

INFORMATION TO USERS

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

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

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again -- beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms

300 North Zeeb Road
Ann Arbor, Michigan 48106

76-3118

MURPHY, Harry Burton, 1944-
THE EFFECTS OF COUNSELOR FACILITATIVE
LEVEL ON CLIENT SUGGESTIBILITY.

The University of Oklahoma, Ph.D., 1975
Education, guidance and counseling

Xerox University Microfilms, Ann Arbor, Michigan 48106

THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

THE EFFECTS OF COUNSELOR FACILITATIVE
LEVEL ON CLIENT SUGGESTIBILITY

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
DOCTOR OF PHILOSOPHY

BY
HARRY BURTON MURPHY
Norman, Oklahoma

1975

THE EFFECTS OF COUNSELOR FACILITATIVE
LEVEL ON CLIENT SUGGESTIBILITY

APPROVED BY

W. Rowe
Robert H. Lumsden
Dorothy A. Peters
William

DISSERTATION COMMITTEE

ACKNOWLEDGEMENTS

I would like to acknowledge with gratitude the guidance of Dr. Wayne Rowe, chairman of my doctoral committee, my teacher, and my friend. I would also like to acknowledge Dr. Dorothy Foster for providing a safe environment for me to begin to understand my strengths and weaknesses as a counselor, and Drs. Albert Smouse and William Graves for their time, effort, and real help in putting this dissertation together.

I have a very special thanks, which doesn't begin to repay what I owe, to Kathryn and Ashli for their understanding and unselfish sacrifice.

Finally, there is a small army of individuals whose belief, support, and encouragement helped make this fantasy a reality and whose main thanks will be in the satisfaction of knowing that one of theirs made it.

H. B. M.
July 1975

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
Manuscript to be submitted for publication	
Abstract	1
Introduction	2
Method	3
Results	6
Discussion	7
References	10
APPENDICES	
A. Prospectus	14
B. Empathy Scale	50
C. Instructions	53
D. Barber Suggestibility Scale	55
E. Raw Data	65

LIST OF TABLES

Table	Page
1 Summary of BSS Scores	12
2 Analysis of Variance of Experimenter Level of Empathy and Sex	13

THE EFFECTS OF COUNSELOR FACILITATIVE
LEVEL ON CLIENT SUGGESTIBILITY

HARRY B. MURPHY

UNIVERSITY OF OKLAHOMA

Running Head: Effects of facilitative level on suggestibility

Abstract

The present study investigates the effects of counselor level of facilitation on client suggestibility. Forty eight university students were individually tested for suggestibility in one of three conditions. In the experimental conditions the subjects interacted with an experimenter who was rated as either high or low on a scale of empathy and then were administered a test of suggestibility. In the control condition the subjects were simply administered the test. The results supported the hypothesis that subjects of higher rated experimenters would demonstrate more suggestibility than subjects of lower rated experimenters. The results did not support the hypothesis that lower rated experimenters would elicit less suggestibility than a no interaction control.

The Effects of Counselor Facilitative
Level on Client Suggestibility

Recent research in counseling has emphasized the facilitative core dimensions of empathy, respect, genuineness, concreteness, self-disclosure, and immediacy in determining client outcome (Carkhuff, 1969, 1971). Empirical evidence links these dimensions to client movement and change, i.e., higher rated counselors have a higher success-treatment ratio and lower rated counselors have a lower success-treatment ratio (Carkhuff, 1969).

These skill dimensions are central to a model of human development created by Carkhuff (1971) and his associates. Each stage of the model has been carefully defined and the skills needed to be effective within the stage have been delineated. The model views the skill dimensions as basic to all counseling approaches. They are not merely techniques of counseling but are believed to be interpersonal facilitative skills that the counselor employs in using his expert knowledge and technique. Measurement scales ranging from 1 (low) to 5 (high) have been developed (Carkhuff, 1971) for each skill dimension.

Although, the facilitative skill dimensions appear to be significant variables in traditional counseling (one-to-one interactive counseling), Vitalo (1970) has suggested that the effective use of various adjunct counseling techniques, such as programmed instruction, behavioral approaches, and direct suggestion is contingent upon the counselor's level of facilitative skill. This is consistent with the model's assertion that the skill dimensions are basic

to all counseling approaches and techniques. However, the supposition that adjunct counseling techniques are influenced by counselor facilitative skill has not been clearly demonstrated (Brady, Rowe, & Smouse, in press).

Further, no research has investigated the effects of the facilitative skill dimensions on suggestibility, even though much research has been conducted on the antecedent variables of suggestion.

Barber (1969) states that experimenter-subject interaction variables are important because the basis for responding to suggestion begins in the social interchange between experimenter (counselor) and subject (client).

The purpose of the present study was to investigate the effects of the counselor's level of facilitation on an adjunct counseling technique, direct suggestion, and to clarify the parameters of the facilitative model. Specifically, the study examined whether client suggestibility was influenced by the counselor's level of empathy.

Method

Participants

Subjects. The subjects were 48 undergraduate education students drawn from a subject pool at the University of Oklahoma. Included were 21 males with a mean age of 22.7 (range 19-31) and 27 females with a mean age of 23.0 (range 20-35). The mean education level was 2.5 years in college (range 1-3 years) for both male and female subjects. The subjects were randomly assigned to one of six groups, four experimental and two control ($n = 8$ per group).

Experimenters. Two experimenters (one male, one female) were

selected to represent moderate to high levels of empathy (mean rating or 2.7 or more) and two (one male, one female) were selected to represent low levels of the skill (1.7 or less). The experimenters were selected from volunteer graduate students enrolled in the helping professions (guidance and counseling, counseling psychology, social work, and human relations) at the University of Oklahoma.

Random segments of a role-play interaction with each potential experimenter cast as the counselor were rated by two trained raters for level of empathy. The selected higher empathy experimenters were rated 3.0 (male) and 2.75 (female) and the selected lower empathy experimenters were both rated 1.5 (interrater reliability, $r = .90$).

The experimenters were familiarized with the experimental procedures and with the Barber Suggestibility Scale (BSS). Each experimenter was given a script of the BSS and a tape-recorded model of an "ideal" BSS presentation. Following the procedure outlined by Barber and Calverly (1964), the experimenters tape recorded the scale in their own voices. This was done to insure that all subjects within a group were presented the scale in the same tone of voice and to insure that the tape recordings were equivalent across groups. The recordings were rated for equivalence by a trained rater.

The tape recorded BSS was individually administered to each subject by his experimenter as the dependent measure for each group. This instrument is an eight item, objectively scored scale. In a study of reliability, 60 subjects were given the BSS twice over one

week with a resulting test-retest correlation of .88. Further, norms for all items and for different age groups, along with a factor analysis of the scale, appear in Barber (1969). The empirical evidence indicates that the BSS is a reliable and experimentally flexible measure of suggestibility and appears to be an appropriate outcome measure for this investigation.

Materials

A room furnished with two arm chairs facing each other, a small table beside one chair, a clock, stopwatch, ruler, standard instruction sheet, score sheet and two tape recorders (one to record the interaction, the other to administer the BSS) were the materials used for all group conditions.

Procedure

Assignment to groups. Each subject was randomly assigned to one of six groups. Group I (conducted by experimenter 1) and group II (conducted by experimenter 2) were the high counselor facilitator experimental groups. Group III (experimenter 3) and group IV (experimenter 4) were low counselor facilitator groups. Groups V and VI were no treatment control groups. Group V was conducted by the highest rated experimenter (experimenter 1) and group VI by the lowest rated experimenter (experimenter 4). This type of control increases the probability that any significant difference between groups is due to the independent variable and not to some other variable such as personal attraction (appearance).

Following the assignment to groups the procedures were individually administered and consisted of: a) instruction period,

b) treatment period, and c) test period.

Instruction period. The instruction period was the same for all groups consisting of an explanation and general information about the experiment. The instructions were read verbatim to the subjects.

Treatment period. The treatment was administered to the experimental groups only and began immediately upon completion of the instructions. The experimenters were instructed to interact verbally with the subjects in order to establish rapport. A time limit of between 15 and 20 minutes was maintained. This period was tape recorded and randomized excerpts were rated by professional, trained, paid raters to check the level of facilitation at which each experimenter was performing. The mean rating for the actual performance of experimenter 1 was 2.5 (range was 2.25 to 2.75), for experimenter 2 was 2.6 (range, 2.25-3.0). For both experimenters 3 and 4, the mean rating was 1.4 (range, 1.0 to 1.5). The interrater reliability was $r = .90$. Therefore the two treatments which were administered should properly be labeled moderate and low empathy.

The control groups simply went on to the test period after the instruction period.

Test period. The Barber Suggestibility Scale was administered by tape recorder and scored by experimenter.

Results

Table 1 shows the BSS mean scores and standard deviations for each treatment group. The mean BSS scores for groups I and II (high rated experimenters) are higher than the means in groups III and IV (low rated experimenters) or the means in the control groups V and VI.

Insert Table 1 about here

Table 2 presents the 2 x 2 analysis of variance testing the effects of low/high experimenter and gender on subject suggestibility (BSS). Experimenter level of empathy was significantly related to subject suggestibility $F(1,31) = 11.66, p < .005$. Gender of experimenter and interaction between the main effects were not significant.

Insert Table 2 about here

Independent t -tests compared group V (high control) to group VI (low control) and compared group IV (low experimental) to group VI (low control) and found no significant differences, $t(14) = .28, p > .05$ for both tests.

A t -test was used to compare group I to group V (high experimental to high control) and found a significant difference, $t(14) = 2.47, p < .05$.

These findings indicate that low facilitation was not subtractive; did not produce less suggestibility, and that high facilitation did produce more suggestibility when compared to no interaction controls. Further these findings would support the idea that facilitation level rather than other personal variables account for the differences reported above.

Discussion

The results of this study seem to support one half of the facilitation skills model, that high level facilitation enhances the

counseling process in terms of counselor impact on client (Carkhuff, 1971). This is particularly notable since the experimenters who had been rated high during the pre-experimental role-play performed at only moderate levels during the actual treatment period. Thus the analysis was not comparing high and low empathy experimenters but moderate and low empathy experimenters. It also suggests that a facilitative level rating is not necessarily stable, but perhaps a description of where the counselor is with a given client. This is important to note because many of the studies supporting this model simply identify (rate) the experimenters who administer the treatment. The data are then analyzed assuming that the experimenters have in fact maintained their facilitation level (for examples see, Anderson, 1969; Carkhuff & Griffin, 1970 or Vitalo, 1970). The assumption that a counselor always performs at his rated level is not supported here and needs to be examined more closely.

Further, the study does not support the subtractive component of the skills model. The low empathy experimenter did not subtract from the process when compared to a no treatment control. This could indicate that some types of situations may be exempt from the subtractive element of the interaction. Present research which supports the hypothesis that some levels of interaction are subtractive clearly needs reviewing and replication.

The results of this study support Vitalo's (1970) statement that adjunct counseling techniques are contingent upon the level of counselor facilitative skill. In addition, these findings seem to indicate that counseling approaches which rely to some degree on client

suggestibility (such as hypnosis, implosive therapy, rational emotive counseling, relaxation techniques, some gestalt techniques, etc.) could be more effective by adding the facilitative component.

The implication here is that programs which stress facilitative communication training (for example, Carkhuff, 1969, 1971; Danish & Hauer, 1973; Egan, 1975; Goldstein, 1973; Ivey, 1971; and Kagan, 1973) are giving their trainees a bonus. By learning to perform as an empathic counselor they are also enabled to employ various adjunct counseling techniques more effectively. Further, adjunct counseling techniques, such as hypnosis and gestalt procedures, which are trained as a "school" or specific method outside the counseling process, should now be alert to this additional component and consider incorporating facilitation skill training into their existing model. It would appear that this could raise the level of effectiveness associated with such techniques or approaches.

References

- Anderson, S. C. Effects of confrontation by high-and low functioning therapists on high-and low functioning clients. Journal of Counseling Psychology, 1969, 16, 299-302.
- Barber, T. X. Hypnosis: A scientific approach. New York: Litten Educational Publishing, 1969.
- Barber, T. X. & Calverly, D. S. Comparative effects on "hypnotic-like" suggestibility of recorded and spoken suggestions. Journal of Counseling Psychology, 1964, 28, 384.
- Brady, D. O., Rowe, W. & Smouse, A. D. Facilitative level and verbal conditioning. Journal of Counseling Psychology, in press.
- Carkhuff, R. R. Helping and human relations: A primer for lay and professional helpers. New York: Holt, Rinehart, and Winston, 1969. (in two volumes.)
- Carkhuff, R. R. The development of human resources: Education, psychology, and social change. New York: Holt, Rinehart, and Winston, 1971.
- Carkhuff, R. R. & Griffin, A. H. The selection and training of human relation specialists. Journal of Counseling Psychology, 1970, 17, 443-450.
- Danish, S. F., & Hauer, A. L. Helping skills: A basic training program. New York: Behavioral Publications, 1973.
- Egan, G. The skilled helper: A model for systematic helping and interpersonal relating. Monterey, Calif.: Brooks/Cole, 1975.
- Goldstein, A. P. Structured learning theory: Toward a psychotherapy for the poor. New York: Academic Press, 1973.

Ivey, A. Microcounseling: Innovations in interviewing training.

Springfield, Ill.: Thomas, 1971.

Kagan, N. & Burke, J. B. Influencing human interaction. Washing-

ton, D.C.: American Personnel and Guidance Association, 1973.

Vitalo, R. L. Effects of facilitative interpersonal functioning in
a conditioning paradigm. Journal of Counseling Psychology,

1970, 17, 141-144.

Table 1
Summary of BSS Scores

Group	\bar{X} .	<u>SD</u>
I	5.3	1.3
II	5.3	1.2
III	3.4	1.2
IV	3.6	1.4
V	3.6	1.4
VI	3.5	1.7

Table 2
Analysis of Variance of Experimenter
Level of Empathy and Sex

Source	df	MS	F
Empathy level (L)	1	24.48	11.66*
Experimenter sex (S)	1	.01	< 1
L x S	1	.01	< 1
error	28	2.10	

*p < .005

APPENDIX A

Prospectus

The Effects of Counselor Facilitative

Level on Client Suggestibility

CHAPTER I

Introduction

Recent research in counseling has emphasized the facilitative core dimensions of empathy, respect, genuineness, concreteness, and self-disclosure in determining client outcome (Carkhuff, 1969, 1971; Carkhuff & Berenson, 1971; Truax & Carkhuff, 1967). Empirical evidence links these dimensions to client movement and change, i.e., the higher rated counselors have the higher success-treatment ratio and the lower rated counselors have the lower success-treatment ratio (Berenson & Carkhuff, 1967; Carkhuff, 1969a; Rogers, 1967). Further, these dimensions are seen as central to a "helping-relationship" regardless of the theory, approach, or technique used (Carkhuff, 1969a).

Although it is commonly accepted that the facilitative core dimensions appear to be significant variables in more traditional counseling (i.e., interactive counseling), Vitalo (1970) has suggested that the effective use of various adjunct counseling techniques, such as programmed instruction, behavioral approaches, and direct suggestion techniques, are contingent upon the level of functioning of the counselor. However, the significance of the counselor facilitative skill dimensions to adjunct techniques has not been demonstrated.

In response to this, the present study investigates the counselor's level of facilitation on an adjunct counseling technique. Specifically, the study examines the extent that client suggestibility is influenced by the counselor's interpersonal skills. The main objective of this research, then, is to investigate and clarify the parameters of the facilitative model.

Statement of the Problem (general)

The question being raised for this research is: Is the facilitative level of the counselor related to his potential effectiveness in using an adjunct counseling technique?

Importance to the field of counseling. Several items of importance to the field of counseling and counselor education are suggested. If the question is answered in the affirmative then the field in general should be aware that high facilitative skill may maximize the utilization of direct suggestion techniques, and further, a positive by-product of facilitative skill training of counselors may be an increased effectiveness in their use of other adjunct counseling techniques. If the question is answered in the negative the field should be aware that other possible response styles are necessary in maximizing the use of direct suggestion techniques, and that there are specific limitations to the facilitation model.

Importance to related helping fields. If the basic question is answered yes, then speciality fields and approaches which emphasize and/or use direct suggestion should be made aware of the added counselor dimension, i.e. facilitation, which influences the client's suggestibility. Examples of these speciality fields and/or

approaches would include: hypnosis, implosive therapy, rational emotive approaches, some of the gestalt techniques, covert conditioning, and directed relaxation in behavior therapy.

Importance to theory and model building. A third area of value of this research is in adding important information to the validation of the facilitation skills model in counseling. The interpersonal facilitative skills model is generally presented as having a universal application to all levels of counseling and counseling technique (Carkhuff, 1969a, 1971). The proponents of the theory/model see the interpersonal facilitative skills as central and basic to counseling regardless of the theory base, approach, or technique used (Vitalo & Vitalo, in press). If the question is answered yes, then additional support is given to the validity of the theory and model and to its reliability as a construct across counseling techniques. If the question is answered no, then a beginning in defining the settings and/or situations in which the facilitative skills are of little use is made. Further, the concept of the universal application of the facilitative skills model in counseling would be weakened.

The problem that this research investigates is grounded in the facilitation skills model. It stems directly from Vitalo's (1970) statement that the effectiveness of adjunct counseling techniques is contingent upon the facilitative skills of the counselor.

Literature Review

Research generated over the last twenty years has seriously challenged the effectiveness of counselors as helpers (Bergin, 1971; Eysenck, 1952; Levitt, 1957, 1963; Lewis, 1965). During this period,

the primary focus in counselor training was on the personality dynamics or characteristics which were believed to constitute an "effective" counselor. The idea seemed to be to identify those individuals who seemed to best fit the personality profile of the "ideal" counselor and to assume that, because the individuals had the proper traits, they would be effective counselors. Rowe, Murphy, and deCsipkes (in press) reviewed the research on the personality correlates of effective counselors and found that there are no parameters, yet established, which describe this "ideal"; the question of what personality characteristics are found in the effective counselor remains unanswered. Rowe et al. suggested that the thrust of research should be turned away from looking for the personality characteristics of effective counselors and instead be directed toward finding out what effective counselors do.

Rogers and Truax (1966) found that there exist qualities of human experience which, when maximized in a counseling relationship, tend to increase the probability of positive client outcome. They suggested that, given a relationship characterized by "warmth" and "genuineness," the process of counseling proceeds due to the counselor's moment-by-moment "empathic" understanding of the meaning and significance of the client's world.

Based on this work, Truax and Carkhuff (1967) proposed that these central therapeutic ingredients were behaviorally definable, observable, and measurable. They further stated that the central ingredients were common to all counseling approaches and that they were not merely "techniques" of counseling but were interpersonal facilitative skills that the counselor employs in using his "expert

knowledge and technique." Truax and Carkhuff identified genuineness, warmth, and empathy as the central ingredients of counseling. By 1969 Carkhuff had expanded the model to include empathy, positive regard (respect), genuineness, self-disclosure (specificity) as the core facilitative dimensions and developed measurement scales for each. All scales consist of five level ranging from 1.0 (low) to 5.0 (high) in each dimension.

A substantial amount of research indicates the importance of high levels (above 3.0) of interpersonal skill to the counseling relationship (Altman, 1973; Carkhuff, 1969a, 1971; Truax & Carkhuff, 1967). For example, Altman (1973) investigated the effects of high and low levels of counselor's functioning in the initial interview on clients continuing or terminating counseling. Typed transcripts from the initial interviews of 19 doctoral level counselors were rated by trained raters. The mean level of facilitation was then compared to whether or not the client terminated counseling after the initial interview or continued counseling for ten or more sessions. Altman found that empathy level in the initial interview was related to the clients continuing in or termination from counseling. The rating of the transcripts in an exchange-by-exchange manner generated some interesting data: when counselors were low in empathy early in the interview, there was a strong tendency for their level to deteriorate further as the interview progressed. Conversely, when empathy was at high levels early in the interview it was generally maintained or increased during the rest of the interview. From this data, Altman concluded that the level of

empathy early in the initial interview will establish the level for the entire session and subsequently whether or not a client will return.

Vitalo and Vitalo (in press) studied the impact of training counselors in the facilitative skill dimensions on client depth of self-exploration. The novel aspect of this study is that the counselors were seeing the clients in on-going counseling sessions before and during the training. Initially, each client-subject was rated on Depth of Self-Exploration (DX) and each counselor was rated on the level of facilitative skill (based on tape-recorded interactions). The counselors were then given systematic training in the skill dimensions and re-rated. Although all counselors improved at least one level, it is interesting to note that none of the counselors reached a rated level of 3. The subject-clients were re-rated on DX and a significant improvement was noted, i.e., the clients displayed more depth of self-exploration. Vitalo and Vitalo concluded that the data supported the effectiveness of in process (mediated) training in producing greater client benefits. This allowed them to strongly imply that counseling outcome is contingent on the level of counselor facilitative skill.

Holder, Carkhuff, and Berenson (1967) analyzed the effect of client level of interpersonal skill on counseling outcome, as measured by depth of self-exploration. They identified three high and three low functioning subjects from a pool of subjects who had been asked to role play a counseling situation. An experienced counselor, rated at high level of facilitative skill, interacted with each client-subject individually. The counseling session had

been previously divided into three segments. The first and third segments the counselor was to respond at high levels. During the middle or second segment the counselor was to respond at a low level but attempt to maintain the frequency of response. Levels of client self-exploration were rated for each segment from a recording of the sessions.

Holder et al. hypothesized that high functioning clients, having experienced a high level of therapeutic conditions, would maintain their high levels of self-exploration during the manipulation period. Further, it was hypothesized that the low functioning client's responses would be contingent upon the level of conditions offered by the counselor. The results supported the hypotheses. Generally, high functioning clients make better use of the counseling process than those who are functioning at lower levels of conditions. They concluded that following the establishment of a relatively high level of communication, much of the communication process with the high level client (at least 3) may remain implicit.

Pagell, Carkhuff, and Berenson (1967) looked at the ability to predict client outcome from the level of both client and counselor functioning. Eight subject-clients were identified as potential long-term cases and were placed in the counselor position in a role-play. Their levels of empathy, respect, and genuineness were then rated. Next they were randomly assigned to eight counselors who had previously been rated on the same dimensions. The indexes of client functioning following the treatment were: tape ratings of the client case in the helping role (post-test), expert assessments

of client level of functioning, client self-assessments, counselor assessment, and assessments by the standard interviewee (role-play clients) who saw the client-subjects both pre- and post- treatment. Predictions for positive outcome were based on: counselor functioning above level 3 and the counselor functioning above the level of the client. The data supported the ability to predict the outcome of counseling based on knowledge of counselor and client level of functioning.

Carkhuff (1969a, 1969b) concluded that a larger number of clients of those counselors who offer high levels of the facilitative dimensions will change dramatically (become "healthier physically, emotionally, and intellectually") than the clients of counselors who offer low levels. In fact, the facilitative model indicates that a counselor can, at best, only bring a client to the level which the counselor is functioning (Carkhuff, 1971, pp. 178-179). A level 2 counselor cannot help a client to function above level 2.

In an attempt to expand the skills model beyond the counseling setting, Vitalo (1970) investigated the effects of interpersonal functioning in a verbal conditioning paradigm. Vitalo was testing to see if high level of facilitative dimensions in the experimenter would enhance subject performance on a verbal conditioning task. The task was selected as a simple example of social conditioning in which systematic rewarding by one individual alters the frequency of occurrence of a response in another. Vitalo compared the learning slopes of conditioned subjects to a control group and concluded that the results clearly supported the efficacy of the facilitative dimensions as significant variables in the interpersonal conditioning

process. Further, he stated, the experimenters' level of functioning is prerequisite to the effective implementation of systematic conditioning and extinction procedures. Vitalo stated that empathy, respect, and genuineness were important variables in using programmed learning, hypnosis (or direct suggestion), and behavioral approaches.

Morris and Suckerman (1974) investigated the dimension of counselor warmth as a factor in automated systematic desensitization. They found that the counselor warmth group demonstrated significant improvement over a no treatment control group. All sessions were tape-recorded for each group. This study supports Vitalo's statement that the facilitative dimensions are significant variables in the effective use of adjunct counseling techniques.

Muehlberg, Pierce, and Drasgow (1969) performed a factor analysis on all the interacting conditions of empathy, positive regard, genuineness, self-disclosure, and concreteness and found the rated facilitative conditions were intercorrelated both positively and substantially. A single major factor accounted for 89% of the observed conditions. They also found that the primary factor was generalizable to include both high and low levels of counselor functioning. Counselors high on one facilitative dimension are high on all other facilitative dimensions and vice versa. Their final conclusion supported the claim that counseling can be for "better or worse" (Truax & Carkhuff, 1963).

In summary, the literature cited above suggests the following points:

- 1) There exist qualities of human experience which tend to increase the probability of positive client outcome.
- 2) These qualities represent a base or core of facilitative skill dimensions from which effective counselors operate.
- 3) The facilitative skill dimensions are common to most counseling approaches.
- 4) The facilitative skill dimensions are definable, observable, and measurable.
- 5) The facilitative skill dimensions are established early in the interaction session and are generally maintained throughout the session.
- 6) An individual who is rated high in any one facilitative dimension is likely to be rated high in all facilitative skill dimensions.
- 7) Some analogue counseling situations demonstrate that the facilitative skill dimensions model tends to generalize, i.e., high skills = high outcome and vice versa.
- 8) The facilitative skill dimensions are believed to be significant variables in the use of adjunct counseling techniques.

The implication here, is strong that the effective use of counseling and adjunct counseling techniques is contingent upon counselor facilitative skill level. However, support for the supposition that adjunct counseling techniques are influenced one way

or another by counselor facilitative skill level has not been clearly demonstrated. This study is intended to investigate the influence of counselor facilitation level on a specific adjunct counseling technique. Direct suggestion is proposed as an appropriate adjunct counseling technique for the purpose of this study. Specifically, the component of client suggestibility will be investigated.

Suggestibility

While suggestion experiences probably date back to ancient times and can logically be seen being used in many different approaches in counseling, discussion of such experiences are found indexed in treatise concerning hypnosis and hypnotic-like phenomena. It is from this body of literature that important generalizations can be made about suggestion.

While most histories of hypnosis (such as Boring, 1957; Pattie, 1967; Shore & Orne, 1965) begin with Franz Anton Mesmer, it was James Braid who first postulated a theory which dealt with a concept of suggestion. Braid (1795-1860), a Scottish physician practicing in Manchester, attended a demonstration of Mesmerism in England and concluded that the phenomenon involved a change in the nervous system. He developed the term "neurohypnotism" (or nervous sleep) for the mesmeric condition. Later he shortened the term to "hypnotism." Braid's theory progressed from a physiological to a psychological one. He reduced everything in hypnosis to the subject's responding to suggestion in a state of mental concentration which was not sleep. Braid's work marks the beginning of a psychological theory of suggestion (Sarbin & Coe, 1973).

In the United States, one of the most important investigators in hypnosis was Morton Prince (1854-1929). Using clinical cases Prince found that hypnosis was not a specific state but one of a large number of conditions involving alteration of the personality.

Due to the non-empirical, anecdotal, reports which made up the bulk of the literature on hypnosis and suggestibility, Clark Hull set out to design and perform experiments on the characteristics of hypnotism and its relationship to suggestibility (Hull & Huse, 1930). Hull developed many theoretical notions concerning the results of his experiments (Hull, 1933), however, his major contribution was his model of experimentation and systematic study of hypnotic-like phenomena. Hull helped make suggestibility more acceptable as a clinical tool and more important, a fit subject for scientific investigation (Sarbin & Coe, 1972).

In order to separate the two concepts, hypnosis and suggestibility, a fundamental question must be asked. What is hypnosis? Traditionally hypnosis has been wrapped in an aura of magic and mystery, and popularly seen as somewhat romantic. Kubie and Margolin (1944) suggested the development of an operational definition based on accurate description and, where possible, measurements because:

Probably no definition of hypnotism will satisfy all workers in the field, especially since it is not always easy to recognize the state itself with certainty, nor to rule out conscious and unconscious simulation (p. 611).

Hilgard, Weitzenhoffer, Landes, and Moore (1961) took Kubie and Margolin's advice and operationally defined hypnosis as:

a relatively persistent tendency to yield the phenomena historically recognized as belonging to the hypnotic trance (p. 1).

Basically what Hilgard et al. and others (Barber, 1965, 1966; Sheehan, 1973) suggest is simply that an individual is hypnotized when he acts as if he were hypnotized. That is to say, they are applying a behavioral approach. Hypnotic responses can be viewed as within the repertoire of learned responses already possessed by the subject, and regarded as another type of performance to be scrutinized using the concepts and methods applicable to any other performance.

Other investigators such as Weitzenhoffer (1953, 1957, 1963), Gill and Brenman (1959), and Kinney and Sachs (1974) have contributed to a dichotomy between what they refer to as "waking" (suggestion) states and "deep" (hypnotic) states. The waking state is sometimes called the waking suggestion state and is seen as a condition of openness to suggestion. Generally, the waking suggestion state is distinguished by the absence of a pre-induction which stresses deep sleep or relaxation and implications that the experience is related to "deep" levels of the mind. However, some hypnotists, such as Erickson (1959, 1967), often do not use such pre-induction techniques and still demonstrate deep levels of hypnosis.

This dichotomy has not been readily accepted, nor the distinctions between the hypnotic trance and the waking state recognized, by other experimenters. Young (1962) wrote that if causation was to be attributed to hypnosis, then "hypnotic behavior" must be compared to "normal waking behavior." Sutcliffe (1960, 1961) discussed "credulous" versus "skeptical" views of hypnotic phenomena as part of a critical review of methodological approaches to the

approaches to the study of hypnosis. This distinction between methodologies was based on whether or not an approach presupposes the existence of a mediating state (e.g., trance) which explains hypnotic performance.

Orne (1959) used "simulating" subjects, those told to behave as if they had been hypnotized. The performance of the simulating subjects was not different than that of "real" or supposedly hypnotized subjects. Orne interpreted his findings as suggesting that the demand characteristics of the situation are apparently most crucial in determining hypnotic behavior, and that some type of "hypnotic state" cannot be claimed as the significant variable.

Barber (1965, 1969) has studied what he calls "hypnotic-like behavior." Using basically a behavioral approach to the hypnotic phenomena, he has taken the position that one cannot infer some hypnotic state to exist because of the presence of commonly recognized hypnotic behaviors. The reason for this is that these behaviors are regarded as hypnotic only by postulating the existence of some hypnotic state (1964d). The problem of circular reasoning is apparent. Therefore, Barber has sought to study conditions under which subjects are suggestible, and refused to call responses anything more than just that -- responses to suggestion.

The above studies tend to dissolve the distinctions between "waking" and "hypnotic" suggestion by removing the assumptions about the central states of the subject. What remains is suggestion, or the ability of an individual to demonstrate "suggestibility." It is because suggestion can be viewed as a general term, without

assuming the existence of an "altered state" of the person, that a behavioral approach such as Barber's may be used to develop knowledge which may expand the boundaries of direct suggestion techniques.

Measuring Suggestibility

Development of suggestibility scales. Hull's work in the 1930's made apparent that any further study of suggestion would require definitive criteria for establishing the presence (or degree of presence) of the response. However, Hilgard (1967) credits Liebeault with developing the forerunner of the modern suggestibility scale. In 1889 Liebeault published a six point scale of susceptibility. He presented the scale as unidimensional, the six items being ordered in terms of their difficulty.

Davis and Husband (1931) published a scale in which scores were given to groups of suggestions rather than specific items. Subjects were rated on a five point scale, with each point associated with a group of events. For example, point one - Insusceptible = no signs of hypnosis observed; point two - Hypnodal = relaxation, fluttering of lids, closing of eyes, complete physical relaxation; ... point six - Somnambulaistic Trance = eyes open in trance, bizarre posthypnotic behavior, posthypnotic amnesia, negative visual and auditory hallucinations, ... etc. The basic weakness of this scale was that it had no standardized technique of induction and no adequate standards for scoring. These weaknesses made it unacceptable as a standard measuring instrument (Hilgard, 1965).

Barry, Mackinnon, and Murray (1933) attempted to standardize

a scale of suggestibility. They developed a protocol consisting of five negative suggestions (i.e., inability to open eyes, raise arm, pull apart interlocked hands, and say one's name) and an item testing post-hypnotic amnesia. The scale was scored according to the number of suggestions carried out and the degree of memory loss.

Friedlander and Sarbin (1938) developed a scale based on items drawn from Hull's work and from the scales developed both by Davis and Husband, and by Barry, MacKinnon, and Murray. While this scale proved to be more reliable than earlier scales, it still had a large subjective component.

The development of the Stanford Hypnotic Suggestibility Scale, Forms A and B (Weitzenhoffer & Hilgard, 1959) and later Form C (Weitzenhoffer & Hilgard, 1962), based in part on Friedlander and Sarbin's work, marked the first reliable, easily administered, standardized measuring instruments of suggestibility. The Stanford scales were developed to specifically overcome the weaknesses of earlier attempts. Easier items at the lower end of the scales made the distribution less skewed. Alternate forms were developed to facilitate repeated measures and more adequate norms were developed. The scoring system was simplified so that each of the twelve items on the scale is scored either pass or fail (fully explained for each item). Further, the entire scale is read verbatim from the manual, and alternate instructions are provided according to the subject's responses (Hilgard, 1967).

Shore and Orne (1962) modified some of the items on the Stanford Hypnotic Susceptibility Scale, Form A and developed the Harvard

Group Scale of Hypnotic Susceptibility to test groups of subjects. The administration of the group scale is basically the same as the administration of the individual scales. The major difference is that the individual subjects in the group score their own responses. Before testing begins a sealed booklet is passed out to each subject. The scale is then administered to the group. After the administration of the scale, the subjects are instructed to open the booklets and respond to the items therein. This method of scoring has been found to be similar to observer scoring (Bentler & Hilgard, 1963; Shor & Orne, 1963) and the distribution of the scores on the group form has been found to be similar to the distribution of scores on the individually administered scales (Coe, 1964).

The Barber Suggestibility Scale (BSS) (Barber, 1965, 1969; Barber & Glass, 1962) was developed independently of the Stanford scales. The major difference between the BSS and the Stanford scales is that the items may be administered with or without the usual hypnotic induction. The BSS is the first scale developed which does not assume a hypnotic state but looks at the subject's suggestibility as the target phenomena to be studied.

Barber and Calverly (1963) report norms which are similar in distribution to the Stanford scales. Further, Barber, (1969) summarized: a) the test-retest correlations (.80 or above) indicate that subjects who test in a direction tend to retest in the same direction on a second occasion under the same or under different experimental conditions, and b) the internal consistency reliability (.80) indicate that the BSS is a homogeneous scale, i.e., that

one part measures the same thing as another part.

Research on the Barber Suggestibility Scale (BSS)

The BSS was developed to answer a need for a reliable measure which could be administered with prior experimental manipulation of antecedent variables, i.e., a scale which could be administered following an experimental treatment (Barber, 1969). Once developed and normed Barber et al. investigated several important antecedent variables to suggestibility. The following variables were investigated to ascertain their influence on suggestibility:

1. The subject's pre-experimental desires to perform.
2. The subject's pre-experimental expectations.
3. The subject's attitude toward the task.
4. The subject's gender (sex).
5. The method of scale presentation.
6. The experimenter's tone of voice.
7. The experimenter's expertness.
8. Whether or not the subject has eyes open.

The extent of the subject's pre-experimental desire and expectation was investigated by Barber and Calverley (1965). They gave 110 subjects a mimeographed pre-experimental questionnaire which asked how deeply they wished to be hypnotized (desire) and how deeply they would be hypnotized (expectations). The subjects were then divided into two groups. Group one received a standardized induction and was administered the scale. Group two was asked to close their eyes and place themselves into hypnosis -- after five minutes they were administered the suggestibility scale. The data indicated that suggestibility was positively correlated with pre-experimental

expectations and desires.

In another study, the same researchers (1964c), investigated the effect of positive and negative attitudes on suggestibility. Thirty-three subjects were randomly assigned to two groups. In the instructions, group one was told that they were involved in a test of imagination (positive set) and group two was told that they were involved in a test of gullibility (negative set). Both groups were individually administered the BSS. Group one scored significantly higher than group two. Barber and Calverley concluded that subjects are more suggestible when the task is described with positive connotations.

Barber and Calverley (1964b) analyzed the experimenter's tone of voice on suggestibility. Again, two groups were used: group one received the BSS in a forceful tone of voice, and group two received the BSS in a lackadaisical tone. The study showed the suggestibility is functionally related to the tone in which the test suggestions are given, i.e., the forceful tone obtained better results.

Two experiments were designed to investigate the effects that eyes being open or closed had on suggestibility. In experiment one, subjects were randomly assigned to two groups. Group one was administered the BSS with their eyes open. Group two was administered the scale with their eyes closed. In experiment two, twenty four subjects were given a standardized induction and then were administered the BSS individually, first with their eyes open, then with their eyes closed. The BSS was tape-recorded to control for

tone of voice. Contrary to the expectation of higher results with eyes closed, the experimenters found that subjects were not significantly more suggestible. They concluded that subjects are as suggestible when their eyes are open as when they are closed.

The effect of modality of scale presentation on suggestibility was studied by Barber and Calverley (1964a). They compared live, face-to-face, presentation of the scale with tape-recorded presentation. They designed and conducted two experiments. In the first experiment, two groups were individually administered the BSS. Group one received the BSS from a live experimenter and group two from a tape-recording of the experimenters voice. In experiment two, a standardized hypnotic induction was administered and then the BSS was administered individually to each subject. Again the subjects were randomly assigned to two groups, the only difference being that group one received a live presentation by the experimenter and group two a tape-recorded presentation. No significant difference was found. It was concluded that subjects are as suggestible when the test-suggestions are presented impersonally (tape-recorded) as when presented personally (orally by experimenter).

In an investigation to obtain normative data, Barber and Calverley (1963) administered the BSS to 724 students. The subjects were 388 males and 336 females ranging in age from six to twenty two years old. The BSS was administered without special preliminary instructions. All subjects were told that they were being tested for the ability to imagine. The results generated by this data indicated that the sexes are equally responsive to standardized

test suggestions; that they were equally suggestible. A curilinear relationship was noted between chronological age and response to test suggestion. Responsiveness to test suggestions increased from age six to eight and reached a maximum around the ages of eight to ten and gradually dropped from ten to fourteen and remains stable from fourteen to twenty two. Further studies were suggested to investigate the effects of age on suggestibility.

The empirical evidence seems to indicate that the Barber Suggestibility Scale (BSS) is a reliable and experimentally flexible measure of suggestibility. However, even though much research has been conducted on the antecedent variables of suggestion, and Barber (1969, p. 12) states that the subject-experimenter interaction variables are important to study, no research has investigated the effects of the interpersonal skill dimensions on suggestibility. The most compelling observation is that the basis for responding to suggestion begins in the social interchange between experimenter (counselor) and subject (client) (Sarbin & Coe, 1972). One would expect that "at this point the subject of investigation would be the relationship between the suggester and the person suggested to" (Haley, 1969). The Barber Suggestibility Scale (BSS) appears to be an appropriate outcome measure for such an investigation.

Assumptions

The literature of the facilitative skill dimensions allow the following assumptions (which will be made for the purpose of this study):

1. Factor analysis of the facilitative skill dimensions

indicate that the rated level of skill in one dimension will hold constant across other dimensions, and that empathy is an adequate measure of overall functioning level.

2. Empathy can be behaviorally observed and measured.
3. Empathy can be reliably measured from segments of experimenter-subject tape recorded interactions. (Also see Gormally and Hill, 1974).

The literature of suggestion allows the following assumptions (which will be made for the purpose of this study):

1. Suggestibility is a behaviorally observable and measurable event.
2. The Barber Suggestibility Scale is a reliable measure of suggestibility.

Statement of the Problem (specific)

The problem with which this research is concerned is the relation between the counselor's level of interpersonal facilitative skill and client's suggestibility. Is client suggestibility, as measured by the Barber Suggestibility Scale, effected by counselor facilitative skill, as measured by empathy ratings?

Hypothesis

General Hypothesis: There exists a significant relationship between the level of facilitation of the counselor and the degree to which the client is suggestible.

Specific Hypotheses: The specific hypotheses were:

1. Subjects who interact with high facilitators will

- demonstrate more suggestibility than subjects who interact with low facilitators (high > low).
2. Subjects who interact with high facilitators will demonstrate more suggestibility than subjects who are offered no interaction (high > control).
 3. Subjects who interact with low facilitators will demonstrate less suggestibility than subjects who are offered no interaction (control > low).
 4. Subjects in the high facilitator control group will not demonstrate different levels of suggestibility than subjects in the low facilitator control group.

Null Hypothesis: The null hypothesis can be stated as:
There will be no significant relationship between level of facilitation and degree of suggestibility, i.e., there will be no difference among groups.

CHAPTER II

Method

Participants

The ethical principles outlined by the American Psychological Association (1973) were followed for all participants.

Subjects. The subjects were 48 students drawn from a departmental subject pool at the University of Oklahoma. The number of subjects needed was determined by performing a power test (Cohen, 1969; Feldt & Mahmoud, 1958) with alpha set at .05, the desired power at .95, and a medium level (one half the population sigma) effect size. The subjects were randomly assigned to one of six groups, four experimental and two control ($n = 8$ per group).

Experimenters. Two experimenters were selected to represent high (mean rating 2.75 or more) levels of empathy and two were selected to represent low (1.75 or less) levels of the skill. The experimenters were selected from volunteer graduate students enrolled in the helping professions (guidance and counseling, counseling psychology, social work, and human relations) at the University of Oklahoma. Each potential experimenter was cast in a role-play counseling session. The same coached-client and presenting problem was used for all role-play sessions. The sessions were tape-recorded and segments of the role-play interaction were rated by trained raters for level of empathy (see appendix B). Reliability correlations were performed to insure high inter-rater agreement.

The chosen experimenters were then familiarized with the experimental procedures and the BSS. Following the procedure outlined by Barber and Calverley (1964a), each experimenter tape-recorded the BSS in their own voice. This was done to insure that all subjects within a group were presented the scale in the same tone of voice. Further, the BSS tape-recordings of all experimenters were rated for forcefulness by a trained rater to insure equivalence of tapes.

Instrument

The Barber Suggestibility Scale (BSS) (Barber, 1965) was tape recorded by each experimenter and individually administered to each subject as the dependent measure for each group. This instrument is an eight item, objectively scored scale. In a study of reliability, 60 subjects were given the BSS twice over one week with a resulting test-retest correlation of .88. Twenty nine of the subjects were again retested after six weeks with a resulting correlation of .82. Barber (1965) reported that even with a change of conditions (e.g., direct suggestion on the first administration, hypnotic induction on the second, administration) correlation coefficients were barely changed. When 186 subjects were tested on response to the BSS under one of three experimental conditions, i.e., hypnotic induction, task motivation instructions, direct suggestion, split-half reliabilities were .84, .75, and .79 respectively (Barber, 1965).

In a study of item correlations with the total scale, it was found that test items were significantly correlated with scores on the total scale minus the item. Norms for all items and for different age groups, along with a factor analysis of the scale appear

in Barber (1969).

Materials

A room furnished with two arm chairs facing each other, a small table beside one chair, a tape-recorder, clock, stopwatch, ruler, and standard instructions along with the instrument (BSS) were the materials used in all group conditions.

Procedure

Assignment to groups. Each subject was randomly assigned to one of six groups. Group I (conducted by experimenter 1) and group II (conducted by experimenter 2) were the high counselor facilitator experimental groups. Group III (experimenter 3) and group IV (experimenter 4) were low counselor facilitator groups. Groups V and VI were no treatment control groups. One of the control groups was conducted by the highest rated counselor (group V and the other by the lowest rated counselor (group VI). This method controls for any personality variable other than facilitation which might account for difference in the outcome measure. In order to demonstrate this point, the following schematic is presented. For the purpose of this experiment the total counselor (C) can be viewed as some function of facilitation skill level (F) and all other unknown personality variables (A), or $C \underline{f} (F,A)$. Schematically this can be presented as $\frac{F A}{C}$. This study is investigating the facilitative skill level on suggestibility (S). Therefore, the four experimental groups can be viewed as $S = \frac{(F)(A)}{(C)}$ and the control groups as $S = \frac{(\quad)(A)}{(C)}$. Since the interaction between F and A is not fully known, each level (high and low) is represented. This type of control

increases the probability that any significant difference between the groups is due to the independent variable.

Following the assignment to groups the procedures were individually administered and consisted of: a) instruction period, b) treatment period, and c) test period.

Instruction period. The instruction period was the same for all groups. It consisted of an explanation and general information about the experiment. It was read verbatim to the subjects. The complete transcript for this segment appears in appendix C.

Treatment period. The treatment period began immediately upon completion of the instructions. The experimenters in the experimental groups (I - IV) were instructed to "establish rapport" with the subject. Time limits were set at between 15 to 20 minutes. Random excerpts from the tape-recording of this session were rated by trained, paid raters to check on the level of facilitation at which each experimenter was performing.

The control groups (V & VI) simply went on to the test period after reading the instructions.

Test period. The Barber Suggestibility Scale was administered by tape recorder and scored by the experimenter. The transcript for the entire scale and scoring instructions appears in appendix D.

Design

The independent variable was the level of facilitation of the counselor-experimenter. The dependent variable was the score obtained on the BSS by the client-subject. The basic design was one of single scores for each subject with a no treatment control.

Expressed in the symbolic code introduced by Campbell and Stanley (1966), the design would appear as:

R	X ₁	0
R	X ₂	0
R		0

Each row in the diagram represents a treatment level (or two groups). The R indicates random assignment of subjects to groups. The X refers to the subjects exposure to a treatment (i.e., X₁ = high facilitation groups and X₂ = low facilitation groups). The lack of an X indicates no treatment. The 0 refers to the measurement or observation, in this case the BSS score. The design can be recognized as design number six, The Post-Test Only Control Group Design, suggested by Campbell and Stanley (1966, p. 25).

Campbell and Stanley (1966) noted that this design has not been fully used in research due in part to distrust of randomization as equation. However, they state that it controls for testing as main effect and interaction and adequately answers the central question of whether or not a treatment did have an effect. They concluded that design six is "greatly underused in educational and psychological research."

CHAPTER III

Analysis

The design and procedure used the following analyses:

1. Inter-rater reliability. A Pearson product-moment correlation to establish interrater reliability between the trained, paid, raters ($n = 2$) who rated the experimenters level of empathy from the experimenter's taped segments of role-played pre-experimental sessions, and from the experimenter's taped segments of the treatment period (in Bruning & Kintz, 1968, pp. 152-155).

2. The Null Hypothesis. A two factor, factorial design analysis of variance (Lindquist, 1953, pp. 207-219) was used to test the null hypothesis that there is no significant relationship between level of facilitation and degree of suggestibility, i.e., that there was no difference among groups.

3. The specific hypotheses. t -tests for difference between two independent means (Bruning & Kintz, 1968, pp. 9-12) were used to test hypotheses 2, 3 and 4. The analysis of variance used to test the null was also the test of hypothesis 1.

4. The sample and population means. A t -test for a difference between the sample mean and the population mean (Bruning & Kintz, 1968, pp. 7-9) was computed to determine if the sample chosen was significantly different from the population norms reported by Barber (1969).

References

- Alexik, M. & Carkhuff, R. R. The effects of manipulation of client depth of self-exploration upon high and low functioning counselors. Journal of Clinical Psychology, 1967, 23, 212-215.
- Altman, H. Effects of empathy, warmth, and genuineness in the initial counseling interview. Counselor Education and Supervision, 1973, 12, 225-228.
- Barber, T. X. Measuring "hypnotic-like" suggestibility with and without "hypnotic induction;" psychometric properties, norms, and variables influencing response to the Barber Suggestibility Scale (BSS). Psychological Reports, 1965, 16, 809-844.
- Barber, T. X. Hypnosis: A Scientific Approach. New York: Litten Educational Publishing, Inc., 1969.
- Barber, T. X. & Calverley, D. S. Comparative effects on "hypnotic-like" suggestibility of recorded and spoken suggestions. Journal of Consulting Psychology, 1964, 28, 384. (a).
- Barber, T. X. & Calverley, D.S. Effects of experimenters tone of voice on "hypnotic-like" suggestibility. Psychological Reports, 1964, 15, 139-144. (b).
- Barber, T. X. & Calverley, D.S. The definition of the situation as a variable affecting "hypnotic-like" suggestibility. Journal of Clinical Psychology, 1964, 20, 438-440. (c).

- Barry, H., MacKinnon, D. & Murray, H. Hypnotizability as a personality trait and its typological relations. Human Biology, 1931, 3, 1-36.
- Bentler, D. & Hilgard, E. Hypnotic susceptibility assessed in large groups. International Journal of Clinical and Experimental Hypnosis, 1963, 11, 93-97.
- Bergin, A. The evaluation of therapeutic outcomes. In Bergin, A. & Garfield, S. (eds). Handbook of Psychotherapy and Behavior Change. New York: John Wiley, 1971.
- Bruning, J. L. & Kintz, B. L. Computational Handbook of Statistics. Dallas: Scott, Foresman and Company, 1968.
- Carkhuff, R. R. Helping and Human Relations: A Primer for Lay and Professional Helpers. New York: Holt, Rinehart and Winston, Inc., 1969. (in two volumes.) (a)
- Carkhuff, R. R. Critical variables in effective counselor training. Journal of Counseling Psychology, 1969, 16, 238-245. (b)
- Carkhuff, R. R. The Development of Human Resources: Education, Psychology, and Social Change. New York: Holt, Rinehart, and Winston, Inc., 1971.
- Carkhuff, R. R. & Berenson, B. G. Beyond Counseling and Psychotherapy. New York: Holt, Rinehart, and Winston, 1967.
- Coe, W. Further norms on the Harvard Group Scale of Hypnotic Susceptibility, form A. International Journal of Clinical and Experimental Hypnosis, 1964, 12, 184-190.
- Cohen, J. Statistical power analysis for the behavioral sciences. New York: Academic Press, 1969.

- Davis, L. & Husband, R. A study of hypnotic susceptibility in relation to personality traits. Journal of Abnormal and Social Psychology, 1931, 26, 175-182.
- Eysenck, H. The effects of psychotherapy: An evaluation. Journal of Consulting Psychology, 1952, 16, 319-324.
- Erickson, M. H. Further techniques of hypnosis: Utilization techniques. American Journal of Clinical Hypnosis, 1959, 12, 3-21.
- Erickson, M. H. Laboratory and clinical hypnosis: the same or different phenomena? American Journal of Clinical Hypnosis, 1967, 9, 166-170.
- Friedlander, J. & Sarbin, T. The depth of hypnosis. Journal of Abnormal and Social Psychology, 1938, 33, 353-375.
- Gormally, J. & Hill, C. E. Guidelines for research on Carkhuff's training model. Journal of Counseling Psychology, 1974, 21, 539-547.
- Hilgard, E. Hypnotic Susceptibility. New York: Harcourt, Brace, and World, Inc., 1965.
- Hilgard, E. Individual differences in hypnotizability. In Gordon, J. E. (ed), Handbook of Hypnosis. New York: Crowell-Collier and MacMillan, Inc., 1967.
- Hilgard, E., Weitzenhoffer, A., Landes, J., & Moore, R. The distribution of susceptibility to hypnosis in a student population: a study using the Stanford Hypnotic Susceptibility Scale. Psychological Monographs, 1961, 75, 1-22.

- Holder, T., Carkhuff, R. R., & Berenson, B. The differential effects of the manipulation of therapeutic conditions upon high and low functioning clients. Journal of Counseling Psychology, 1967, 14, 63-66.
- Hull, C. L. & Huse, B. Comparative suggestibility in the trance and waking states. American Journal of Psychology, 1930, 52, 279-286.
- Hull, C. L. Hypnosis and Suggestibility: An Experimental Approach. New York: Appleton-Century-Crofts, 1933.
- Kubie, L. & Margolin, S. The process of hypnotism and the nature of the hypnotic state. American Journal of Psychiatry, 1944, 100, 611-122.
- Levitt, E. Psychotherapy with children: a further evaluation. Behavior Research and Therapy, 1963, 1, 45-51.
- Levitt, E. The results of psychotherapy with children: An evaluation. Journal of Consulting Psychology, 1957, 21, 189-196.
- Lewis, W. Continuity and intervention in emotional disturbance. Exceptional Children, 1965, 31, 465-475.
- Lindquist, E. F. Design and Analysis of Experiments in Psychology and Education. Boston: Houghton Mifflin Company, 1953.
- Morris, R. & Suckerman, K. Therapist warmth as a factor in automated systematic desensitization. Journal of Consulting and Clinical Psychology, 1974, 42, 244-250.
- Muelhberg, N., Pierce, R. & Drasgow, J. A factor analysis of therapeutically facilitative conditions. Journal of Clinical Psychology, 1969, 25, 93-95.

- Orne, M. The nature of hypnosis: artifact and essence. Journal of Abnormal and Social Psychology, 1959, 58, 277-299.
- Pagell, W., Carkhuff, R. R. & Berenson, B. The predicted differential effects of high and low functioning therapists upon the level of functioning of outpatients. Journal of Clinical Psychology, 1967, 23, 510-512.
- Pattie, F. A. A brief history of hypnotism. In Gordon, J. (ed). Handbook of Clinical and Experimental Hypnosis. New York: MacMillan, 1967, 10-43.
- Piaget, G., Berenson B., Carkhuff, R. R. The differential effects of the manipulation of therapeutic conditions by high and low functioning counselors upon high and low functioning clients. Journal of Consulting Psychology, 1967, 31, 481-486.
- Rowe, W., Murphy, H. B., & deCsipkes, R. A. The relation of counselor characteristics and counseling effectiveness. In press, 1975.
- Sarbin, T. R. & Coe, W. C. Hypnosis a Social Psychological Analysis of Influence Communication. New York: Holt, Rinehart, and Winston, Inc., 1972.
- Sheehan, P. W. Escape from the ambiguous, artifact and methodologies of hypnosis. American Psychologist, 1973, 54, 983-993.
- Shor, R. & Orne, E. C. Harvard Group Scale of Hypnotic Susceptibility. Palo Alto: Consulting Psychologists Press, 1962.
- Shor, R. & Orne, E. C. Norms on the Harvard Group Scale of Hypnotic Susceptibility, Form A. International Journal of Clinical and Experimental Hypnosis, 1963, 11, 39-48.

- Shor, R. & Orne, M. T. The Nature of Hypnosis: Selected Basic Readings. New York: Holt, Rinehart, and Winston, Inc., 1965.
- Sutcliffe, J. "Credulous" and "skeptical" views of hypnotic phenomena: a review of certain evidence and methodology. International Journal of Clinical and Experimental Hypnosis, 1960, 8, 73-101.
- Sutcliffe, J. "Credulous" and "skeptical" views of hypnotic phenomena: experiments on amnesia, hallucinations, and delusion. Journal of Abnormal and Social Psychology, 1961, 62, 189-200.
- Truax, C. B. Therapist empathy, warmth, and genuineness and patient personality change in group psychotherapy: A comparison between interaction unit measures, time sample measures, and patient perception measures. Journal of Clinical Psychology, 1966, 22, 225-229.
- Truax, C. B. & Carkhuff, R. R. "For better or for worse:" the process of psychotherapeutic personality change. In Recent Advances in the Study of Behavior Change, Montreal: McGill University, 1963.
- Truax, C. B. & Carkhuff, R. R. Toward Effective Counseling and Psychotherapy: Teaching and Practice. Chicago: Aldine, 1967.
- Vitalo, R. L. Effects of facilitative interpersonal functioning in a conditioning paradigm. Journal of Counseling Psychology, 1970, 17, 141-144.
- Vitalo, R. L. & Vitalo, P. Effects on clients of therapist training. Journal of Clinical Psychology, in press, 1974.

- Weitzenhoffer, A. General Techniques of Hypnotism. New York: Grune & Stratton, Inc., Inc. 1957.
- Weitzenhoffer, A. & Hilgard, E. The Stanford Hypnotic Susceptibility Scale, Form C. Palo Alto: Consulting Psychologists Press, Inc., 1962.
- Weitzenhoffer, A. & Hilgard, E. The Stanford Hypnotic Susceptibility Scale, Form A and B. Palo Alto: Consulting Psychologists Press, Inc., 1959.
- Weitzenhoffer, A. When is a "suggestion" a "suggestion?" International Journal of Clinical and Experimental Hypnosis, in press, 1974.
- Young, P. C. An experimental study of mental and physical functions in normal and hypnotic states. American Journal of Psychology, 1926, 37, 345-356.

APPENDIX B

Empathic Understanding: A Scale For Measurement

Level 1

The verbal and behavioral expressions of the first person either do not attend to or detract significantly from the verbal and behavioral expressions of the second person(s) in that they communicate significantly less of the second person's feelings than the second person has communicated himself.

EXAMPLES: The first person communicates no awareness of even the most obvious, expressed surface feelings of the second person. The first person may be bored or uninterested or simply operating from a preconceived frame of reference which totally excludes that of the other person(s).

In summary, the first person does everything but express that he is listening, understanding, or being sensitive to even the feelings of the other person in such a way as to detract significantly from the communications of the second person.

Level 2

While the first person responds to the expressed feelings of the second person(s), he does so in such a way that he subtracts noticeable affect from the communications of the second person.

EXAMPLES: The first person may communicate some awareness of obvious surface feelings of the second person, but his communications drain off a level of the affect and distort the level of meaning. The first person may

communicate his own ideas of what may be going on, but these are not congruent with the expressions of the second person.

In summary, the first person tends to respond to other than what the second person is expressing or indicating.

Level 3

The expressions of the first person in response to the expressed feelings of the second person(s) are essentially interchangeable with those of the second person in that they express essentially the same affect and meaning.

EXAMPLES: The first person responds with accurate understanding of the surface feelings of the second person but may not respond to or may misinterpret the deeper feelings.

In summary, the first person is responding so as to neither subtract from nor add to the expressions of the second person; but he does not respond accurately to how that person really feels beneath the surface feelings. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4

The responses of the first person add noticeably to the expressions of the second person(s) in such a way as to express feelings a level deeper than the second person was able to express himself.

EXAMPLE: The facilitator communicates his understanding of the expressions of the second person at a level deeper than they were expressed, and thus enables

the second person to experience and/or express feelings he was unable to express previously.

In summary, the facilitator's responses add deeper feeling and meaning to the expressions of the second person.

Level 5

The first person's responses add significantly to the feeling and meaning of the expressions of the second person(s) in such a way as to (1) accurately express feelings levels below what the person himself was able to express or (2) in the event of on going deep self-exploration on the second person's part, to be fully with him in his deepest moments.

EXAMPLES: The facilitator responds with accuracy to all of the person's deeper as well as surface feelings. He is "together" with the second person or "tuned in" on his wave length. The facilitator and the other person might proceed together to explore previously unexplored areas of human existence.

In summary, the facilitator is responding with a full awareness of who the other person is and a comprehensive and accurate empathic understanding of his deepest feelings.

APPENDIX C

Instructions

(Start tape recorder before S enters room)

Read: In a few minutes I am going to administer a standard procedure for measuring your ability to imagine and visualize. To allow you to feel more fully at ease in the situation I would like to reassure you on a few points.

First of all, the experience, while a little unusual, is not far removed from ordinary experience as you may expect. Success here is largely a question of your willingness to be receptive and responsive to ideas, and to allow your imagination to act without interference.

Second, there is nothing personal about what you are to do or say during the test period.

Third, you will not be asked to do anything that will make you look stupid or silly, or that will be embarrassing to you. We are here for serious purposes.

You may wonder why we are doing these experiments. Imagination and visualization are being used more and more as tools by professional psychologists. Some of the techniques developed use the imagination as a means to relax an especially anxious person; it is being used to have a person disassociate himself from physical pain and to help depressed individuals imagine that they are in more pleasant situations.

If we can understand the process involved, we will know more about the relationship between ideas and action, and more about the

way people are open to suggestion. So by participating here you are contributing to the knowledge of a kind that may be used to help others. We are trying here merely to understand imagination and visualization. Probably all people have an imagination, but some seem to be able to use their's much more readily than others, even when each of them cooperates. We are studying here some of the differences among people.

Let's talk awhile before we start. Maybe you have some questions you would like answered.

(Spend 15 - 20 minutes establishing rapport and insure complete cooperation. At the end of approximately 10 to 15 minutes break off by saying...)

Now please make yourself comfortable in your chair. Place your arms on the arm-rests and do not cross your legs. O.K., that's fine. Now close your eyes and make yourself perfectly comfortable. Relax. In a few seconds I'm going to play a tape-recording of my voice suggesting several tasks for you to imagine. Listen to the tape closely. Just listen to my voice on the tape. Don't try to do anything or not to do anything. Just let yourself go.

To start with I would like you to hold your right arm straight out in front of you. (If necessary guide the subject to extend the right arm.) O.K. fine, now concentrate on your arm and listen to the tape.

Concentrate on your arm and listen to me

(Start tape and score test.)

APPENDIX D

THE BARBER SUGGESTIBILITY SCALE

1. Arm Lowering. "Hold your right arm straight out in front of you like this." (Guide S to extend the right arm directly in front of body at shoulder height and parallel to the floor.) "Concentrate on your arm and listen to me."

(Began timing) "Imagine that your right arm is feeling heavier and heavier, and that it's moving down and down. It's becoming heavier and heavier and moving down and down. It weighs a ton! It's getting heavier and heavier. It's moving down and down, more and more, coming down and down, more and more; it's heavier and heavier, coming down and down, more and more and more."
(End 30 sec.)

"You can relax your arm now." (If necessary, ask S to lower the right arm.)

Objective score criterion: 1 point for response of 4 in. or more. (Response is measured by placing a ruler near S's hand at the beginning of the suggestions and noting degree of displacement at the end of the 30 sec. suggestion period.)

2. Arm Levitation. "Keep your eyes closed and put your left arm straight out in front of you in the same way. Concentrate on your arm and listen to me."

(Begin timing) "Imagine that the arm is becoming lighter and lighter, that it's moving up and up. It feels as if it doesn't have any weight at all, and it's moving up and up, more and more. It's as light as a feather, it's weightless and rising

in the air. It's lighter and lighter, rising and lifting more and more. It's lighter and lighter and moving up and up. It doesn't have any weight at all and it's moving up and up, more and more. It's lighter and lighter, moving up and up, more and more, higher and higher." (End 30 sec.)

"you can relax your arm now." (If necessary, ask S to lower his arm.)

Objective score criterion: 1 point for response of 4 in. or more during 30 sec. suggestion period.

3. Hand Lock. "Keep your eyes closed. Clasp your hands together tightly, and interlace the fingers." (If necessary E states, "Press your hands together, with palms touching," and assists S to interlock the fingers and to bring the palms together.) "Put them in your lap, concentrate on your hands and hold them together as tightly as you can."

(Begin timing) "Imagine that your hands are two pieces of steel that are welded together so that it's impossible to get them apart. They're stuck, they're welded, they're clamped. When I ask you to pull your hands apart they'll be stuck and they won't come apart no matter how hard you try. They're stuck together; they're two pieces of steel welded together. You feel as if your fingers were clamped in a vise. Your hands are hard, solid, rigid! The harder you try to pull them apart the more they will stick together! It's impossible to pull your hands apart. The more you try the more difficult it will become. Try, you can't."

(5 sec. pause) "Try harder, you can't." (10 sec. pause)
"You can unclasp your hands now."

Objective score criterion: $\frac{1}{2}$ point for incomplete separation of the hands after 5 sec. effort; 1 point for incomplete separation after 15 sec. effort.

4. Thirst "Hallucination." "Keep your eyes closed." (begin timing) "Imagine that you've just finished a long, long walk in the hot sun. You've been in the hot sun for hours, and for all that time you haven't had a drink of water.... You've never been so thirsty in your life. You feel thirstier and thirstier. Your mouth is parched, your lips are dry, your throat is dry. You have to keep swallowing and swallowing. You need to moisten your lips. (3 sec. pause) You feel thirstier and thirstier, drier and drier. Thirstier and thirstier, dry and thirsty. You're very, very thirsty! Dry and thirsty! Dry and thirsty!" (End 45 sec.) "Now, imagine drinking a cool, refreshing glass of water." (5 sec. pause)

Objective score criteria: $\frac{1}{2}$ point if S shows swallowing, moistening of lips, or marked mouth movements; additional $\frac{1}{2}$ point if the subject indicates during the "post-experimental" questioning that he became thirsty during this test (e.g., "I felt dry," "I was parched," "I felt somewhat thirsty").

(See post-experimental questions for final scoring criteria on this test.)

5. Verbal Inhibition. "Keep your eyes closed." (Begin timing) "Imagine that the muscles in your throat and jaw are

so solid and so rigid, that you can't speak. Every muscle in your throat and mouth is so tight and so rigid that you can't say your name. The harder you try to say your name the harder it becomes. You can't talk! Your larynx has tightened up; your throat is clamped so tightly that you can't talk; you can't say your name. The harder you try the harder it will be. It's useless, the words won't come out; and you can't speak your name; it's impossible to talk! The harder you try to say your name the harder it will become. Try, you can't!" (End 45 sec.)

(5 sec. pause) "Try harder, you can't." (10 sec. pause)

"You can say your name now."

Objective score criteria: $\frac{1}{2}$ point if S does not say his name after 5 sec. effort; 1 point if he does not say his name after 15 sec. effort.

6. Body Immobility. "Keep your eyes closed." (Begin timing)
"Imagine that for years and years you've been sitting in that chair just as you are now. Imagine that you've been sitting in that chair so long that you're stuck to it! "It's as if your part of the chair. Your whole body is heavy rigid, solid and you weigh a ton. You're so heavy that you can't budge yourself. It's impossible for you to stand up, you're stuck right there! Your body has become part of the chair. When I ask you to stand up you won't be able to do it! You're stuck tight. The harder you try the tighter you'll be stuck and you won't be able to get up. You're so heavy and stuck so tight. You can't stand; you're stuck. Try, you can't." (End 45 sec.)

(5 sec. pause) "Try harder; you can't". (10 sec. pause)
"You can relax (or sit down) now."

(S is considered not standing if he rises slightly from the chair without straightening into an erect posture. In this event, E says, "Try harder, you can't.")

Objective score criteria: $\frac{1}{2}$ point if S is not standing fully erect after 5 sec. effort; 1 point if not standing fully erect after 15 sec. effort.

7. "Posthypnotic-like" Response. (The auditory stimulus consists of tapping once on the metal back of a stop watch with a fountain pen.) (Begin timing) "When this experiment is over in a few minutes and your eyes are open, I'll click like this (E presents auditory stimulus) and you'll cough automatically. At the moment I click (E presents stimulus) you'll cough. When your eyes are open, I'll click (stimulus is presented) and you'll cough. When I click you'll cough." (End 30 sec.)

Objective score criterion: 1 point if S coughs or clears his throat "post-experimentally" when presented with the auditory stimulus.

8. Selective Amnesia. "Your eyes are still closed but I'm going to ask you to open them in a minute. When they're open I'm going to ask you to tell me about these tests." (Begin timing) You'll remember all the tests and be able to tell me about them, all except for one. There's one that you'll completely forget about as if it never happened! That's the one where I said your arm was becoming lighter. This is the one test that you cannot

remember! You will remember that I said your arm was heavy and all the other tests will be perfectly clear but the harder you try to remember that I told you your arm was rising the more difficult it will become. You will not remember until I give you permission by saying, 'Now you can remember', and then, and only then, you will remember that I said your arm was rising!" (End 45 sec.)

Objective score criterion: 1 point if S does not refer to the Arm Levitation item (Test suggestion 2) but recalls at least four other items and then recalls Test suggestion 2 in response to the cue words.

"Post-experimental" Objective Scoring of Test-Suggestions 4, 7, and 8

"Open your eyes, the experiment is over."

Scoring of Test-suggestion 7. The "Posthypnotic-like" Response item (item 7) is scored at this point. E presents the auditory stimulus after S has opened his eyes and before conversation commences.

Scoring of Test-Suggestion 8. E next asks: "How many of the tests can you remember?"

E prompts S by asking, "Were there any others?", "Can you think of any more?", and "Is that all?", until S mentions at least four of the test-suggestions. If S verbalizes the Arm Levitation item during the recital, he receives a score of zero on Test-suggestion 8 (selective amnesia). If S doesn't include the Arm Levitation item in his enumeration, E finally states, "Now you can remember," and, if S still does not verbalize the Arm Levitation

item, "You can remember perfectly well now!"

S receives a score of 1 point on Test-suggestion 8 (Selective Amnesia) if he mentions at least four of the test-suggestions, but does not mention the Arm Levitation item when given the cue words, "Now you can remember," or, "You can remember perfectly well now!"

Final Scoring of Test-suggestion 4. The Objective scoring of Test-suggestion 4 is completed when S refers to this item during his recital. At this point E asks: "Did you become thirsty during this test? If S answers, "Yes" to this question he receives the additional $\frac{1}{2}$ point on Item 4. If S answers, "Yes" but adds a qualifying statement, e.g., "he had been thirsty to begin with," he is asked: "Did the imaginary glass of water help quench your thirst?" If S now answers, "Yes" he received the additional $\frac{1}{2}$ point.

The maximum objective score obtainable on the BSS is 8 points.

SCORING OF TEST-SUGGESTIONS 4, 7, and 8

"Open your eyes the experiment is over."

Scoring of test-suggestion 7: The post-test response is scored at this point. The experimenter presents the auditor stimulus after the subject has opened his eyes and before the conversation begins.

Scoring test-suggestion 8: The experimenter then asks "How many of the tests can you remember?"

The experimenter prompts the subject by asking "Were there any others?", "Can you think of more?", and "Is that all?". Until the subject remembers at least four (4) test items. If the subject verbalizes the arm levitation during this period he is given a score of zero. If the subject does not mention the arm levitation during his recital, the experimenter then states, "Now you can remember," and if the subject still does not verbalize the arm-levitation item then, "You can remember perfectly well now!"

The subject receives a score of 1 point if he mentions at least four items but does not remember the arm levitation before given the cue words to do so, and remembers the arm levitation after given the cue

Final scoring of test-suggestion 4: The scoring of this item is completed when the subject refers to this item during his recital. At this point the experimenter asks: "Did you become thirsty during this test?" If the subject answers yes to this question he receives the additional $\frac{1}{2}$ point.

SCORING BLANK FOR BSS

Name _____ Sex _____ Age _____

Date _____ Experimenter _____

1. Arm lowering: _____

Arm down: inches _____
 (1 point for response of 4" or more).

2. Arm levitation. _____

Arm up: inches _____
 (1 point for response of 4" or more).

3. Hand lock. _____

Hands opened before 5 secs. _____ (0).
 Hands opened after 5 secs. _____ ($\frac{1}{2}$).
 Hands not opened after 15 secs. _____ (1).

4. Thirst "hallucination." _____

Swallowed _____ Moved mouth _____
 Licked lips _____ felt thirst _____
 ($\frac{1}{2}$ point if subject shows swallowing, moistening of
 lips, or marked mouth movements; additional $\frac{1}{2}$ point
 if subject indicates during the post-experimental
 questioning that he became thirsty during this test,
 e.g., "I felt dry." "I was parched", etc.)

5. Verbal inhibition. _____

Said name before 5 secs. _____ (0).
 Said name after 5 secs. _____ ($\frac{1}{2}$).
 Did not say name after 15 secs. _____ (1).

6. Body immobility. _____

Got up before 5 secs. _____ (0).
 Got up after 5 secs. _____ ($\frac{1}{2}$).
 Didn't get up after 15 secs. _____ (1).

7. "Post-test" response. _____

Did cough _____ (1).
 Didn't cough _____ (0).
 (1 point if subject coughs or clears throat Post- test
 when presented with the auditory stimulus.)

8. Selective amnesia. _____

Remembered task. _____ (0).

Didn't remember until given permission. _____ (1).

APPENDIX E

Raw Data

GROUP I

Experimenter 1 (high male)

Subject	BSS	Experimenter rating
1	5.5	2.50
2	6	2.50
3	4.5	2.37
4	4	2.25
5	6.5	2.75
6	7	3.00
7	4	2.25
8	5	2.37

GROUP II

Experimenter 2 (high female)

Subject	BSS	Experimenter rating
9	6	2.50
10	7	2.75
11	6	2.50
12	5	2.50
13	6	2.50
14	3	2.25
15	5	2.50
16	4	2.25

GROUP III

Experimenter 3 (low male)

Subject	BSS	Experimenter rating
17	4	1.5
18	4	1.5
19	6	2.0
20	3.5	1.5
21	4.5	1.25
22	1.5	1.0
23	1.5	1.25
24	3.5	1.5

GROUP IV

Experimenter 4 (low female)

Subject	BSS	Experimenter rating
25	3.5	1.5
26	3	1.5
27	7	1.75
28	4	1.5
29	2	1.25
30	4.5	1.5
31	1	1.25
32	3	1.5

GROUP V

Control I
(High male experimenter)

Subject	BSS
41	4
42	6.5
43	3
44	2.5
45	4.5
46	4
47	1
48	3

GROUP VI

Control II
(Low female experimenter)

Subject	BSS
33	5.5
34	2
35	3
36	4
37	1.5
38	3
39	4
40	4