topic preference change that attraction did increase the counselor's ability to influence the S's responses, as (Goldstein 1962), Back (1951) and Backman and Secord (1959) predict. The data, however, also provide evidence, apart from balance theory predictions, for an augmentive influence of discrepancy on the counselor's ability to induce the S to change. These results are in accord with the findings of Aronson, Turner and Carlsmith (1963), Zimbardo (1960), and Appel (1960), all of whom demonstrated that greater behavior change is associated with greater amounts of communicator-recipient discrepancy.

The attraction variable was associated with the extent to which which the S changed by moving toward or away from the counselor. This finding suggests that when the counselor was able to elicit either positive or negative attraction from the S, it served to mediate the direction in which the S ranked his final topic preferences. That is, when

the counselor was made to be similar to the S, positive attraction served to ensure that the S remained similar, and when the counselor was made to be discrepant, it mediated change toward the counselor. To a lesser extent, the effect of negative attraction was associated with greater dissimilarity of response by the S for both the similar and discrepant conditions.

These results, while supportive of the balance theory predictions made in this experiment, also suggest that the presence of an expert in such a dyadic relationship can serve to accentuate the predicted effects of positive attraction when it is made to occur with either topic similarity or discrepancy, and attenuate the predicted effects of negative attraction when it is made to occur with topic similarity or discrepancy.

It will be recalled that the Ss under condition 4 (topic discrepancy-negative attraction) changed their preferences more than was expected from the prediction made, and that this change appeared to be associated with the discrepancy effect. Yet these same Ss, in changing toward the counselor, ranked their final topics in a manner that revealed them to be more dissimilar to their counselors than all other Ss. The situation was one where they encountered a disliked but credible authority figure who advocated their acceptance of less preferred discussion topics. If these Ss felt constrained to change their original preferences because of finding themselves discrepant from a credible communicator, then it is reasonable to expect that some change would occur. A situation where one is induced to change by a credible yet disliked counselor suggests a mediating condition of dissonance arousal (cf., Festinger, 1957). If this were so, then one may also expect dissonance reduction to be

maximized by derogation of the counselor (cf., Zimbardo, 1960). Inspection of the data for the counselor evaluation scales indicated that these Ss consistently gave their counselors the lowest ratings.

The responsiveness of the Ss to the manipulation of the attraction variable was evident throughout this study as indicated by its significant effects on all of the dependent measures. This underscores the counselor's ability to behave toward the S such that the counselor becomes attractive or unattractive to the S, thereby enhancing or inhibiting the counselor's ability to influence the S's responses. In this experiment the counselors were asked to behave as if they liked or disliked a particular S, and were, therefore, acting more in accord with a prescriptive role than from spontaneous personal conviction. In the case of positive attraction, the counselors were, to use Jones' (1964) term, attempting to be "ingratiating." That is, they sought to elicit increased attraction from the S with behavior designed to create a positive impression. It goes without saying that their purpose was to gain the advantage of influence over the S by virtue of this increased attraction.

Jones defines ingratiating behavior as a "class of strategic behaviors illicitly designed to influence a particular other person concerning the attractiveness of one's personal qualities" (1964, p. 11). The behavior is considered illicit because it is assumed not to be directed toward the ends contained in the implicit contract that undergirds social interaction. More simply, this seems to mean that the ingratia- tor seeks favor from another by appearing to validate the other's defini- tion of why and how they are to interact. He invalidates this defini-

tion for his own advantage, however, by extending the boundaries of what the other would consider relevant to the interaction, and by doing so, he complicates the situation (1964, p. 10).

Viewed in this light, the effects of the counselor's attempts to increase attraction with ingratiating behavior have been striking. Not only did the S respond to this behavior in the counselor by stating that he liked him and would be willing to have him for a real counselor, but he also construed the counselor as having been helpful to him.

The question arises as to what the S's intentions were in responding as he did to the counselor's overtures. Jones suggests that favorable responses to another's ingratiating behavior represent a person's desire to interpret approval from the other as a sign of his own basic worth (1964, pp. 78-79). By responding favorably, in effect, the S may have been both agreeing that the approval given him was sincere and deserved, and was to be treated, therefore, as believable since it came from an "expert" (cf., Jones, Gergen & Jones, 1963). Since the sincerity of the counselor is to be questioned, however, there remains the possibility that the S, by accepting the counselor's approval, was serving his own vanity for autistic reasons (1964, pp. 70-80). The willingness of these Ss to believe the overtures of someone whom they had known for a total of 30 minutes is a sobering commentary on both the potent effects of interpersonal attraction, and the impression management skills of the counselors and the E.

Implications

Two findings from this study have particular relevance to some of the current research in social psychology. For example, the results of

the present experiment lend support to the general belief that the greater the attitude discrepancy between communicator and recipient, the greater will be the recipient's subsequent attitude change (cf., Zimbardo, 1960; Aronson, Turner & Carlsmith, 1963). It was found that Ss in the two topic discrepancy conditions (2 & 4) did, indeed, change their topic preferences significantly more than did the Ss in the topic similarity conditions (1 & 3).

Support was not gained, however, for Newcomb's (1961) contention that when one person responds to another as having discrepant attitudes, he will decrease his liking for the other person. It was determined, instead, that Ss in condition 2 (topic discrepancy-positive attraction) responded to the counselor by increasing their scores on the second attraction measure. These results also appear incongruent with Byrne's (1961) argument that "a stranger who is known to have attitudes similar to those of the S will be better liked than a stranger with attitudes dissimilar to those of the subject" (p. 713).

Even though a recent conference (cf., Super & Thompson, 1964) on the preparation of counseling psychologists gives recognition to the diverse activities of those so labeled, Wrenn (1962) implies that the psychological treatment of others who appear to need it continues to be the primary mission of Counseling Psychology. The present study has contributed to that mission by demonstrating the applicability of theory and empirical findings from social psychology to counseling research and practice.

In attempting to include Ss representative of those seen in actual counseling situations, and in making the experimental events themselves correspond to those of psychological treatment, however, present find-

ings could be more widely generalized than those of many experiments in social psychology. In addition, three actual counselors, carefully trained as confederates, were used. This ensured greater control over their behavior so that each S's behavior could be more systematically influenced and observed. Hence the finding that there was similarity among the confederates in their effect on the Ss has added to the external validity of the study (cf., Campbell & Stanley, 1963).

For these reasons, the experimental results can be interpreted as contributing to knowledge about the effects of social influence during counseling. The results suggest that a client's responses to a situation in which a counselor tries to modify his behavior are contingent both upon the extent to which he is personally attracted to the counselor, and on the extent to which the content of their discussion is congruent with the client's prior expectations.

CHAPTER IV

Summary

An experiment was designed to test predictions about the effects of interpersonal attraction and communication discrepancy on an S's responses to a counselor and to psychological treatment. The point of view was taken that psychological treatment is a kind of social influence process in which one important antecedent of client behavior change is the counselor's ability to indoctrinate the client with his own beliefs about how and why the client is to change (cf., Frank, 1959; Strupp, 1960; Popinsky & Karst, 1964).

To determine how interpersonal attraction and communication discrepancy might enhance or inhibit a counselor's ability to influence a client, the following predictions were tested in this study: (1) when an S is either positively attracted to a counselor who prefers discussion topics discrepant from his own, or negatively attracted to a counselor who prefers discussion topics similar to his own, he will make more changes in his topic preferences than will an S whose preferences are either similar to those of a liked counselor or discrepant from those of a disliked counselor. It was further predicted that when an S is positively rather than negatively attracted to his counselor he will (2) rank his final topic preferences in a manner more similar to that of the counselor; (3) express greater willingness to be counseled by him; and (4) evaluate the counselor as having been more helpful during the interview.

In a simulated intake interview situation, 72 undergraduate male Ss were subjected to two experimental manipulations: (1) the prior induction of a set to be positively or negatively attracted to a counselor-confederate, and (2) an interview with one of three counselor-confederates who attempted to induce each S to accept discussion topics, which, by prior determination, were made to be either similar to or discrepant from the S's. 18 Ss were run in each of four treatment conditions: (1) topic similarity-positive attraction; (2) topic discrepancy-positive attraction; (3) topic similarity-negative attraction; (4) topic discrepancy-negative attraction. Scores indicating the amount and direction in which each S was induced to change his topic preferences were obtained from the S's responses to a list of nine discussion topics; prior to and following his encounter with the counselor the S ranked these from most to least preferred. Scores indicating the S's post-interview attitudes toward his counselor were derived from the S's responses to appropriate items, each rated on a thirteen-point scale.

Support for hypothesis 1 was gained when Ss under conditions of topic discrepancy-positive attraction and topic similarity-negative attraction changed their topic preferences more than did Ss under the conditions of topic similarity-positive attraction and topic discrepancy-negative attraction. As predicted, there was a significant interaction between the discussion topic and attraction variables, and discrepancy effects were also noted in that more preference change occurred for Ss under the discrepancy conditions (2 & 4) than under the similarity conditions (1 & 3). In addition, it was suggested that counselor credibility or expertise served to accentuate the predicted effects of positive

attraction, and to attenuate the predicted effects of negative attraction in mediating the S's change in topic preferences.

Hypothesis 2 was supported by data which indicated that attraction mediated the S's responses in ranking his final topic preferences in a manner either similar or dissimilar to that of his counselor. That is, positive attraction mediated the S's responses in appearing similar to his counselor, and negative attraction mediated the S's responses in appearing dissimilar to his counselor. The significant main effect of the attraction variable in the analysis of the data related to hypotheses 3 and 4 provided support for these two predictions. It was determined that when an S is positively rather than negatively attracted to his counselor he will express greater willingness to be counseled by him and will also rate him as having been of more help during the interview.

The results of this experiment contain implications about the effects of social influence during counseling. They suggest that a client's responses to a situation in which a counselor tries to modify his behavior are contingent both upon the extent to which he is personally attracted to the counselor, and on the extent to which the content of their discussion is congruent with his prior expectations. The experiment itself was designed as a balance formulation of the cognitive consistency principle (cf., Secord & Backman, 1964; Brown, 1965). Specific predictions were derived by modifying some of Newcomb's (1953) and Sampson & Insko's (1964) propositions regarding cognitive balance, interpersonal attraction and communicator discrepancy.

APPENDIX I

Pre-Interview Rating Scale	A
Discussion Topic Preference List	B
Topic Preference Rating Scale	C
Experimental Opinion Form	D
Personality Preference Test	E
Illustration of Procedure Used to Measure Amount and Direction of Change in the S's Discussion Topic Preferences	F
Final Interview Rating Scale	G

A

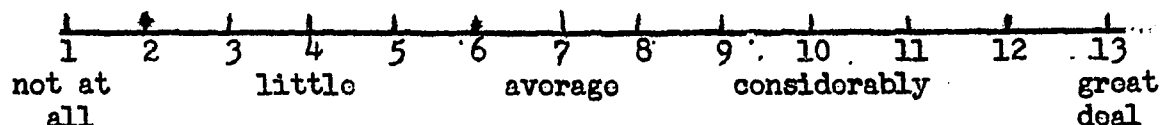
Pre-Interview Rating Scale

Even though you haven't met the counselor yet, we need your immediate impressions about him for the research. We realize it is difficult to be certain in answering the questions below, so just give the answer that is closest to your honest impressions at the moment. Please be assured that this form will not be shown to the counselor, nor will it be used to evaluate you or the counselor in any way.

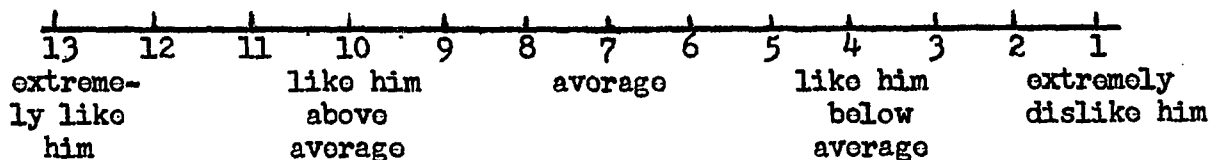
On the scales below, circle the number that describes how you feel about the counselor right now.

BE SURE TO NOTE THE DIRECTION OF THE RATINGS BEFORE YOU MARK THEM

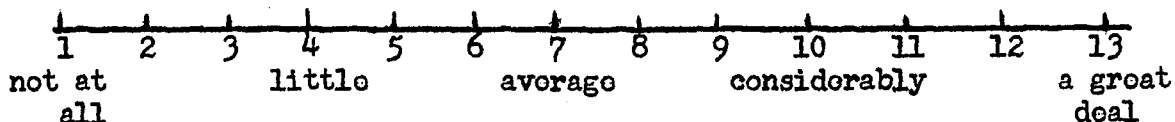
1. How sincerely interested in you do you think this counselor will be?



2. As far as I can tell at this moment, I am inclined to feel that I...



3. How much do you think the counselor to whom you are assigned likes to work with college students?



Discussion Topic Preference List

Note: Please do not sign your name on this form.

We are asking you to help us in devising a discussion topic rating scale to be used by students who request our counseling service. In order to both improve the effectiveness of counseling and to save counselor and student time, it would be helpful for a counselor to know beforehand what it is that a student prefers to discuss. To do this, it is first necessary to determine what things are of concern to students in general.

Directions:

Suppose that you have an opportunity to talk with a professionally trained counselor about problems of present concern to you. Please list below and briefly describe the topics that you, personally, would prefer to discuss with your counselor.

1.

2.

3.

4.

5.

6.

TOPIC PREFERENCE RATING SCALE

Please check:
 Male _____; Female _____

Note: Please do not sign
 your name on this form.

Directions:

Below you will find several problem areas that are often mentioned by students who talk with a counseling psychologist. It is the function of such a professionally trained person to help students with personal, social, study or vocational problems.

In filling out this rating scale, please assume for the moment that you have made an appointment, and are going to talk with a counseling psychologist about some things that are of present concern to you. With this in mind, check the extent to which you would prefer to talk with a psychologist about each of the areas below. Please do so by placing a check mark (✓) at that point on the scale which indicates the degree of your preference to talk about the area.

A. To talk about participation in extra-curricular life at O.S.U.

1	2	3	4	5	6	7	8	9	10	11	12	13
definitely do not prefer			do not prefer			not sure			prefer			definitely prefer

B. To talk about deciding what courses I should take

1	2	3	4	5	6	7	8	9	10	11	12	13
definitely do not prefer			do not prefer			not sure			prefer			definitely prefer

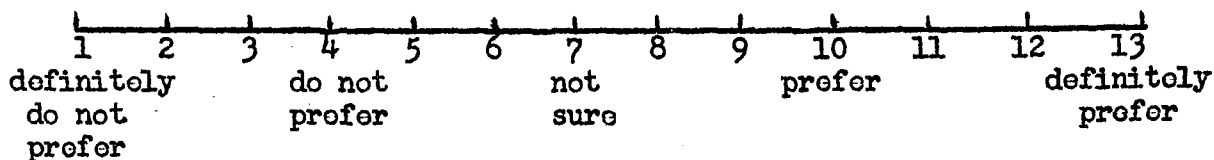
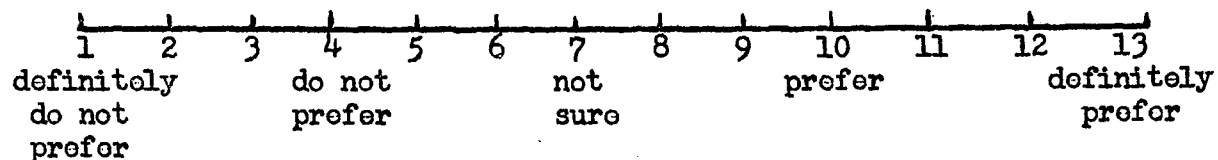
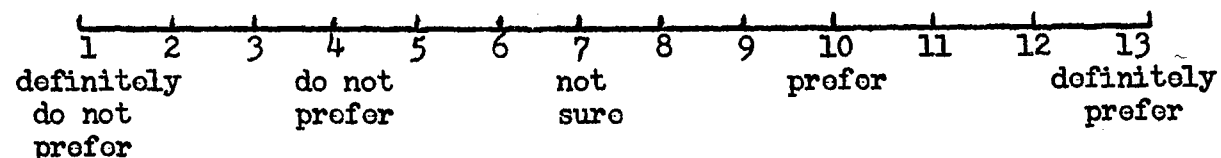
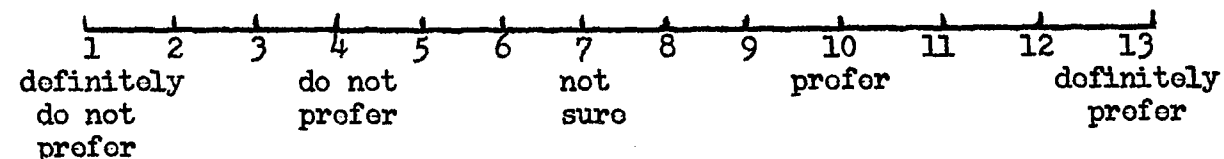
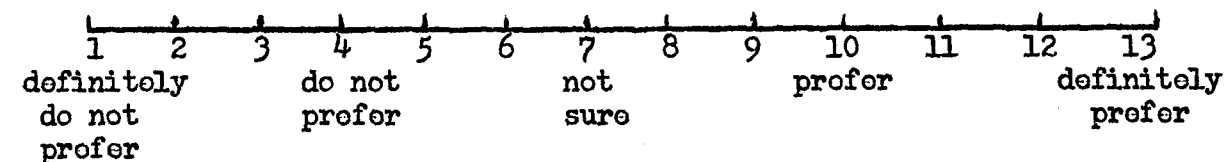
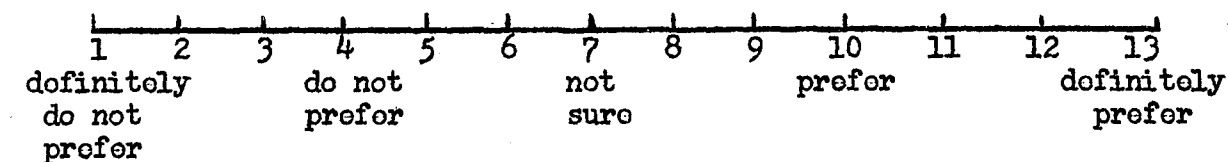
C. To talk about my feeling that O.S.U. is too large and impersonal

1	2	3	4	5	6	7	8	9	10	11	12	13
definitely do not prefer			do not prefer			not sure			prefer			definitely prefer

D. To talk about deciding on my future vocation

1	2	3	4	5	6	7	8	9	10	11	12	13
definitely do not prefer			do not prefer			not sure			prefer			definitely prefer

(Please go on to next page)

E. To talk about handling school and living expensesF. To talk about getting along with other peopleG. To talk about meeting my military obligationsH. To talk about my learning to study more effectivelyI. To talk about being in love and/or marriageJ. To talk about my purpose in going to school

(Please go on to next page)

K. To talk about sex matters

1	2	3	4	5	6	7	8	9	10	11	12	13
definitely			do not			not			prefer			definitely
do not			prefer			sure						prefer
prefer												

L. To talk about home and family matters

1	2	3	4	5	6	7	8	9	10	11	12	13
definitely			do not			not			prefer			definitely
do not			prefer			sure						prefer
prefer												

M. To talk about my feeling different from other people

1	2	3	4	5	6	7	8	9	10	11	12	13
definitely			do not			not			prefer			definitely
do not			prefer			sure						prefer
prefer												

N. To talk about my physical health

1	2	3	4	5	6	7	8	9	10	11	12	13
definitely			do not			not			prefer			definitely
do not			prefer			sure						prefer
prefer												

O. To talk about religious matters

1	2	3	4	5	6	7	8	9	10	11	12	13
definitely			do not			not			prefer			definitely
do not			prefer			sure						prefer
prefer												

-
- note: (a) please go back and rank the areas above by placing a one (1) to the left of that area you would most prefer to talk about with a counselor, and then place a two (2) by the next most preferred area, and so on through fifteen (15).
- (b) If you have areas you would prefer to talk about but they were not listed above, please list them below.

Experimental Opinion Form

Before you help us with the research interview, we would like to have you lend us a hand in testing or trying out this research opinion form that we are attempting to develop. It is a separate part of our research and does not pertain to your interview with the counseling psychologist. Instead, we are hoping to build a form that can be used with real counseling clients at some future time.

There are some topics listed below that students often talk about with a counseling psychologist when they see him at a regular counseling agency on campus. You can be helpful to us here, by imagining, for a moment, that you were seeing such a psychologist on a weekly basis at a counseling agency. With this imaginary state-of-affairs in mind, to what extent would you prefer to talk about each of the topics below with the counselor?

Complete the form by following these directions carefully:

1. Read through the entire list and find the topic you would most of all prefer to consider in real counseling, and put a (1) one beside it.
2. Next, find the topic somewhere in the list that you would least of all prefer to consider, and put a (9) beside it.
3. Now, find the topic that you would next most prefer to consider, and put a (2) two beside it.
4. Then, find a topic you would next to least prefer, and put an (8) eight beside it.
5. Next, assign a 3, then a 7, then 4, then 6, and last 5.

The complete order for assigning topics is: 1, 9, 2, 8, 3, 7, 4, 6 and 5.

- | | |
|--|--|
| <u> </u> A. Values or personal philosophy of life. | <u> </u> F. Deciding what courses to take. |
| <u> </u> B. Getting along with others. | <u> </u> G. Home and Family |
| <u> </u> C. Health and appearance. | <u> </u> H. School and living expenses |
| <u> </u> D. Out-of-class life at O.S.U. | <u> </u> I. How to study more effectively. |
| <u> </u> E. Deciding on a future vocation. | |

E

PERSONALITY PREFERENCE TEST

A Measure of Counselor-Student Similarity

Student instructions: (to be read aloud by the test administrator)

This phase of your participation in helping us constitutes a second research project, apart from the research interview. Here, we are interested in using a separate measure of personality similarity that calls for your own personal judgments about some items in comparison to the counselor's judgments. The test will not be shown to the counselor, and will not be used to evaluate you or him, personally, in any way.

You have now had an opportunity during the interview to get acquainted with the counselor. You also heard what he personally prefers to consider with you if you were to talk with him again.

The purpose of this test is to determine, further, the extent of any similarity between you and the counselor. This becomes a test of personality in that you will be answering the test items in relation to the counselor's answers. Therefore, the preferences you have for the test items, taken in comparison with the counselor's, reflect the extent of any underlying similarity between your personalities. Knowing now what your interview situation was like, and having experienced how you felt during the interview should allow you to be more aware of yourself and the counselor as you consider each item.

To be sure, we cannot make direct interpretations from your answers to specific aspects of your personality, but we can, however, assume that if you and the counselor have similar preferences, you are both probably very similar in personality structure.

We have obtained the permission of our participating counselors to allow us to use the answers they have given about what they would prefer to discuss with the students in a real counseling situation. These counselor preferences were made by their reviewing the test scores and background information of the student to whom they were assigned.

So, the question becomes: "Is your personality more similar to, or more different from the counselor's?"

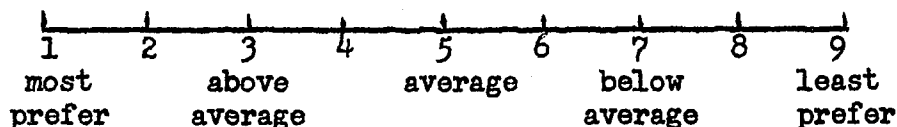
How much two people prefer to talk about the same things in each other's presence is usually evidence of the degree of similarity between them. The counselor thinks you ought to consider some areas with him more than others, and these are his personal preferences. The closer you are to his preferences, the more similar the two of you probably are in personality make-up.

Directions:

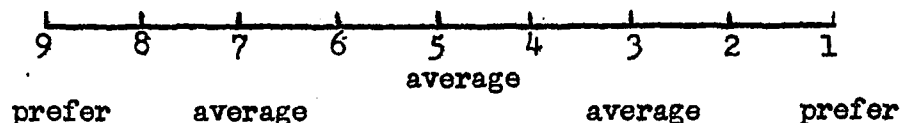
The counselor's preferences are shown by the red circles on each item scale. Find your preference for each item and circle the appropriate number, but do not circle any number you chose more than once. You may keep track of which numbers you are using by marking them out in the line below.

1 2 3 4 5 6 7 8 9

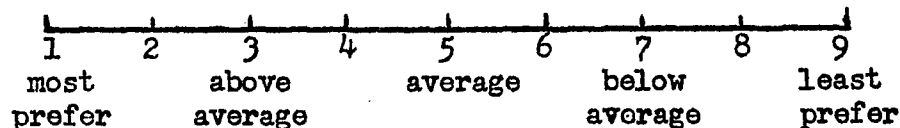
1. With this counselor, the extent I would prefer to consider (health and appearance) is:



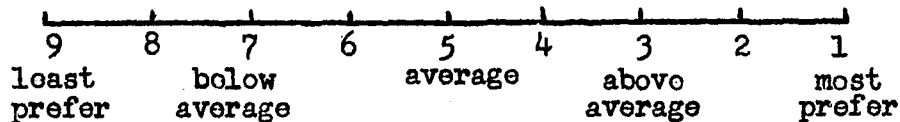
2. With this counselor, the extent I would prefer to consider (deciding what courses to take) is:



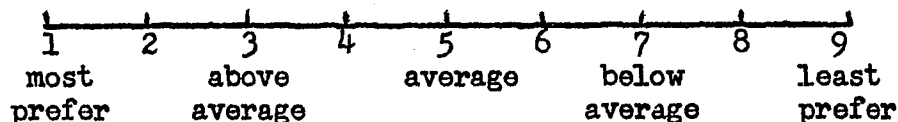
3. With this counselor, the extent I would prefer to consider (values or personal philosophy of life) is:



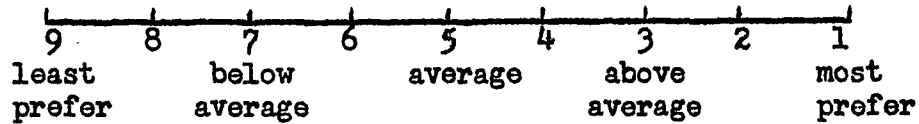
4. With this counselor, the extent I would prefer to consider (how to study more effectively) is:



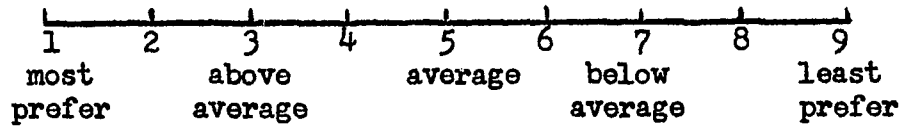
5. With this counselor, the extent I would prefer to consider (getting along with others) is:



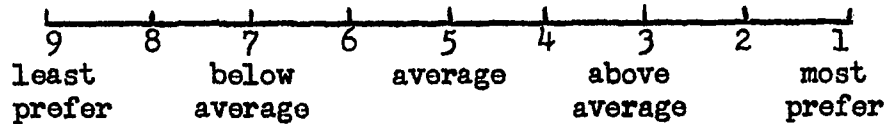
6. With this counselor, the extent I would prefer to consider (school and living expenses) is:



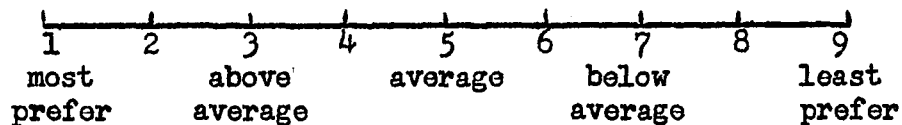
7. With this counselor, the extent I would prefer to consider (deciding on a future vocation) is:



8. With this counselor, the extent I would prefer to consider (out-of class life at O.S.U.) is:



9. With this counselor, the extent I would prefer to consider (home and family) is:



ADJECTIVE CHECK LIST

In terms of the following adjectives, how would you characterize yourself? Please check the traits that clearly describe you.

<u> </u> agressive	<u> </u> domineering	<u> </u> persevering
<u> </u> antagonistic	<u> </u> emotionally reactive	<u> </u> realistic
<u> </u> anxious	<u> </u> friendly	<u> </u> responsive
<u> </u> cooperative	<u> </u> hostile	<u> </u> restricted
<u> </u> dependable	<u> </u> impulsive	<u> </u> rigid
<u> </u> dependent	<u> </u> insightful	<u> </u> sensitive
<u> </u> depressed	<u> </u> intelligent	<u> </u> talkative
<u> </u> distractable	<u> </u> motivated	<u> </u> tense
<u> </u> dogmatic	<u> </u> nervous	<u> </u> zestful

Now, please go back over the list and draw a line under those adjectives that you think the counselor would use to describe you.

F

ILLUSTRATION OF PROCEDURE USED TO MEASURE
AMOUNT AND DIRECTION OF CHANGE IN S's
DISCUSSION TOPIC PREFERENCES

Condition 2: where the S is positively attracted to the counselor and the latter is made to be discrepant from him. The prediction stated that S would change his preferences so as to be more similar to the counselor.

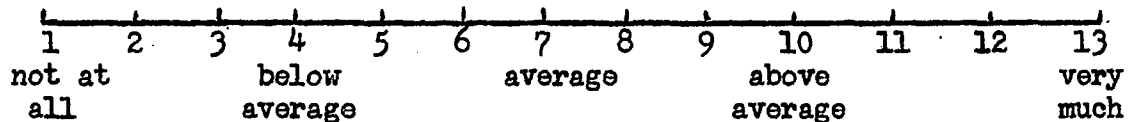
<u>S's Initial Topic Ranking</u>		<u>Counselor "Prefers"</u>		<u>S's Final Topic Ranking</u>		<u>S-Counselor Difference</u>	<u>S's Pre- Post Change</u>
<u>Topic</u>	<u>Rank</u>	<u>Topic</u>	<u>Rank</u>	<u>Topic</u>	<u>Rank</u>		
A	1			A	7		
B	2			B	5		
C	3			C	9		
D	4			D	6		
E	5			E	8		
F	6			F	4		
G*	7	G	3	G*	3	0	4
H*	8	H	2	H*	2	0	6
I*	9	I	1	I*	1	<u>0</u>	<u>8</u>
						0	18

Final Interview Rating Scale

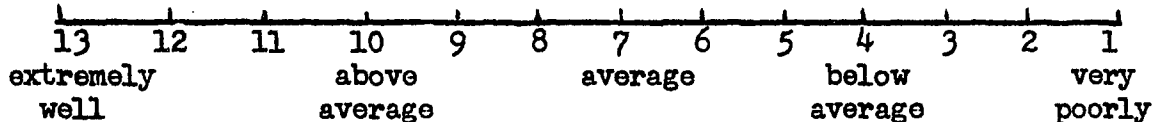
On each rating scale, please circle the number that appropriately describes your reactions to the counselor. Again, this form will not be shown to the counselor, and will not be used to evaluate you or him, personally in any way.

Be sure to note the directions of the ratings before you mark them.

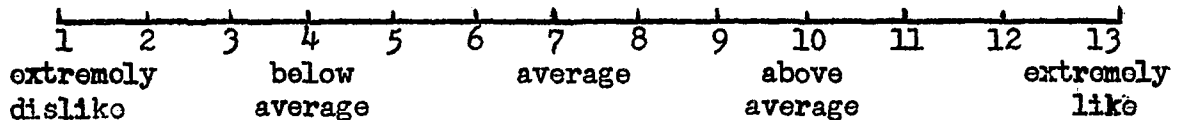
1. To what extent were you able to feel at ease with this counselor?



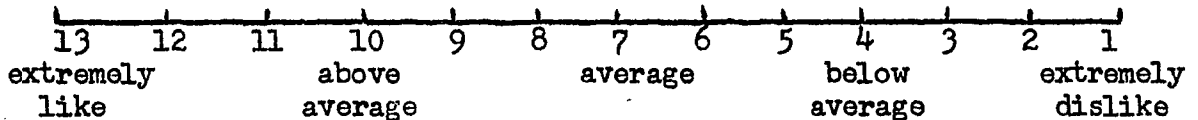
2. How well do you think the counselor gets along with other students?



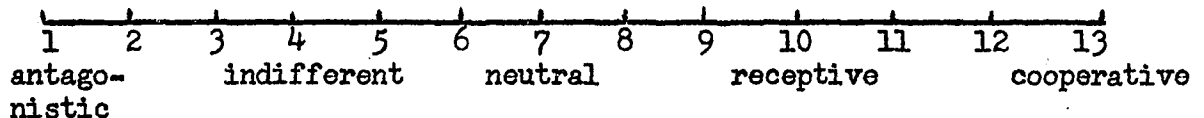
3. As far as you can tell, did you like this counselor?



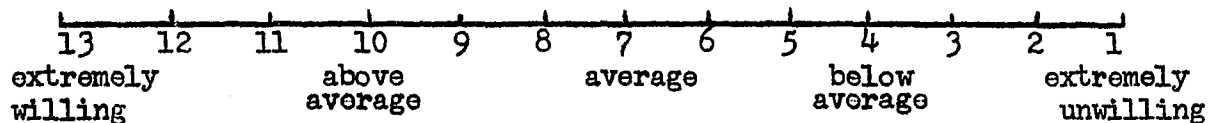
4. As far as you can tell, would other students like this counselor?



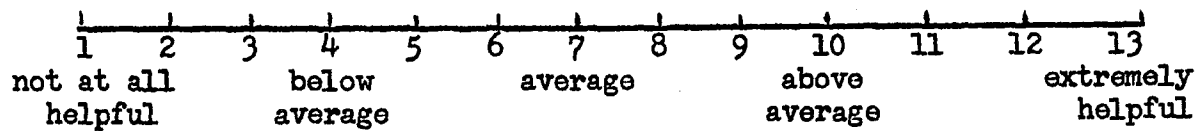
5. How would you characterize the counselor on the following scale?



6. If you wanted to get some real counseling help, how willing would you be to have this person for your counselor?



7. How helpful do you feel this counselor has been to you?



APPENDIX II

Confederate's Interview Format and Script	A
Request for Volunteers	B
Experimenter Script	C
Debriefing Script	D

A

Confederate's Interview Format
and Script

To: (confederates)
From: (E)

Re: Instructions for Counselor Role

Your fundamental role is to be that of a counseling psychologist; one who believes he has some facility in understanding and helping people; one who has been trained to work with people as an applied psychologist. In short, one who can depend on a S's expectation that you will attempt to fulfill the socially defined role of "helper," and I am urging you to take advantage of this social belief about our role.

Beyond this very general prescription, there are some particular role components that pertain to the research. These are primarily attitudinal orientations toward the S, but they have behavioral components that must be communicated to the S. For each condition, they require your adopting the following set:

(a) Positive: try to believe you like the S, and then act as though you do. But, caution please! While you need to behave above "neutral", don't err toward the direction of sentimentality. Behaviorally, you should engage in some or all of the following: 1) smile, 2) nod head in agreement on occasion, 3) verbalize agreement and understanding, when appropriate, 4) compliment S, if appropriate, that he seems to be handling things well, 5) use a warm and friendly tone of voice.

(b) Negative: try to believe you dislike the S, and then act as though you are trying hard to hide it. Here, you need to behave below "neutral" without directly expressing verbal hostility or antagonism. Your behavior should include: 1) occasional frowning, 2) looking intently at the S as though you are trying to figure him out, 3) glancing at your watch or the clock, 4) stating, "Well, I'm not sure I really understand what you're saying here", or "Do you really believe that?", 5) use an indifferent quality to your voice tone.

The important thing is to keep your performance consistent from start to finish, which means practice and a continual monitoring of your behavior. This is especially important when the role begins to get routine for you.

As for the interview itself, the discussion topic areas will not be mentioned until the last five minutes of the interview. Therefore, you are to treat the major portion of your time with the S as though you were conducting an in-take interview in which you explore how the S is getting along at State. By this I mean the following:

1. Introduction: invite S to tell you who he is, where he's from and what he's doing at O.S.U.

2. Main body of interview: when you have exhausted the introductory material, invite S to tell you what he thinks of O.S.U. as a place to go to college, and how he's getting along here. That is, what things did he encounter as a new student that might have taken some getting used to: i.e., housing, food, course work, teachers, other students, Columbus, etc.

If this general area proves exhaustible, then invite him to tell you about his high school experiences and preparation, his work-experience, and his military experience, if any. If he should begin to discuss one of the topic areas, do not respond to it, and re-direct him to the material mentioned above.

3. Transition: about five minutes before the close of the interview, say to the S:

"Before we finish here, let me tell you, briefly, how I go about counseling with a student. If you and I were actually going to see each other for a real counseling situation, I would want us to agree on what we should talk about. In your case for example, it would be best for you to tell me about such things as....(here, you are to mention, and very briefly elaborate the three topics I have given you). Then conclude by saying, "I don't know how you would look at it, but I'd favor you're telling me about some of these things." Do not let him reply to your elaboration of the topics.

Then state either:

(a) positive: "I think I should tell you that I've confirmed the impression I got of you when I first came in here, and were it possible, I would definitely enjoy talking with you again."

(b) negative: "I think it only fair to tell you that I've confirmed the impression I got of you when I first came in here, and were we to continue, I just don't think we'd hit it off well together."

In the negative condition, be careful not to wash-out your performance by saying something like, "It was sure nice to talk with you," when, in fact, it wasn't supposed to be.

Last, just stand and mention that time appears to be up, and the E should probably be here in a minute.

B

Request for Volunteers

"THANK YOU, MR. X. AS YOUR INSTRUCTOR INDICATED, I HAVE ASKED TO TALK WITH YOU TODAY TO REQUEST YOUR HELP WITH AN IMPORTANT RESEARCH PROJECT WE ARE GETTING UNDERWAY. THIS RESEARCH DEALS WITH COUNSELING, AND WE WILL BE STUDYING CERTAIN FEATURES OF THE RELATIONSHIP BETWEEN A COUNSELING PSYCHOLOGIST AND ANOTHER PERSON DURING A SINGLE RESEARCH INTERVIEW. BUT, LET ME BE VERY CLEAR AT THE OUTSET: I AM NOT HERE TO ASK YOU TO GET INVOLVED IN COUNSELING. I AM ONLY ASKING YOU TO PARTICIPATE IN OUR RESEARCH INTERVIEWS. IN ADDITION TO ASKING YOU TO HELP, WE HAVE ALSO ASKED A GROUP OF COUNSELORS TO PARTICIPATE BY DONATING SOME OF THEIR TIME TO US."

"THE MAJOR REASON FOR THIS RESEARCH IS THAT, TODAY LARGER NUMBERS OF STUDENTS ASK TO TALK WITH A COUNSELING PSYCHOLOGIST ABOUT A VARIETY OF PROBLEMS THEY ARE FACING. IF WE ARE TO BE OF GREATER HELP TO STUDENTS, THOSE OF US WHO DO COUNSELING, AND THE TRAINING OF FUTURE COUNSELORS MUST LEARN MORE ABOUT THE COUNSELING RELATIONSHIP. IN ORDER TO DO THIS, WE VERY MUCH NEED YOUR HELP."

"HERE'S WHAT YOUR PARTICIPATION WOULD INVOLVE. FIRST OF ALL, IT WOULD TAKE NO LONGER THAN AN HOUR AND A HALF, AND PROBABLY LESS. THE RESEARCH WILL TAKE PLACE UNDER THE SUPERVISION OF A SENIOR PROFESSOR IN THE PSYCHOLOGY DEPARTMENT AND MYSELF. IT WILL BE CONDUCTED AT THE STADIUM IN THE INTERVIEWING ROOMS OF THE BEHAVIORAL SCIENCE RESEARCH LABORATORY. THIS MODERN AND VERY FULLY EQUIPPED SETTING IS IDEALLY SUITED FOR CONDUCTING COUNSELING RESEARCH."

"YOU WOULD COME TO THE LAB AT A CONVENIENT TIME THAT YOU AND I WOULD ARRANGE, AND I WOULD MEET YOU THERE AND TALK BRIEFLY WITH YOU, AND ASK YOU TO FILL OUT SOME SHORT RESEARCH FORMS. I WOULD THEN INTRODUCE YOU TO A COUNSELOR WITH WHOM YOU WOULD TALK FOR ABOUT A HALF HOUR. IN ORDER TO MAKE IT EASIER FOR YOU, YOU COULD EXPECT THAT THE COUNSELOR WOULD SIMPLY ASK YOU TO TELL HIM WHO YOU ARE, WHERE YOU ARE FROM, AND HOW YOU'RE GETTING ALONG AT OSU---NOTHING SPECIFIC---MORE LIKE A GETTING ACQUAINTED SESSION."

"IN THIS WAY WE HOPE TO LEARN SOMETHING ABOUT INTERVIEW EFFICIENCY FROM THE STANDPOINT OF TIME AND TALKING. THE IMPORTANT THING WOULD BE TO JUST LET YOU AND THE COUNSELOR TALK ABOUT WHAT YOU WANTED TO. AFTER THE RESEARCH INTERVIEW, I WOULD AGAIN ASK YOU TO FILL OUT SOME BRIEF FORMS, AND WOULD TALK WITH YOU BEFORE YOU LEAVE."

"I THINK YOU, PERSONALLY, MIGHT FIND IT VALUABLE AND INTERESTING TO PARTICIPATE IN RESEARCH WHERE YOU COULD LEARN WHAT IT'S LIKE TO TALK WITH A COUNSELOR, AND AT THE SAME TIME HELP US MAKE COUNSELING MORE EFFECTIVE. IN ADDITION, YOU WOULD HAVE THE OPPORTUNITY TO SEE A VERY UNIQUE RESEARCH SETTING THAT FEW UNDERGRADUATES EVER SEE."

"I SINCERELY HOPE YOU WILL SEE YOUR WAY CLEAR TO HELP US WITH THIS IMPORTANT RESEARCH, BUT OF COURSE, YOU ARE UNDER NO OBLIGATION WHATEVER, TO DO SO. HOW MANY OF YOU WOULD BE INTERESTED IN HELPING US WITH THESE RESEARCH INTERVIEWS?....THAT'S FINE. TO EXPEDITE MATTERS, WE CAN GET

SOME OF THE NECESSARY INFORMATION NOW. BEFORE I PASS OUT THESE FORMS FOR YOU TO FILL OUT, I'LL PUT A SCHEDULE OF TIMES ON THE BOARD AND YOU CAN DECIDE WHEN YOU COULD COME. WHILE YOU'RE FILLING OUT THE FORMS, I'LL PASS AROUND A SIGN-UP SHEET FOR YOU TO SIGN. FRIDAY YOUR INSTRUCTOR WILL GIVE YOU A REMINDER SLIP OF YOUR APPOINTMENT AND YOU CAN BRING IT WITH YOU TO THE LAB."

EXPERIMENTER SCRIPT

(in Reception Area)

"HELLO _____: BEFORE WE BEGIN THE RESEARCH INTERVIEW, WE'VE BEEN ASKING STUDENTS, AS LONG AS THEY'RE HERE ANYWAY, TO HELP US OUT WITH SOMETHING ELSE BY FILLING OUT THIS FORM. JUST READ IT THROUGH VERY CAREFULLY BEFORE YOU FILL IT OUT & I'LL BE BACK IN A COUPLE OF MINUTES."

"FINISHED? FINE...IF YOU'LL COME WITH ME, WE'LL GO TO THE INTERVIEWING ROOM WHERE I WANT TO TALK WITH YOU BEFORE YOU AND THE COUNSELOR MEET FOR THE RESEARCH INTERVIEW."

(in Interview Room)

"YOU'LL RECALL THAT I SAID WE ARE DOING RESEARCH ON COUNSELING AND SO, HAVE ASKED BOTH STUDENTS AND COUNSELORS TO HELP US. WE ARE STUDYING AND COLLECTING INFORMATION ON CERTAIN FEATURES OF THE RELATIONSHIP. THERE ARE TWO WAYS WE'RE COLLECTING THE RESEARCH DATA. ONE IS THAT I'LL BE GIVING YOU SOME FORMS TO FILL OUT AND THE OTHER IS THAT I'LL BE OBSERVING THE INTERVIEW FROM BEHIND THAT ONE-WAY MIRROR THERE. NOW, IN THIS CONNECTION _____, I WANT TO ASSURE YOU THAT WHAT YOU AND I, AND YOU AND THE COUNSELOR TALK ABOUT IS FOR RESEARCH ONLY, AND WILL BE HELD IN STRICT PROFESSIONAL CONFIDENCE."

"WHAT WE'RE INTERESTED IN LEARNING IS SOMETHING ABOUT INTERVIEW EFFICIENCY MUCH LIKE THE TIME AND MOTION STUDIES CARRIED OUT IN INDUSTRY. SUCH THINGS AS THE AMOUNT OF TALK BETWEEN THE PARTICIPANTS, AND WHERE AND WHEN IT NATURALLY OCCURS, AND BY WHOM, IN THE INTERVIEW. BUT TO HELP YOU PREPARE, A LITTLE, I THINK YOU CAN EXPECT THAT THE COUNSELOR WILL PROBABLY TREAT THIS AS A KIND OF GETTING ACQUAINTED OR EXPLORATORY INTERVIEW, WHERE HE WILL PROBABLY ASK YOU TO TELL HIM SOMETHING ABOUT YOURSELF. I CAN'T TELL HIM OR YOU WHAT TO TALK ABOUT, BECAUSE THE IMPORTANT THING IS TO LET IT GO THE WAY IT WILL."

"IN ADDITION _____, TO TAKING MEASURES OF INTERVIEW EFFICIENCY, WE'RE ALSO INTERESTED IN STUDYING OTHER WAYS OF MAKING IT MORE EFFECTIVE (BUT WE'VE RUN INTO A SNAG HERE). "WHAT WE'VE DONE IS TO TRY TO MATCH STUDENTS AND COUNSELORS WHOM WE BELIEVE WILL BE COMPATIBLE--THAT IS, WHO APPEAR TO HAVE HIGHLY SIMILAR PERSONALITIES AND WHO SHOULD ENJOY TALKING TOGETHER. IN DOING THIS, WE'VE EXAMINED, VERY CAREFULLY, THE "PERSONAL REACTION INVENTORY" THAT BOTH YOU AND OUR COUNSELORS HAVE TAKEN TO SEE WHAT KIND OF FIT WE CAN GET. ALSO, WE'VE TAKEN A CLOSE LOOK AT THE 411 BACKGROUND MATERIAL YOU GAVE EARLIER TO ADD TO THIS. PAST RESEARCH INDICATES THAT WHEN TWO PEOPLE HAVE SIMILAR SCORES ON THIS TEST, THEY DO GET ALONG VERY WELL."

(Positive Set)

"USUALLY WE CAN'T MATCH PEOPLE EXACTLY, BUT IN YOUR CASE THIS IS GOING TO BE PRETTY MUCH POSSIBLE. AS A MATTER OF FACT, THE MATCHING OF YOU

WITH THE KIND OF PERSON THAT MR. _____, YOUR ASSIGNED COUNSELOR IS, IS SO CLOSE IT HARDLY EVER HAPPENS. I KNOW HIM AND THE KIND OF STUDENT HE LIKES TO WORK WITH MOST AND THIS IS SOMEONE LIKE YOURSELF IN A GREAT MANY RESPECTS, IT APPEARS. HE'S ALSO HAD A CHANCE TO LOOK AT YOUR TEST SCORES AND THE 411 BACKGROUND MATERIAL AND ON THE BASIS OF THAT, FEELS HE WILL ENJOY TALKING WITH YOU. I THINK WHAT THIS MEANS _____, IS THAT YOU APPEAR TO HAVE THE KIND OF CHARACTERISTICS HE VALUES AND ENJOYS WORKING WITH. I REALLY FEEL PLEASED ABOUT THIS AND I'M SURE YOU SHOULD GET ALONG VERY WELL TOGETHER."

S then fills out procedural check form:

"I SEE IT'S ABOUT TIME TO MEET THE COUNSELOR, SO, FOR THE RESEARCH, WILL YOU LET US KNOW AS FAR AS YOU CAN TELL, HOW YOU FEEL ABOUT TALKING WITH THIS COUNSELOR YOU'RE ABOUT TO MEET?"

"PLEASE DON'T MENTION OUR CONVERSATION TO THE COUNSELOR BECAUSE I DON'T WANT TO UNDULY INFLUENCE HIM."

"IF YOU WILL SIT TIGHT FOR A MINUTE, I'LL SEE IF HE'S READY."

(Negative Set)

"SO FAR, WE'VE BEEN ABLE TO MATCH PEOPLE QUITE WELL, BUT IN YOUR CASE WE'VE HAD SOME DIFFICULTY. I DON'T MEAN THAT YOU DON'T MATCH WITH SOMEONE, YOU CERTAINLY DO, BUT, UNAVOIDABLY THE PERSON THAT YOU WERE ORIGINALLY ASSIGNED TO TODAY, CALLED IN AND CAN'T MAKE IT BECAUSE OF A COUNSELING EMERGENCY THAT HE'S HAD TO HANDLE IN THE PROFESSIONAL SETTING WHERE HE WORKS. WE DON'T LIKE THIS, BUT WE HAVE TO BE SATISFIED SINCE THE COUNSELORS, LIKE YOURSELF, ARE ONLY DONATING THEIR TIME TO US."

"SO THAT WE CAN GET ON WITH THE MAJOR RESEARCH, WE'VE ASSIGNED YOU TO MR. _____, WHO HAS AGREED TO FILL IN FOR THE RESEARCH INTERVIEW. BUT I WANT TO BE PERFECTLY FRANK WITH YOU _____, AND TELL YOU THAT IF THIS WERE REAL COUNSELING YOU REALLY WOULDN'T GET ALONG AT ALL WELL WITH THIS KIND OF COUNSELOR, AND I WANT TO TELL YOU WHY. I KNOW BOTH THE KIND OF PERSON HE IS AND THE TYPE OF STUDENT HE WORKS WITH BEST, AND THIS IS SOMEONE WHO APPEARS QUITE DIFFERENT FROM YOURSELF IN A NUMBER OF RESPECTS. AS PART OF THE ROUTINE, HE'S LOOKED AT YOUR TEST SCORES AND 411 BACKGROUND MATERIAL, AND ON THE BASIS OF THAT, DOESN'T THINK HE COULD WORK WELL WITH YOU IF THIS WERE REAL COUNSELING."

"I FEEL BADLY ABOUT THIS _____, AND WANT TO APOLOGIZE TO YOU BECAUSE YOU CAME DOWN HERE IN GOOD FAITH AND THEN THIS HAS TO HAPPEN TO MAKE THINGS DIFFERENT FOR US. YOU'RE CERTAINLY FREE TO LEAVE. BUT I HOPE YOU WILL STAY SINCE I'D HATE TO ASK MR. _____ TO LEAVE AFTER HE'S AGREED TO BE HERE AT THIS HOUR. I THINK WHAT THIS MEANS, IS THAT PROBABLY HE FEELS YOU'VE GOT THE KIND OF CHARACTERISTICS HE DOESN'T VALUE VERY MUCH AND FINDS DIFFICULT TO CONTEND WITH IN COUNSELING. HE MAY IRRITATE YOU A LITTLE, BUT DO THE BEST YOU CAN. ALSO, DON'T MENTION OUR CONVERSATION TO HIM, AS I ONLY WANTED TO BE HELPFUL TO YOU."

(S then fill out procedural check form)

"WE'VE BEEN ASKING STUDENTS TO FILL OUT THIS FORM, (AND IT'S OCCURRED TO ME THAT EVEN THOUGH YOURS IS A DIFFERENT SITUATION, IT WOULD STILL BE HELPFUL FOR THE RESEARCH) TO GET YOUR IMPRESSIONS OF THE COUNSELOR."

"IF YOU WILL SIT TIGHT FOR A MINUTE, I'LL SEE IF HE'S READY AND I'LL BE RIGHT BACK."

DEBRIEFING SCRIPT

(E enters interview room after counselor's departure)

"YOUR PARTICIPATION IN THE INTERVIEW WAS VERY USEFUL; YOU HANDLED YOURSELF VERY WELL."

"WHAT WE WANT TO DO NOW IS TO GET FURTHER RESEARCH INFORMATION ABOUT THE EXTENT OF ANY SIMILARITY BETWEEN YOU AND THE COUNSELOR. SO I'LL GIVE YOU THIS TEST TO TAKE AND I'LL READ THE DIRECTIONS ALOUD AS YOU FOLLOW ALONG SILENTLY."

(the E reads directions; the S completes the form)

"WE (ALSO) NEED TO GET YOUR PERSONAL OPINIONS ABOUT THE INTERVIEW, SO WOULD YOU FILL OUT THIS FORM FOR US, AND BE AS FRANK AS YOU CAN, AS THAT WILL BE VERY HELPFUL."

(E then proceeds to the de-briefing)

"FIRST OF ALL, I WANT TO THANK YOU FOR YOUR COOPERATION IN HELPING US WITH THIS RESEARCH INTERVIEW. AT THIS POINT, I'D LIKE TO ASK YOU ABOUT YOUR REACTIONS TO HAVING PARTICIPATED IN THE STUDY, AND I THINK THE BEST WAY TO DO THIS IS JUST TO ASK YOU WHAT YOU THOUGHT WAS GOING ON".....
 "UMMMM, I SEE.....WHAT WAS YOUR IMPRESSION OF THE COUNSELOR?.....
 WHAT WAS YOUR REACTION TO THE THINGS YOU AND I TALKED ABOUT BEFORE YOU MET THE COUNSELOR?.....WHAT DID YOU THINK OF THESE FORMS I ASKED YOU TO FILL OUT?....."

"WELL _____, BECAUSE YOU'VE SO FREELY GIVEN YOUR TIME TO HELP US, I WANT TO FILL YOU IN COMPLETELY AS TO WHAT THIS RESEARCH PROJECT IS ABOUT, SO THAT WHEN YOU LEAVE HERE TODAY YOU ARE FULLY AWARE OF WHAT WE ARE STUDYING."

"LET ME GIVE YOU SOME BACKGROUND MATERIAL. IN REAL COUNSELING, A COUNSELOR AND CLIENT INFLUENCE EACH OTHER IN MANY WAYS, AND ABOUT MANY THINGS, AS DO PEOPLE IN EVERY DAY LIFE. BUT IN COUNSELING WE DON'T YET KNOW VERY MUCH ABOUT HOW THIS INFLUENCE OCCURS, BUT WE SUSPECT THAT WHEN COUNSELING IS EITHER EFFECTIVE OR INEFFECTIVE, THE INFLUENCE OF THE COUNSELOR AND THE CLIENT ON EACH OTHER HAS PLAYED A BIG PART IN IT. NOW THERE ARE MANY FACTORS THAT DETERMINE THE KIND OF INFLUENCE THAT TAKES PLACE BETWEEN ANY TWO PEOPLE, BUT WE HAVE CHOSEN TO STUDY TWO FACTORS WHICH ARE CLOSELY RELATED TO THIS INFLUENCE PROCESS IN COUNSELING. THE FIRST ONE IS THE AMOUNT OF LIKING OR DISLIKING A STUDENT HAS FOR THE COUNSELOR. THE SECOND FACTOR IS THE EXTENT TO WHICH THE TWO PERSONS AGREE ON WHAT THEY SHOULD TALK ABOUT IF THEY WERE TO MEET AGAIN. THE POINT HERE IS TO FIND OUT WHAT TOPICS THE STUDENT WILL SELECT TO TALK ABOUT WHEN HE EITHER LIKES OR DISLIKES THE COUNSELOR, AND WHEN HE AND THE COUNSELOR ARE IN AGREEMENT OR DISAGREEMENT ON WHAT TO TALK ABOUT IF THEY WERE TO MEET A SECOND TIME."

"COMMON SENSE WOULD TELL US THAT IF COUNSELING IS TO BE EFFECTIVE THE TWO SHOULD BE IN SOME AGREEMENT AS TO WHAT'S IMPORTANT TO TALK ABOUT, AND THEY SHOULD LIKE EACH OTHER. BUT, COMMON SENSE DOES NOT TELL US WHAT HAPPENS WHEN ONE OR BOTH OF THESE FACTORS IS ABSENT IN COUNSELING. SO WE HAVE ASKED OURSELVES QUESTIONS LIKE THESE:

1. "WHEN A STUDENT LIKES THE COUNSELOR, WILL HE CHANGE HIS ORIGINAL TOPIC PREFERENCES SO AS TO BE SIMILAR TO A COUNSELOR WHO HOLDS DIFFERENT PREFERENCES?"
2. "WHEN A STUDENT DISLIKES THE COUNSELOR, WILL HE CHANGE HIS ORIGINAL TOPIC PREFERENCES SO AS TO BE DISSIMILAR TO A COUNSELOR WHO HOLDS THE SAME PREFERENCES?"

"TO ANSWER QUESTIONS LIKE THESE, WE HAVE PREARRANGED FOUR (4) DIFFERENT RESEARCH SITUATIONS WHERE THE TWO FACTORS OF LIKING AND TOPIC SIMILARITY CAN OPERATE NATURALLY TO DETERMINE THE OUTCOME. MAYBE THIS LITTLE DIAGRAM WILL HELP EXPLAIN IT BETTER."

"NOW, IN THE SITUATION YOU PARTICIPATED IN, IT WAS NECESSARY TO MAKE SURE THE COUNSELOR TALKED ABOUT TOPICS THAT WERE SIMILAR (OR DISSIMILAR) TO YOUR ORIGINAL PREFERENCES, AND I TOLD HIM TO DO THIS. ALSO, I TRIED TO CONVINCE YOU BEFOREHAND THAT YOU AND THE COUNSELOR WOULD PROBABLY GET ALONG (OR NOT GET ALONG) VERY WELL, SO THAT THIS ATTRACTION FACTOR COULD OPERATE. I BELIEVED THAT IF YOU HAD BEEN AWARE OF THESE THINGS BEFORE, YOU PROBABLY COULD NOT HAVE BEHAVED AS NATURALLY AS YOU DID, AND WE WOULD HAVE LEARNED NOTHING ABOUT THE IMPORTANCE OF THESE FACTORS TO COUNSELING. THEREFORE, TO MAKE THE SITUATION MORE BELIEVABLE FOR YOU, YOU WERE NOT MADE AWARE THAT THIS BUSINESS OF "PERSONALITY SIMILARITY" WAS ONLY AN ATTEMPT TO GET YOU TO LIKE OR DISLIKE THE COUNSELOR. HE DID NOT SEE YOUR TEST SCORES OR BACKGROUND MATERIAL, NOR DID WE TRY TO MATCH YOU WITH HIM. THE COUNSELOR SIMPLY COOPERATES BY TRYING TO ACT AS IF HE LIKES OR DISLIKES THE STUDENTS, AND THEN MENTIONS THE THREE PREFERENCE AREAS I GIVE HIM."

"I'VE BEEN DOING MOST OF THE TALKING HERE. DO YOU HAVE ANY QUESTIONS OR COMMENTS YOU'D LIKE TO MAKE TO ME?....."

"I HAVE ONE VERY IMPORTANT REQUEST TO MAKE OF YOU _____. PLEASE KEEP TIGHT SECURITY ON WHAT HAS HAPPENED HERE. THIS MEANS NOT TALKING TO ANYONE ABOUT IT UNTIL THE PROJECT IS FINISHED. WILL YOU DO THIS FOR ME? I THINK YOU CAN SEE THE REASON FOR THIS, BECAUSE IF WE HAD STUDENTS COMING DOWN HERE WHO KNEW WHAT IT WAS ALL ABOUT, WE MIGHT AS WELL NOT DO THE STUDY."

"IT MIGHT BE DIFFICULT AT TIMES PARTICULARLY WHEN A CLASSMATE OF YOURS WHO HASN'T PARTICIPATED YET ASKS YOU ABOUT YOUR EXPERIENCE. I WOULD ASK YOU TO PLAY IT COOL BY BEING SOMEWHAT MATTER-OF-FACT IN TELLING HIM SIMPLY THAT 'IT WAS VERY INTERESTING, AND I TALKED WITH A COUNSELOR.' THE LESS YOU SAY ABOUT IT, THE BETTER. IN ANY EVENT, IT'S BEST THAT YOU NEVER BRING IT UP AT ANY TIME EVEN WITH THOSE WHO HAVE ALSO BEEN DOWN HERE UNTIL THE END OF SPRING QUARTER. UNTIL THEN, IT'S OUR SECRET."

"IF YOU ARE EVER INTERESTED IN REAL COUNSELING, I WOULD RECOMMEND MAKING AN APPOINTMENT WITH THE STUDENT CONSULTATION SERVICE IN ROOM 333 ARPS HALL. THIS SERVICE OPERATES THROUGH THE SCHOOL YEAR, AND HELPS MANY STUDENTS WITH A VARIETY OF CONCERNS. IF I, MYSELF, COULD BE OF ASSISTANCE IN HELPING YOU GET AN APPOINTMENT, I WOULD BE HAPPY TO DO SO. MY OFFICE IS IN ROOM 342 ARPS HALL. ALSO, IF YOU WANT TO ASK ME SOMETHING ABOUT THE STUDY LATER ON, FEEL FREE TO LOOK ME UP."

"THANKS AGAIN FOR ALL YOUR HELP, AND PLEASE REMEMBER NOT TO TALK ABOUT THE RESEARCH TO ANYONE, EVEN THOSE WHO HAVE ALREADY BEEN DOWN HERE, UNTIL IT'S COMPLETED AT THE END OF SPRING QUARTER."

APPENDIX III

Tables

Table 15

Mean Rank and Standard Deviations for Fifteen Discussion
Areas as Ranked by Psychology 411 Males

Discussion Topics	M	S.D.
1. Deciding on a future vocation*	2.92	2.30
2. Deciding what courses I should take*	3.95	2.30
3. Learning to study more effectively*	4.19	2.09
4. Purpose in going to school	5.30	3.37
5. Meeting my military obligations	7.40	4.35
6. Getting along with other people*	7.93	3.43
7. Participation in extra-curricular life at O.S.U.*	8.29	3.60
8. Handling school and living expenses*	8.75	3.85
9. Feeling different from other people	9.22	3.59
10. Sex matters	9.27	3.45
11. Being in love and/or marriage	9.38	4.11
12. Feeling that O.S.U. is too large or impersonal	9.76	3.54
13. Religious matters**	10.50	3.62
14. Physical health and appearance*	10.69	3.32
15. Home and family matters*	10.70	3.53

* - denotes topics selected for the study

** - label changed to "Values or personal philosophy of life"

Table 16

Values and Significance of the F's Associated with Each Variable or Interaction of Variables

	I	II	III	IV	V	df
Discussion Topics (A)	62.253***	20.040***	1.169	3.380	1.388	1/48
Attraction (B)	.157	361.391***	209.446***	114.631***	329.388***	1/48
Counselors (C)	.989	1.326	.663	3.894*	6.487**	2/48
Order (D)	.931	3.439	.129	.421	1.388	1/48
A x B	32.879***	.261	1.403	2.292	.154	1/48
A x C	1.221	.553	.328	1.204	1.462	2/48
A x D	5.959*	1.182	1.933	9.836**	2.7222	1/48
B x C	.196	.142	.034	2.140	1.129	2/48
B x D	.931	.494	1.169	2.631	.302	1/48
C x D	2.227	1.240	1.164	.877	3.722*	2/48
A x B x C	.399	.129	3.026	1.730	4.895*	2/48
A x B x D	.157	.200	.002	.421	.154	1/48
A x C x D	1.946	2.945	2.872	.853	1.388	2/48
B x C x D	5.167*	1.307	1.026	2.561	2.932	2/48
A x B x C x D	.583	4.387*	1.355	.561	1.487	2/48

***p .001

**p .01

*p .05

I = Amount of Change

II = Direction of Change

III = Willingness to Have Confederate for a Counselor

IV = Evaluation of Confederate's Helpfulness

V = Second Procedural Check on Attraction Set

Table 17

Raw Scores*
First Procedural Check on Attraction

<u>Positive Attraction</u>		<u>Negative Attraction</u>	
12	10	7	6
11	10	6	7
10	8	8	3
7	9	8	5
10	7	4	5
9	9	9	5
12	11	7	6
9	10	7	7
8	7	6	7
10	8	6	4
9	7	7	6
9	7	6	7
8	7	4	4
10	8	6	7
10	10	8	10
11	12	9	8
10	9	8	5
10	11	7	4

* - higher scores indicate more favorable attraction toward the counselor (range = 1 to 13)

Table 18

Raw Scores*
Amount of Change in the S's Preferential
Ordering of Discussion Topics

		<u>D₁</u>			<u>D₂</u>		
		<u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₁</u>	<u>C₂</u>	<u>C₃</u>
B ₁	A ₁	1	0	0	0	0	0
		0	0	0	0	0	0
		0	2	0	0	0	2
	A ₂	12	12	18	18	14	17
		14	12	7	18	16	17
		17	6	17	9	15	16
B ₂	A ₁	3	5	12	6	0	7
		0	10	7	5	8	0
		2	15	15	18	0	0
	A ₂	5	0	5	6	0	7
		3	11	6	18	7	15
		12	8	13	12	15	8

* - scores represent summed difference between the S's initial and final ranks for the three topics used to make the counselor similar to or discrepant from him

A₁ = topic similarity

A₂ = topic discrepancy

B₁ = positive attraction

B₂ = negative attraction

C₁ = counselor-confederate no. 1

C₂ = counselor-confederate no. 2

C₃ = counselor-confederate no. 3

D₁ = presentation order of the dependent measures where the S responded first to the topic preference list, and the counselor evaluation scales second

D₂ = presentation order reversed

Table 19

Raw Scores*
Amount of Dissimilarity between the S's and the Counselor's
Topic Preference Assignments

		<u>D₁</u>			<u>D₂</u>		
		<u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₁</u>	<u>C₂</u>	<u>C₃</u>
B ₁	A ₁	1	0	0	2	0	0
		2	2	0	2	0	4
		0	2	2	0	0	4
	A ₂	6	6	2	0	4	3
		5	10	11	2	6	5
		3	12	5	9	3	7
B ₂	A ₁	3	5	12	6	4	7
		0	10	7	5	8	4
		2	15	15	18	2	0
	A ₂	13	18	13	9	11	16
		15	7	12	0	7	3
		8	10	9	8	16	10

* - scores represent summed difference between the S's final ranks for the three topics used to make the counselor similar to or discrepant from the S, and the Counselor's ranks for these same topics

A₁ = topic similarity

A₂ = topic discrepancy

B₁ = positive attraction

B₂ = negative attraction

C₁ = counselor-confederate no. 1

C₂ = counselor-confederate no. 2

C₃ = counselor-confederate no. 3

D₁ = presentation order of the dependent measures where the S responded first to the topic preference list, and the counselor evaluation scales second

D₂ = presentation order reversed

Table 20

Raw Scores*
Extent of the S's Willingness to Have the
Confederate for a Real Counselor

		<u>D₁</u>			<u>D₂</u>		
		<u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₁</u>	<u>C₂</u>	<u>C₃</u>
B ₁	A ₁	6	13	12	10	12	10
		13	13	13	13	13	9
		13	11	12	10	13	13
	A ₂	12	13	10	13	11	13
		11	11	10	13	13	12
		13	10	10	11	11	13
B ₂	A ₁	4	6	5	2	9	4
		7	2	6	5	4	1
		13	2	2	1	3	4
	A ₂	2	5	4	2	4	1
		2	10	2	1	2	10
		2	1	1	1	4	4

* - higher scores represent more willingness to have confederate for a real counselor (range = 1 to 13)

A₁ = topic similarity

A₂ = topic discrepancy

B₁ = positive attraction

B₂ = negative attraction

C₁ = counselor-confederate no. 1

C₂ = counselor-confederate no. 2

C₃ = counselor-confederate no. 3

D₁ = presentation order of the dependent measures where the S responded first to the topic preference list, and the counselor evaluation scales second

D₂ = presentation order reversed

Table 21

Raw Scores*
The S's Evaluation of the Confederate's Helpfulness
During the Interview

		<u>D₁</u>			<u>D₂</u>		
		<u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₁</u>	<u>C₂</u>	<u>C₃</u>
B ₁	A ₁	9	11	10	9	2	9
		7	12	12	10	12	10
		13	10	8	10	13	10
	A ₂	11	11	8	12	12	10
		7	10	7	13	11	11
		8	4	7	11	11	10
B ₂	A ₁	6	7	4	4	6	4
		6	5	7	4	7	3
		12	5	2	1	4	5
	A ₂	1	5	4	2	8	1
		2	7	2	2	9	1
		4	1	1	2	7	2

* - higher scores represent more "helpfulness" (range = 1 to 13)

A₁ = topic similarity

A₂ = topic discrepancy

B₁ = positive attraction

B₂ = negative attraction

C₁ = counselor-confederate no. 1

C₂ = counselor-confederate no. 2

C₃ = counselor-confederate no. 3

D₁ = presentation order of the dependent measures where the S responded first to the topic preference list, and the counselor evaluation scales second

D₂ = presentation order reversed

Table 22

Raw Scores*
Second Procedural Check on Attraction

		<u>D₁</u>			<u>D₂</u>		
		<u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₁</u>	<u>C₂</u>	<u>C₃</u>
B ₁	A ₁	10	11	13	12	12	11
		11	12	13	12	13	9
		10	11	10	7	13	11
	A ₂	12	12	9	12	11	10
		10	12	7	13	13	11
		10	10	10	11	11	12
B ₂	A ₁	5	6	6	2	7	5
		7	3	5	5	7	4
		7	2	4	3	5	5
	A ₂	2	4	7	3	8	4
		3	8	4	3	5	4
		3	3	2	1	10	4

* - higher scores represent greater liking for the counselor (range = 1 to 13)

A₁ = topic similarity

A₂ = topic discrepancy

B₁ = positive attraction

B₂ = negative attraction

C₁ = counselor-confederate no. 1

C₂ = counselor-confederate no. 2

C₃ = counselor-confederate no. 3

D₁ = presentation order of the dependent measures where the S responded first to the topic preference list, and the counselor evaluation scales second

D₂ = presentation order reversed

REFERENCES

REFERENCES

- Appel, V. H. Client expectancies about counseling in a university counseling center. Paper read at Western Psychol. Assoc., San Jose, Calif., April, 1960.
- Aronson, E., Turner, Judith & Carlsmith, J. M. Communicator credibility and communication discrepancy as determinants of opinion change. Journal of Abnormal and Social Psychology, 1963, 67, 31-36.
- Back, K. W. Influence through social communication. Journal of Abnormal and Social Psychology, 1951, 46, 9-23.
- Backman, C. W., & Secord, P. F. The effect of perceived liking on interpersonal attraction. Human Relations, 1959, 12, 379-384.
- Brown, R. Social psychology. New York: The Free Press, 1965.
- Byrne, D. Interpersonal attraction and attitude similarity. Journal of Abnormal and Social Psychology, 1961, 62, 713-715.
- Byrne, D., & Rhamey, R. Magnitude of positive and negative reinforcements as a determinant of attraction. Journal of Personality and Social Psychology, 1965, 2, 884-889.
- Campbell, D. T., & Stanley, J. C. Experimental and quasi-experimental designs for research on teaching. In N. L. Gage (Ed.) Handbook of Research on Teaching. Chicago: Rand McNally, 1963.
- Festinger, L. A theory of cognitive dissonance. New York: Harper & Row, 1957.
- Frank, J. D. The dynamics of the psychotherapeutic relationship. Psychiatry, 1959, 22, 17-40.
- Freedman, J. L. & Steinbruner, J. D. Perceived choice and resistance to persuasion. Journal of Abnormal and Social Psychology, 1964, 68, 678-681.

- Goldstein, A. P. Therapist-patient expectancies in psychotherapy.
New York: Macmillan, 1962.
- Goldstein, A. P. Interpersonal attraction in psychotherapy. Unpublished
manuscript, Syracuse University, 1965.
- Goldstein, A. P. Psychotherapy research by extrapolation from social
psychology. Journal of Counseling Psychology, 1966, 13, 38-45.
- Guilford, J. P. Fundamental statistics in psychology and education.
New York: McGraw-Hill, 1956.
- Heider, F. The psychology of interpersonal relations. New York: Wiley,
1958.
- Heller, K. & Goldstein, A. P. Client dependency and therapist expectancy
as relationship maintaining variables in psychotherapy. Journal of
Consulting Psychology, 1961, 25, 371-375.
- Homans, G. C. Social behavior: its elementary forms. New York:
Harcourt, Brace and World, 1961.
- Hovland, C. I. & Pritzker, H. A. Extent of opinion change as a function
of amount of change advocated. Journal of Abnormal and Social
Psychology, 1957, 54, 257-261.
- Jones, E. E. Gergen, K. J., & Jones, R. G. Tactics of ingratiation
among leaders and subordinates in a status hierarchy. Psychological
Monographs, 1963, 77, No. 3 (whole No. 566).
- Jones, E. E. Ingratiation: a social psychological analysis. New York:
Appleton-Century-Crofts, 1964.
- Lennard, H. L. & Bernstein, A. The anatomy of psychotherapy. New York:
Columbia University Press, 1960.

- Luchins, A. S. Primacy-recency in impression formation. In C. I. Hovland (Ed.), The order of presentation in persuasion. New Haven: Yale University Press, 1957.
- McGuire, W. J. Attitudes and Opinions. In P. R. Farnsworth, et al. (Ed's.), Annual Review of Psychology, 17, Palo Alto, Calif.: Annual Reviews, Inc., 1966.
- Mooney, R. L. Mooney problem check list. New York: The Psychological Corporation, 1950.
- Naylor, J. C. & Estep, Carol. An analysis of variance program for replicated or non-replicated designs; 5 factor. Unpublished manuscript, Laboratory of Aviation Psychology, The Ohio State University, 1965.
- Newcomb, T. M. An approach to the study of communicative acts. Psychological Review, 1953, 60, 393-404.
- Newcomb, T. M. The prediction of interpersonal attraction. American Psychologist, 1956, 11, 575-586.
- Newcomb, T. M. The acquaintance process. New York: Holt, Rinehart and Winston, 1961.
- Osgood, C. E., & Tannenbaum, P. H. The principle of congruity in the prediction of attitude change. Psychological Review, 1955, 62, 42-55.
- Pepinsky, H. B. Help-giving in search of a criterion. In E. Landy and A. M. Kroll (Ed's.), Guidance in american education. Cambridge, Mass.: Harvard Graduate School of Education, 1966.
- Pepinsky, H. B. & Karst, T. O. Convergence: a phenomenon in counseling and psychotherapy. American Psychologist, 1964, 19, 333-338.
- Rosenberg, M. J. & Abelson, R. P. An analysis of cognitive balancing. In C. I. Hovland and I. L. Janis (Ed's.), Attitude organization and change. New Haven: Yale University Press, 1960.

- Sampson, E. E. & Insko, C. A. Cognitive consistency and performance in the autokinetic situation. Journal of Abnormal and Social Psychology, 1964, 68, 184-192.
- Secord, P. F. & Backman, C. W. Social psychology. New York: McGraw-Hill, 1964.
- Strupp, H. H. Some comments on the future of research in psychotherapy. Behavioral Science, 1960, 5, 60-71.
- Super, D. E., & Thompson, A. S. (Ed's.) The professional preparation of counseling psychologists. New York: Bureau of Publications, Teachers College, Columbia University, 1964.
- Tannenbaum, P. H. & Gengel, R. W. Generalization of attitude change through congruity principle relationships. Journal of Personality and Social Psychology, 3, 299-304.
- Thibaut, J. W. & Kelley, H. H. The social psychology of groups. New York: Wiley, 1962.
- Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill, 1962.
- Wrenn, C. G. The counselor in a changing world. Washington, D. C.: American Personnel and Guidance Association, 1962.
- Zimbardo, P. G. Involvement and communication discrepancy as determinants of opinion conformity. Journal of Abnormal and Social Psychology, 1960, 60, 86-94.