THE EFFECT OF TOUCH ON INTERPERSONAL ATTRACTION OF SELECTED PATIENTS IN AN INITIAL INTERVIEW HELD IN A NEUROPSYCHIATRIC SETTING

DISSERTATION

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This study was designed to determine the effect of touch on the interpersonal attraction between therapist and patient. Four instruments were used to measure the effect. Those measurements included "Client's Personal Reaction Questionnaire," "Attitudes Toward Psychotherapy and Psychotherapists Scale," actual physical distance and actual timed verbal measure. The general nature of the research hypotheses stated that the touch technique would increase the interpersonal attraction of the patients toward the therapist as indicated by the four measures.

Fifty neuropsychiatric male patients between the ages of twenty and sixty-five participated in the study, with a mean age of thirty-nine. The experimental group and the control group were selected from four neuropsychiatric wards at the Veterans Administration Hospital in Waco, Texas. The subjects were selected on the basis of five criteria: (1) the patient had no previous therapy; (2) the patient was not suffering from severe cognitive deficits; (3) the patient was not so disturbed as to be incapable of complying with the experimental instructions; (4) the patient was of average intelligence as defined by the
Grayson Kent EGY: (5) and the patient was a first admission to the neuropsychiatric hospital.

The fifty subjects in the study had no previous contact with the therapist who was trained in Rogers' concept of therapy. The single interview sessions all took place in rooms arranged specifically for this study. The conditions for the experimental and control groups were identical with one exception. While subjects in the experimental group received the touch procedures, subjects in the control group were excluded from the procedures.

Statistical analysis of the data indicated that a significant difference existed between the mean scores of the experimental and control groups on the measure of actual physical distance. No significant difference was found between the mean scores of the experimental and control groups on the "Client's Personal Reaction Questionnaire," "Attitudes Toward Psychotherapy" and actual timed verbal measure.

The results of the study led to the conclusion that touch during a single interview session effects statistically significant change in interpersonal attraction when measured by actual physical distance. However, change in interpersonal attraction was not found when measured by the "Client's Personal Reaction Questionnaire," "Attitudes Toward Psychotherapy and Psychotherapists Scale" and an actual timed verbal measure. Implications of the study,
based on observations of the experimenter, were that touch is successful in helping hospitalized neuropsychiatric patients increase their interpersonal attraction and that this attraction cannot always be measured by global questionnaires and specific amounts of verbalization. A similar study should be replicated with subjects other than neuropsychiatric patients, such as hospitalized medical patients, college students and children.
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CHAPTER I

INTRODUCTION

The hospitalized person in a neuropsychiatric hospital is commonly regarded as an individual in need of treatment and rehabilitation. In spite of parental, institutional and hospital efforts to provide opportunities for positive growth, many of these hospitalized patients are unable to adequately respond to their environment and treatment. They come to a neuropsychiatric hospital primarily because they lack the ability to cope with day to day problems and decisions. In our rapidly changing society, which often leaves persons with limited emotional support, therapists have been pressed to help these persons adjust satisfactorily.

During the 1960's Rogers began to work with patients in neuropsychiatric hospitals, and he introduced the idea that warm acceptance, empathic understanding and sincerity are important aspects of the psychotherapeutic process. Evidence supporting Rogers' position began to accumulate as Rogers (11) dealt with his own experiences in relation to his patients. Later Truax and Carkhuff (15) constructed scales by which the three essential qualities--accurate empathy, nonpossessive warmth and genuineness--could be assessed from live observations on tape recordings.
Neuropsychiatric patients have personality, intellectual and social deficiencies which challenge conventional psychotherapeutic techniques and other hospital rehabilitation efforts. Therefore, of central importance in the care of the patient is the coming together of therapist and patient in the initial interview. What happens at this meeting determines what will happen in future sessions. Rogers (11) felt that this encounter should result primarily in the therapist's communicating unconditional positive regard for the patient.

Goldstein (6) generally agreed that interpersonal attraction is necessary between therapist and patient, and that therapy progresses at a rate directly proportionate to the degree of attraction. He further demonstrated that even in quite brief initial interviews, the therapist's behavior could be manipulated to increase the patient's initial level of attraction toward the therapist.

In recent years the act of touching has emerged as a means of communicating what Rogers, Truax and Carkhuff called a warm and accepting relationship. Today researchers such as Goldstein (6) and Pattison (10) are quite aware of the effect of tactile communication. Touch has long been viewed as a communicative activity—a way of expressing care. Parents touch infants in an effort to convey attraction, love and concern. Physicians touch patients in an effort to comfort, quiet and reassure. Touching
is the child's way of practicing interaction with persons in his world.

Although touch has long been considered a communicative activity, it was not until recent years that attempts were made to explore touch as a psychotherapeutic technique for engendering interpersonal relationships. There is considerable interest in this area, and there seems to be a need for research to investigate the applicability of touch methods with seriously disturbed individuals in a neuropsychiatric hospital setting.

Statement of the Problem

The problem of this study was to determine the effect of touch on the level of interpersonal attraction between therapist and patient in an initial interview situation.

Purpose of the Study

The purpose of this study was to determine whether the touching of patients will increase their interpersonal attraction toward the therapist as evidenced by measurements in physical distance, actual timed verbalization, "Client's Personal Reaction Questionnaire" and "Attitudes Toward Psychotherapy and Psychotherapists Scale."

Background and Significance of the Study

As study continues in psychotherapy, there is mounting interest in touch as a technique to increase interpersonal
attraction between therapist and patient. Pattison (10) states in his study of touch and self-exploration that a single touch seems to evoke warmth and caring. Jourard (8) noted, "Some form of physical contact with patients expedites the arrival of this mutual openness and unreserve" (8, p. 65). Others supporting this position are Bown (2); Braatøy (3); Frank (5); Hunt, Ewing, LaForge and Gilbert (7); Parloff (9); Sapolsky (12); Truax and Carkhuff (15); and Schutz (13).

There are a few authors, however, who stress that touching may be harmful to the therapeutic relationship. Three of these authors are Burton and Heller (4) and Wolberg (16; 17). Wolbert (17) stated, "It goes without saying that physical contact with the patient is absolutely taboo" (17, p. 606), arguing that touching patients tends to imply sexuality and therefore should be avoided in all therapeutic relationships.

Studies have been done exploring the results of non-verbal methods of therapy, and many sensitivity-encounter groups employ non-verbal techniques. However, there has been relatively little reported research which focused on using a specific touch procedure as a therapeutic technique and its effectiveness in significantly increasing interpersonal attraction.

Pattison (10), in summaries of research on effective-
ness of touch, stressed the point that most existing research suffered from lack of behavioral measures, direct patient report and physiological measures.

In reviewing the literature on touch and non-verbal techniques, it becomes obvious that controlled clinical research is needed in order to evaluate the specific effects of touch with respect to patient needs and characteristics. The bulk of the literature dealing with non-verbal techniques supports the contention that physical contact promotes more effective interpersonal relationships. The evidence, however, is derived from single case studies by Schutz (13); nurses touching patients in a medical hospital by Barnett (1); personal testimonies by practicing psychotherapist Shapiro (14); and a study using college students by Pattison (10). The present study has attempted to eliminate some of the stated criticisms through the use of behavioral measurements and the use of experimental and control groups randomly selected from a population of seriously disturbed individuals in a neuropsychiatric hospital.

Research is needed to evaluate the behavioral manifestations of patients who are touched as a means of exploring and understanding the effect touching produces in a patient. If a patient answers a questionnaire and says he feels warmth for the therapist, then it needs to be determined how he will display this warmth in a situation in which he is not aware that attraction is being measured.
This touch technique in therapy is designed to help patients grow into productive, healthy people. It also is a way for therapist and patient to possibly discover a new way of communication which maximizes therapy and puts the patient back into the community.

Definitions

For the purpose of this study, the following terms were defined as follows:

1. **Initial interview** is the first meeting between therapist and patient at which time a relationship is established.

2. **Accurate empathy** is a process whereby the therapist has the ability to understand what the patient feels and transmit this understanding to the patient by means of verbal and non-verbal responses. This may be done by tone of voice, content of verbal response, nod of head, facial expression or body posture. One or more of the above may be used to transmit accurate empathy to the patient.

3. **Nonpossessive warmth** is the ability of the therapist to accept the patient as he is, with his moral, ethical and philosophical positions, and his willingness to allow each patient to differ from every other patient and to accept each patient as having worth.

4. **Unconditional positive regard** is synonymous with acceptance (used interchangeably with nonpossessive warmth).

5. **Genuineness** means that the therapist is himself or that there is no phoniness on the part of the therapist.
The therapist does not pretend that he is something he is not.

6. **Touch** is the physical contact with the patient and includes the following types: hand, lower arm, upper arm, upper back and shoulder region, middle back and front shoulder region.

7. **Interpersonal attraction** is positive feelings which exist between therapist and patient. This positive feeling will be evidenced by the following measurements: (a) actual physical distance, (b) actual timed verbalization, (c) "Client's Personal Reaction Questionnaire," (d) "Attitudes Toward Psychotherapy and Psychotherapists Scale."

8. **Reflection of feelings** is the therapy technique used in which the therapist tries to understand the patient’s internal frame of reference and then communicates this understanding to the patient. The patient is encouraged to look inward and to deal with his feelings.

9. **Patients** refers to persons who are under treatment or care in a hospital. The subjects in this study are male neuropsychiatric patients in the V. A. Hospital in Waco, Texas, and are identified by a specific diagnosis as found in the Diagnostic and Statistical Manual of Mental Disorders.

10. **Therapist** is a person skilled in the treatment of mental operations and diseases.

11. **Psychotherapy** is that form of therapy which employs psychologic methods in treatment of functional nervous disorders.
12. **No-touch** means the therapist will at no time physically contact the patient.

**Hypotheses**

The study contains the following hypotheses:

1. Following the interview session the experimental (touch) group will exhibit a higher mean score on the "Client's Personal Reaction Questionnaire" than the control (no-touch) group.

2. Following the interview session the experimental (touch) group will exhibit a higher mean score on the "Attitudes Toward Psychotherapy and Psychotherapists Scale" than the control (no-touch) group.

3. Following the interview session the experimental (touch) group will exhibit a lower mean distance score on the actual physical distance measure than the control (no-touch) group.

4. Following the interview session the experimental (touch) group will exhibit a higher mean verbal score on the actual timed verbal measure than the control (no-touch) group.

**Basic Assumptions**

1. A basic assumption was that all persons experience a certain amount of anxiety when meeting with a therapist for the first time. Therefore, it is assumed that the patients participating in this study will exhibit some anxiety at the beginning of the interview.
2. It was also assumed that all patients considered for the study would be physically able to climb two flights of stairs, would have arm and hand structure sufficient to pull a chair across the room and would be mentally able to read the questionnaire and mark the appropriate answer.

3. It was assumed that the random assignment of subjects would equalize any effect due to differential diagnosis among patients.

4. It was assumed that verbal expression provides a measure of interpersonal attraction.

Delimitations of the Study

1. The study was limited to patients who were admitted to neuropsychiatric wards at the Veterans Administration Hospital in Waco, Texas.

2. The use of touch was limited to a single interview situation for each experimental subject.
CHAPTER BIBLIOGRAPHY


CHAPTER II

REVIEW OF THE LITERATURE

Physical contact psychotherapy is a comparatively new field in the treatment of maladjustment, and there is more theoretical and case-study literature than well-documental results of the productiveness of touch. This chapter is a review of the literature on the rationale for interpersonal attraction, the use of physical contact psychotherapy and the outcome of studies on interpersonal attraction which have led to the design of this study.

The Rationale for Interpersonal Attraction

Today there is disagreement between schools of psychotherapy on many issues, but there is general agreement on the significance attributed to the interpersonal attraction between therapist and patient. The essence of most research in the area of interpersonal relationship has been directed toward finding new ways of enhancing the therapist-patient relationship. Bordin (3) states:

The key to the influence of Psychotherapy on the patient is in his relationship with the therapist... Virtually all efforts to theorize about psychotherapy are intended to describe and explain what attributes of the interactions between the therapist and the patient will account for whatever behavior change results (3, p. 235).
In neuropsychiatric hospitals with severely disturbed patients it has been found that patients actively pursue isolation, making therapy extremely difficult. The patient can be brought to the therapist and placed in a room but therapy does not begin until there is a favorable interpersonal attraction between the patient and the therapist. Goldstein (7) investigated the patient-therapist phenomenon and indicates that interpersonal attraction is the variable which enhances the therapist-patient relationship in the initial stage of psychotherapy.

Goz (8) in commenting on the meaning of the therapist-patient relationship said, "The therapist contributes to the development of the alliance by actively conveying his genuine respect and concern for the patient as a real person with individual attributes and needs, throughout the therapy, but especially in the initial therapy hours and at crucial moments" (8, p. 440). She commented further that it is possible for the patient to sense intuitively rather accurately some barely noticeable but essential things about his therapist through his appearance, odor, movements and voice.

In his studies of patient-therapist relationship in psychotherapy, Langs (13) emphasized that when the alliance between therapist and patient is established, the process of healing for many patients could begin.
Physical Contact Psychotherapy

Precedents for the use of physical contact with severely disturbed neuropsychiatric patients come from clinical resources, and studies by Sechehaye (26), Rosen (21), Masko (18), and Boucher (4). Physical contact methods were offered as plausible alternatives to verbal approaches because of the disturbed neuropsychiatric patient's fear of being rejected. Sechehaye (26) reported successes after massaging regressed schizophrenics during individual therapy sessions.

The use of physical contact in therapy has a tradition that is often forgotten. Its use in groups stems largely from Reichian (9), gestalt therapists (20) and the sensitivity training field (25; 9; 11; 27). In recent years there has been increasing confidence in physical contact as a means of enhancing therapy process. Sensitivity and encounter groups have encouraged the use of physical contact, the basic reason being that physical contact evoked important therapeutic experiences for normals and disturbed patients. Masko (18) studied the use of physical contact with neuropsychiatric patients and reported that the quality most frequently ascribed to physical contact was that it generated authentic human interaction. He commented further that it brought people closer together, increased expression of feeling and produced greater willingness to reveal their feelings.
Interpersonal Attraction and Body Movement

Studies dealing with interpersonal attraction have researched body movement and the changes resulting from its use. Birdwhistell (2) reported, "In the past we have overemphasized verbalization and underemphasized body movement as a mode of communication" (2, p. 130). Scheflen (24) reported, in his study on different types of psychotherapy sessions, that he observed a uniform progression of positions by the therapist. The positions taken by the therapist often resulted in the therapist moving his chair closer as the session progressed. Those therapists who were aware of their behavior felt that the movements helped create rapport, increased the transference or improved the patient's attitude toward the therapist.

Mehrabian (17) conducted an interview study in which he predicted that a communicator's movement toward an addressee would communicate a positive attitude, whereas a movement away would communicate a negative attitude. Movement was described in this study as head and body toward the addressee and head and body away from the addressee. After the interview, subjects estimated on a like-dislike scale the examiner's attitude toward her. The results indicated partial support for the hypothesis, as there was a main effect on attitude rating for head orientation (p. less than .01). There was also a significant interaction of head and body orientation (p less than .05). The effect
of body orientation alone did not quite reach an acceptable level of statistical significance (p less than .06). In summarizing other research, Mehradian (16) stated, "Standing close to your partner and facing him directly also indicates positive feelings" (16, p. 54).

Interpersonal Attraction and Distance

Rosenfield (22) studied the effect of distance and found a relationship between distance and attitude. He found that subjects directed to role play an approval-seeking attitude toward another subject (confederate) sat closer to the confederate than subjects instructed to role play an approval-avoiding attitude. Thus subjects seemed in this experiment to be operating on the implicit assumption that closer distance would communicate a more positive attitude (or greater attraction) than farther distance.

Little (14), using cardboard figures, found that the distance the figures were apart was influenced by the degree of prior acquaintance attributed to the figures. The study was replicated twice, one using silhouettes and the other using live actresses; both showed that the distance at which the figures were placed was the result of the closeness of the relationship.

A recent study by Boucher (4) reported that one could predict that closer distances would lead to increased attraction by subject toward examiner based on a "reciprocal
attraction" principle. This theory could be developed from Heider's (10) cognitive balance theory which predicts that the subject's perception that the examiner likes him, and that the examiner has displaced his attraction toward the subject, would lead to subject's showing an increase in attraction toward examiner.

Interpersonal Attraction and Touch

The statement "The act of touch is an integral part of nursing intervention and is to be used judiciously between nurse and patient, health team and patient" (1, p. 123), summarizes the rationale for the use of touch as a therapeutic technique. The physical touching of a patient seems necessary for healing and also communicates to the patient the empathy and warmth necessary for the therapeutic relationship. Burnside, (5) in commenting on the importance of touch said:

"I had requested to work with six patients, three men and three women. The youngest member was 64, the oldest 86, and the mean age was 78. During the first meeting, I wondered where to begin, since I wanted to use a constant theme with these people in the hope that it would provide some structure. I went around the circle and shook hands, holding each person's hand tightly and trying to maintain close, intense eye contact. I came to the last frail little lady. She was babbling, her eyes were closed, and I suddenly doubted my ability to offer much of anything to these people with "shattered hearts". But then a shutter moved in this tiny woman. As I held her hand with its tissuepaper skin, she pulled my head down to her and kissed me tenderly on the cheek. At that moment I substituted "touch
therapy" for "food therapy." This is the best example of "touch hunger" I had seen in a long while" (5, p. 2).

Rueveni and Speck (23) have commented that certain touch encounter group techniques can enhance the treatment of the social network of the schizophrenic. It has been found that these techniques can provide a stimulus for meaningful and beneficial change in the patient's perceptions, feelings and behavior. Under the right conditions touch can focus on health rather than illness, take the solemnness out of therapy, produce trustful relationships and give support and approval to feeling good.

Cooper and Bowles (6) conducted a study in which there was a significant difference between pre- and posttest scores in the directions of greater willingness to self-disclose for subjects who participated in the physical contact exercises, but no significant difference for those who merely listened to the tapes but did not participate. It seems from this evidence that there is some relationship between touching and increased willingness for self-disclosure.

Pattison (19) conducted a study to research the experimental conditions of touch and no touch in an initial interview. The subjects were selected from among female under-graduate students. Four treatment combinations were assigned randomly to the subjects, with five subjects per treatment combination. Significant differences at
the .01 level were found between touched and non-touched clients for depth of self-exploration. No significant differences were found between touch and no-touch groups on the measures of perception of relationship.

A recent survey conducted by Johnson and Johnson (12) revealed that most of the 300 nurses interviewed felt that the simple act of touch—whether the wiping of a brow, a reassuring pat or an evening backrub—is taking its place as the very essence of patient care. The same nurses saw touch as being more important than verbal communication in patient care. Some of the nurses felt that touch was also helpful in breaking through the barrier of "professionalism." All of the nurses surveyed strongly believed in the therapeutic value of touch and its primary place in patient care.

Summary

The chapter has provided a review of the literature on the rationale for interpersonal attraction, the use of physical contact psychotherapy and studies on interpersonal attraction which have led to the design of this study. Most writers theorized that interpersonal attraction was an important element in the therapist-patient relationship. Attraction was often cited as the result of body movement, distance and touch.
Most outcome studies on attraction have researched the results of body-movement, distance and touch. Studies of these variables have often shown evidence of increased interpersonal attraction and patient improvement.

Studies of touch techniques in therapy have explained or predicted the effect of specific techniques and how they can be used to produce optimal results.

Considerable information on physical contact therapy was available for analysis; however, a review of the literature indicated that methodological techniques and data are incomplete and often contradictory.
CHAPTER BIBLIOGRAPHY


CHAPTER III

METHODS AND PROCEDURES

Selection of Subjects

The subject sample for this study consisted of fifty patients admitted to the V. A. Hospital in Waco, Texas. The patients selected to participate in the study were from four neuropsychiatric buildings housing new admissions. If the patient had previous counseling experience, was suffering from severe cognitive deficit or was so disturbed as to be incapable of complying with the experimental instructions, he was excluded from the study. Subjects included in the sample exhibited a variety of neuropsychiatric diagnoses as determined by a psychiatrist and were of average intelligence as determined by the Grayson Kent EGY form which was administered by the Psychology Service. From the pool of newly admitted patients, fifty subjects were randomly assigned by a flip of the coin to an experimental (touch) group or to a control (no-touch) group.

Procedures for Collection of Data

All subjects in the experimental (touch) and control (no-touch) groups participated in an initial interview with the therapist. The subjects in the experimental (touch) group received the touch procedure (see appendix C) and those in the control (no-touch) group did not. The forms of touch were chosen on the basis of studies...
undertaken by Jourard (7) and Jourard and Rubin (9) on areas of body accessibility between females and same-sexed and opposite sexed friends (hand, lower arm, upper arm, upper back and shoulder region, middle back and front shoulder areas were most accessible). Each subject was interviewed individually in a room containing two chairs and one small table. The two chairs were cushioned, straight back chairs, and the table was thirty-six by twenty-four inches. The table was placed against and in the middle of the east wall. The east wall contained one window with green drapes, shade and air conditioning unit. There were two other windows in the interview area with dark shades. The total area of the room was twenty feet by twelve feet. The temperature was controlled with window units and radiator steam heat. The interview room was located on the second floor of Building Twelve, which is designated as Psychology Service. The room is at the end of the hall and the area used for the interview was void of other furniture. The room had recessed lighting and tile floor and the walls were plaster, painted light green.

All subjects were introduced to the therapist by a staff person in the reception area. The reception area was about one hundred feet from the interview room. The following procedure was identical for the experimental (touch) group and control (no-touch) group, with the exception being that the control (no-touch) group received
none of the touch procedures. The moment the staff person said the therapist's name, the therapist extended his hand for a handshake. The therapist placed his left hand firmly over the subject's hand without losing eye contact or hesitating. The clasp handshake lasted approximately four to five seconds. When the subject neared the door leading into the interview room, the therapist placed his hand and wrist on the subject's back or shoulder as he told the subject which seat to take. The touch period lasted approximately nine to ten seconds. The therapist then sat in his chair as it was positioned, which was close enough to the subject to allow easy reaching to touch. The audio taping of the interview began when the therapist asked his first question. When the second question was asked, the therapist placed his hand on subject's lower arm for approximately four to six seconds. While asking the fourth question, the therapist placed his hand over the back of the subject's hand firmly for about two to three seconds. The interview terminated with the asking of the fifth question. The therapist placed his hand on the subject's upper back or shoulder as he left the room and went out the door and down the hall with the subject. This final touch period lasted about nine to ten seconds.

At the end of the interview the subject was returned to a room twenty feet down the hall from the interview room.
This room was eighteen feet by fifteen feet, was well lighted and had white plaster walls and tile floor covering. The room was used as a library and there were six metal book shelves placed against the walls. The room had one window which had a shade that covered half the window. The temperature in the room was controlled with a window unit and radiator steam heat. There was a table in the middle of the room that was twelve feet by four feet and had two soft-cushioned, straight back chairs around it. A staff member administered the "Client's Personal Reaction Questionnaire" and "Attitudes Toward Psychotherapy and Psychotherapists Scale." When the subject finished the questionnaires, he returned to the therapist's interview room as directed for the purpose of asking any questions he had regarding the experiment. Prior to the subject's return, the therapist moved the subject's chair back to the farthest extremity of the interview room. This placed the chair ten feet from its original position and located the chair to the right of the door as the subject entered the interview room. When the subject entered the room, the seated therapist asked the subject to pull up a chair and sit down. The chair was the same chair used in the interview. The distance between the chairs was measured after the subject left and the results were recorded on a data sheet which contained the subject's number and building designation. Care was taken to see that the subject did not move the chair upon rising. This
was accomplished by an observer's noting the position of
the chair and by the therapist's shaking the subject's hand
and guiding him away from contact with the chair as he stood
to leave. The distance between the chairs served as an
unobtrusive measure of the subject's attraction toward the
therapist. The second period of audio-taping began when the
therapist asked, "What are your feelings about this
interview?" Following the "debriefing" session, the therapist
thanked the subject for his help and dismissed him.

Therapy and Therapist

The therapist, who was the investigator and conducted
all the study interviews, had a Master's degree in counseling
psychology, and spent two years in private practice with a
clinical psychologist and had five years of counseling
experience. He was relaxed with the subjects and able to
follow Rogers' concept of counseling with naturalness.
The therapist used reflection of feelings as the basic
counseling interview technique with the assumption that the
subject would choose content relevant to his needs. The
therapist followed Rogers' concept of positive regard,
empathy and congruence and used the following statements and
questions with all the subjects:

I would now like to ask you some questions about
yourself and I'd like you to answer them as best you can.

1. First of all, I wonder if you can tell
me what you see as the cause of your problem?
2. Now try to describe to me what you see as your strong points and your weak points.

3. Now, I'd like you to tell me the kinds of things that get you angry.

4. What about the kinds of things that get you anxious or fearful?

5. Now, I'd like you to tell me what your parents are like.

These questions have been used meaningfully in previous investigations of psychotherapeutic attraction by Liberman, Davidoff and Kleeper as reported by Boucher (3).

The therapist was trained in touching and not touching subjects. The training process consisted of several hours of discussion and demonstration of the procedures. The therapist tried out the treatment procedure with six different subjects. Six professional V. A. employees were trained observers who observed the therapist's procedure to determine ease, naturalness and lack of awkwardness in touching and not touching. Five observers rated the therapist acceptable, one rated neither acceptable nor unacceptable, and none rated the therapist unacceptable. The therapist reached this level with six subjects, and it was not necessary to continue the procedure with trial subjects. Three trial subjects were touch subjects and three were no-touch subjects.
Test Instruments

Four instruments were used to test the hypotheses of this study: the "Client's Personal Reaction Questionnaire", the "Attitudes Toward Psychotherapy and Psychotherapists Scale", the distance measure and the timed verbalization. These instruments were selected to investigate the client's attraction toward the interviewer.

1. The first method utilized a paper-pencil attraction scale which was a modification of the "Client's Personal Reaction Questionnaire" developed by Ashby, Ford, Guerney and Guerney (1) and was meaningfully used in studies by Goldstein (4), Goldstein, et al (5), and Snyder (11). The questionnaire consisted of a series of thirteen statements describing positive and negative aspects of the therapist's and client's interactions to which each client responded on a seven-point scale from "strongly agree" to "strongly disagree." The original form was composed of two scales. One scale was designed to measure defensive subject's reactions to therapist and therapy. The second scale was designed to reflect positive subjective reactions to the therapist and therapy. Test-retest correlations were computed from data obtained in the experiment. The defensive Client's Personal Reaction Questionnaire had a test-retest correlation of .79 (p < .001). The positive Client's Personal Reaction Questionnaire had a test-retest correlation of .52
(p < .01).

2. The second method utilized a paper-pencil attitude scale which measured generalized attraction toward therapists. The questionnaire consisted of a series of twenty-five statements describing positive and negative aspects of the therapist's and client's general attraction to which each subject responded on a seven point scale from "strongly agree" to "strongly disagree." This measure has been used meaningfully in studies by Goldstein (4), and Boucher (3). In both studies it was found to correlate significantly with both the Client's Personal Reaction Questionnaire and the distance measure. This instrument had face-validity but must still be considered experimental.

3. The third index of subject's attraction toward therapist was the distance between therapist and subject after subject had been invited to sit down. This occurred at the beginning of the second portion of the interview, following completion of the questionnaires. The therapist was seated across the room in front of a table. When the subject entered the room, the therapist asked him to pull up a chair and sit down. The distance was measured using a metal tape and was recorded to the nearest one-eighth inch after each subject left the room. This measurement variable has been used successfully as an unobtrusive behavioral measure of attraction by Basket
and Byrne (2) and Boucher (3).

4. The fourth index of client's attraction toward therapist was the actual time, in seconds, that each subject responded verbally. After the therapist's predetermined question, the first five minutes of the first and second interview were taped on a small cassette recorder. The time of audio responses by the subject was measured in seconds. This measured time served as a behavioral measure of subject's attraction toward the therapist. Boucher (3) reported that in studies by Himmelsbach (6) and Orenstein (10) the ability to be influenced was measured by a paper-pencil "Willingness to Disclose Questionnaire" devised by Jourard (8). Both of these studies revealed that psychotherapeutic attraction toward the therapist is positively related to the client's willingness to discuss personal concerns with the therapist. This measure has face-validity but must still be considered experimental.

Scoring and Analysis of the Data

All of the test data were hand-scored by the investigator. Data from the instruments were then keypunched on IBM computer data cards for processing at the North Texas State University Data Processing Center.

To test the four hypotheses of the study, one-way analysis of variance was used to determine the significance of difference between the mean scores of the experimental (touch) group and the control (no-touch) group. Acceptable
level of significance in differences between means was established at the .05 level.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

PRESENTATION AND ANALYSIS
OF THE DATA

The purpose of this chapter is to present the statistical procedures used in the data analyses and the results of those analyses. The results described are based upon the findings of one-way analyses of variance.

Hypothesis I

The first hypothesis tested was that there would be a main effect for touch such that the experimental (touch) group would exhibit greater interpersonal attraction than the control (no-touch) group. Hypothesis I stated: Following the interview session the experimental (touch) group will exhibit a higher mean score on the "Client's Personal Reaction Questionnaire" than the control (no-touch) group.

Hypothesis I was tested by the utilization of one-way analysis of variance, and the means and standard deviations on the "Client's Personal Reaction Questionnaire" are presented in Table I.
TABLE I

MEANS AND STANDARD DEVIATIONS ON THE "CLIENT'S PERSONAL REACTION QUESTIONNAIRE"

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>45.16000</td>
<td>8.75919</td>
</tr>
<tr>
<td>Control</td>
<td>44.92000</td>
<td>9.21918</td>
</tr>
</tbody>
</table>

Examination of the data in Table I indicates no statistical difference in the mean scores for the experimental (touch) group and the control (no-touch) group. Also, there is no appreciable difference in the standard deviations for the experimental (touch) and control (no-touch) groups.

The analysis of the mean scores on the "Client's Personal Reaction Questionnaire" is presented in Table II.

TABLE II

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF DIFFERENCES BETWEEN UNCORRELATED MEANS ON THE "CLIENT'S PERSONAL REACTION QUESTIONNAIRE"

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Variance Estimate</th>
<th>F-Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>1</td>
<td>0.7200</td>
<td>0.7200</td>
<td>0.0089</td>
<td>0.925</td>
</tr>
<tr>
<td>Within</td>
<td>48</td>
<td>3881.2000</td>
<td>80.8583</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>49</td>
<td>3881.9200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From these results it can be seen that the predicted main effect due to touch was not confirmed at .05 level of significance. The $F$-value of 0.0089 and the $P$ of 0.925 indicates that the experimental (touch) group and control (no-touch) group means did not statistically differ from each other. Based on these data, since no significant difference was found between the mean score of the experimental (touch) group and the control (no-touch) group, Hypothesis I was rejected.

**Hypothesis II**

The second hypothesis tested was that there would be a main effect for touch such that the experimental (touch) group would exhibit greater interpersonal attraction than the control (no-touch) group. Hypothesis II stated: Following the interview session the experimental (touch) group will exhibit a higher mean score on the "Attitudes Toward Psychotherapy and Psychotherapist Scale" than the control (no-touch) group.

Hypothesis II was tested by the utilization of one-way analysis variance, and the means and standard deviations on the "Attitudes Toward Psychotherapy and Psychotherapist Scale" are presented in Table III.
TABLE III

MEANS AND STANDARD DEVIATIONS ON THE "ATTITUDES TOWARD PSYCHOTHERAPY AND PSYCHOTHERAPISTS SCALE"

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>94.24000</td>
<td>13.63904</td>
</tr>
<tr>
<td>Control</td>
<td>93.08000</td>
<td>11.18004</td>
</tr>
</tbody>
</table>

Examination of the data in Table III indicated no statistical difference in the mean scores for the experimental (touch) group and the control (no-touch) group. Also, there is no appreciable difference in the standard deviations for the experimental (touch) and control (no-touch) groups.

The analysis of the mean scores on the "Attitudes Toward Psychotherapy and Psychotherapists Scale" is presented in Table IV.

TABLE IV

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF DIFFERENCES BETWEEN UNCORRELATED MEANS ON THE "ATTITUDES TOWARD PSYCHOTHERAPY AND PSYCHOTHERAPISTS SCALE"

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Variance Estimate</th>
<th>F-Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>1</td>
<td>16.82000</td>
<td>16.8200</td>
<td>0.1082</td>
<td>0.7437</td>
</tr>
<tr>
<td>Within</td>
<td>48</td>
<td>7464.4000</td>
<td>155.5083</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>49</td>
<td>7481.2200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From these results it can be seen that the predicted main effect due to touch was not confirmed at the .05 level of significance. The F-value of 0.1082 and the P of 0.7437 indicates that the experimental (touch) group and control (no-touch) group means did not statistically differ from each other. Based on these data, since no significant difference was found between the mean scores of the experimental (touch) group and the control (no-touch) group, hypothesis II was rejected.

Hypothesis III

The third hypothesis tested was that there would be a main effect for touch such that the experimental (touch) group would exhibit greater interpersonal attraction than the control (no-touch) group. Hypothesis III stated: Following the interview session the experimental (touch) group will exhibit a lower mean distance score on the actual physical distance measure than the control (no-touch) group.

Hypothesis III was tested by the utilization of one-way analysis of variance, and the means and standard deviations on the actual physical distance measure are presented in Table V.
Examination of the data in Table V indicates statistical difference in the mean scores for the experimental (touch) group and the control (no-touch) group. Also, there is appreciable difference in the standard deviations for the experimental (touch) and control (no-touch) groups.

The analysis of the mean scores on the actual physical distance measure is presented in Table VI.
From these results it can be seen that the predicted main effect due to touch was confirmed at the .05 level of significance. The F-value of 8.5354 and the P of 0.005 indicates that the experimental (touch) group and control (no-touch) group means did statistically differ from each other. Based on these data, significant difference was found between the mean scores of the experimental (touch) group and the control (no-touch) group at the .005 level. Therefore, hypothesis III was accepted.

Hypothesis IV

The fourth hypothesis tested was that there would be a main effect for touch such that the experimental (touch) group would exhibit greater interpersonal attraction than the control (no-touch) group. Hypothesis IV stated: Following the interview session the experimental (touch) group will exhibit a higher mean verbal score on the actual timed verbal measure than the control (no-touch) group.

Hypothesis IV was tested by the utilization of one-way analysis of variance, and the means and standard deviations on the actual timed verbal measure are presented in Table VII.
TABLE VII
MEANS AND STANDARD DEVIATIONS ON THE DIFFERENCES IN ACTUAL TIMED VERBAL MEASURE IN UNITS OF SECONDS

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Change</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>-6.920000</td>
<td>10.39198</td>
</tr>
<tr>
<td>Control</td>
<td>-7.920000</td>
<td>10.78548</td>
</tr>
</tbody>
</table>

Examination of the data in Table VII indicates no statistical difference in the mean score for the experimental (touch) group and the control (no-touch) group. Also, there is no appreciable difference in the standard deviations for the experimental (touch) and control (no-touch) groups.

The analysis of the mean scores on the actual timed verbal measure is presented in Table VIII.

TABLE VIII
ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF DIFFERENCES BETWEEN UNCORRELATED MEANS ON THE ACTUAL TIMED VERBAL MEASURE

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Variance Estimate</th>
<th>F-Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>1</td>
<td>12.5000</td>
<td>12.5000</td>
<td>0.1114</td>
<td>0.7400</td>
</tr>
<tr>
<td>Within</td>
<td>48</td>
<td>5383.6800</td>
<td>112.1600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>49</td>
<td>5396.1800</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From these results it can be seen that the predicted main effect due to touch was not confirmed at the .05 level of significance. The F-value of 0.1114 and the P of 0.7400 indicates that the experimental (touch) group and control (no-touch) group means did not statistically differ from each other. Based on these data, no significant difference was found between the mean scores of the experimental (touch) group and the control (no-touch) group; therefore hypothesis IV was rejected.

Summary of Results

In summary, Hypothesis III was supported and Hypotheses I, II and IV were rejected. Based on the four analyses of variance summarized in Table IX, the difference between the mean scores on the measure of chair distance was the only significant difference found on the four measures. No significant difference was found between the means of the experimental and control groups on other measures.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Experimental</th>
<th>Control</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPRQ</td>
<td>45.16000</td>
<td>44.92000</td>
<td>0.0089</td>
<td>0.9252</td>
</tr>
<tr>
<td>ATPPS</td>
<td>94.24000</td>
<td>93.08000</td>
<td>0.1082</td>
<td>0.7437</td>
</tr>
<tr>
<td>Chair distance</td>
<td>200.75000</td>
<td>238.35000</td>
<td>8.5354</td>
<td>0.0053</td>
</tr>
<tr>
<td>Verbalization</td>
<td>-6.9200</td>
<td>-7.9200</td>
<td>0.1114</td>
<td>0.7400</td>
</tr>
</tbody>
</table>

CPRQ - Client's Personal Reaction Questionnaire
ATPSS - Attitudes Toward Psychotherapy and Psychotherapists Scale
Table X is a summary of means and standard deviations for all four measures.

TABLE X
SUMMARY OF MEANS AND STANDARD DEVIATIONS FOR FOUR MEASURES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPRQ</td>
<td>45.16000</td>
<td>8.75919</td>
</tr>
<tr>
<td></td>
<td>44.92000</td>
<td>9.21918</td>
</tr>
<tr>
<td>ATPPS</td>
<td>94.24000</td>
<td>13.63904</td>
</tr>
<tr>
<td></td>
<td>93.08000</td>
<td>11.18004</td>
</tr>
<tr>
<td>APD</td>
<td>200.7500</td>
<td>35.74177</td>
</tr>
<tr>
<td></td>
<td>238.3500</td>
<td>53.51051</td>
</tr>
<tr>
<td>ATVM</td>
<td>-6.92000</td>
<td>10.39198</td>
</tr>
<tr>
<td></td>
<td>-7.92000</td>
<td>10.78548</td>
</tr>
</tbody>
</table>

CPRQ - Client's Personal Reaction Questionnaire
ATPPS - Attitudes Toward Psychotherapy and Psychotherapist Scale
APD - Actual Physical Distance in units of one-eighth inch
ATVM - Actual Timed Verbal Measure in units of seconds

On measures CPRQ, ATPPS and ATVM there is little difference in the means, indicating that the treatment had little or no influence on performance. On the APD measure there is considerable difference in the means, indicating that the treatment had an influence on performance. The hypothesis for the APD measure stated
that there would be a lower mean score for the experimental group, and the mean difference indicates that the treatment produced the predicted effect.
CHAPTER V
SUMMARY, DISCUSSION AND RECOMMENDATIONS

Summary

This study was designed to determine whether touch, as a therapy technique, would be effective in improving the interpersonal attraction between therapist and patient in a neuropsychiatric Veterans Hospital. The effect of touch on interpersonal attraction was investigated. Four instruments were used to measure the effect. Those measurements were "Client's Personal Reaction Questionnaire," "Attitudes Toward Psychotherapy and Psychotherapists Scale," actual physical distance and actual timed verbal measure. The general nature of the research hypotheses was that the touch technique would increase the interpersonal attraction of the patients toward the therapist as indicated by the four measures. Specifically, the following hypotheses were formulated:

1. Following the interview session the experimental (touch) group will exhibit a higher score on the "Client's Personal Reaction Questionnaire" than the control (no-touch) group.

2. Following the interview session the experimental (touch) group will exhibit a higher mean score on
the "Attitudes Toward Psychotherapy and Psychotherapists Scale" than the control (no-touch) group.

3. Following the interview session the experimental (touch) group will exhibit a lower mean distance score on the actual physical distance measure than the control (no-touch) group.

4. Following the interview session the experimental (touch) group will exhibit a higher mean verbal score on the actual times verbal measure than the control (no-touch) group.

Fifty neuropsychiatric male patients between the ages of twenty and sixty-five participated in the study, with a mean age of thirty-nine. The experimental group and the control group were selected from four neuropsychiatric wards at the V. A. Hospital in Waco, Texas. The fifty subjects were selected on the basis of five criteria: (1) the patient had had no previous therapy; (2) the patient was not suffering from severe cognitive deficits; (3) the patient was not so disturbed as to be incapable of complying with the experimental instructions; (4) the patient was of average intelligence as defined by the Kent EGY; (5) and the patient was a first admission to the neuropsychiatric hospital. Informed consent, signed by the patient on V. A. Form 10-1086, was secured from each patient who participated in the study.
The fifty subjects in the study had no previous contact with the therapist. The therapist was well trained in Rogers' concept of therapy. The single interview sessions all took place in rooms arranged specifically for this study. The conditions for the experimental and control group were identical with one exception; subjects in the experimental group received the touch procedures while the control group did not.

All of the data were handscored by the investigator prior to being keypunched on IBM cards and processed at the North Texas University Computer Center. The units of measure for the actual physical distance were converted to one-eighth inch to meet computer requirements. Each of the four hypotheses was tested with a one-way analysis of variance. The Bartlett test was applied to test for group homogeneity.

Statistical analysis of the data indicated a significant difference beyond the .05 level between the mean scores of the experimental and control groups on the measure of actual physical distance. Therefore Hypothesis III was supported. An F-value of 8.5354 with a probability of 0.0053 was found for the means of the experimental and control groups. Hypotheses I, II and IV were rejected, since no significant difference was found between the mean scores of the experimental and control groups. The Bartlett test results were not statistically significant, revealing that homogeneity existed between the experimental and control groups.
Discussion

Statistical analyses revealed that only Hypothesis III reached the .05 level of significance, which was the acceptable level for the study. Hypothesis III stated that following the interview session the experimental (touch) group would exhibit a lower mean score on the actual physical distance measure than the control (no-touch) group. The data on the actual physical distance measure indicated that this difference resulted from an increase in interpersonal attraction on the part of the experimental (touch) group.

One of the goals of this study was to provide behavioral data to verify increased interpersonal attraction of the patient resulting from touch. The decrease in actual physical distance scores suggests that touch had some impact on the experimental subjects which may have caused them to move in a positive direction. One possible reason for the significance of this behavioral measure is that the instrument provides an unobtrusive measure of the subject's attraction toward the therapist.

Another point to consider is that increased attraction occurred on the variable of actual physical distance within a short time period. This appears significant for the following two reasons: (1) the subjects in the experimental (touch) group and the control (no-touch) group had
no previous contact with the therapist; and (2) there was no lag time opportunity for external variables to affect the experimental (touch) and the control (no-touch) groups, from time of treatment to measurement.

In the present investigation touch, when measured behaviorally, was found to be significantly related to interpersonal attraction as measured by distance. This result adds support to Boucher's (1) finding that closer distance would lead to increased attraction. Indirectly, the results support Pattison's (3) finding that touch in an initial interview increased depth of self-exploration.

Even though the actual physical distance measure indicated significance, nevertheless it should be noted that the actual timed verbal measure was also an unobtrusive measure of the subject's attraction toward the therapist which indicated no significance. Another point to consider is the possibility of investigator bias producing the desired result on the actual physical distance measure. For this reason, an observer was used to evaluate the consistency of the investigator. This control, however, did not eliminate the possibility of investigator bias, which might have tended to indicate significance even if there had been none. Finally, the close proximity of the therapist's and patient's chairs may have repulsed the control subjects if they expected to be touched.

Scores on the "Client's Personal Reaction Questionnaire" and "Attitudes Toward Psychotherapy and Psychotherapists
Scale" did not indicate statistical significance in the means between the experimental (touch) and control (no-touch) groups. However, it is important to point out aspects that were and were not reflected in the data that raise questions about whether or not using these questionnaires is meaningful.

The lack of significant results on the "Client's Personal Reaction Questionnaire" and "Attitudes Toward Psychotherapy and Psychotherapists Scale," indicates a possibility that in the present study the hospitalized subjects answered the paper and pencil questionnaires in the direction that would seem appropriate for their early release.

Evaluation of two questions from each paper and pencil questionnaire revealed the following for the experimental (touch) and control (no-touch) groups. The questionnaire consisted of statements describing positive and negative aspects of the therapist's and patient's general attraction, to which each patient responded on a seven point scale from "strongly agree" to "strongly disagree." The one to seven answer scale was divided into three cells. The first cell included answers marked one through three; the second cell included answers marked four; and the third cell included answers marked five through seven. The same cell division was employed for all four questions. From the "Client's Personal Reaction Questionnaire," question three
stated, I felt comfortable talking with the psychologist." Twenty-one subjects from the experimental (touch) group answered in the agree direction and were placed in cell one; one answered neither agree nor disagree and was placed in cell two; and three answered in the disagree direction and were placed in cell three. Eighteen subjects from the control (no-touch) group answered in the agree direction and were placed in cell one; five answered neither agree nor disagree and were placed in cell two; and two answered in the disagree direction and were placed in cell three. From the "Client's Personal Reaction Questionnaire" question nine stated, "The Psychologist is a warm and friendly person." Twenty-four subjects from the experimental (touch) group answered in the agree direction and were placed in cell one; none answered neither agree nor disagree; and one answered in the disagree direction and was placed in cell three. Nineteen subjects from the control (no-touch) group answered in the agree direction and were placed in cell one; three answered neither agree nor disagree and were placed in cell two; and three answered in the disagree direction and were placed in cell three.

Question four from the "Attitudes Toward Psychotherapy and Psychotherapists Scale" stated, "Talking about your problem to a psychologist is mostly a waste of time." Two
subjects from the experimental (touch) group answered in the agree direction and were placed in cell one; two answered neither agree nor disagree and were placed in cell two; and twenty-one answered in the disagree direction and were placed in cell three. Two subjects from the control (no-touch) group answered in the agree direction and were placed in cell one; six answered neither agree nor disagree and were placed in cell two; and seventeen answered in the disagree direction and were placed in cell three. Question seventeen from the "Attitudes Toward Psychotherapy and Psychotherapists Scale" stated, "Talking with a psychologist is the best way to deal with mental, nervous and emotional problems."

Twenty subjects from the experimental (touch) group answered in the agree direction and were placed in cell one, four answered neither agree nor disagree and were placed in cell two and one answered in the disagree direction and was placed in cell three. Sixteen subjects from the control (no-touch) group answered in the agree direction and were placed in cell one, six answered neither agree nor disagree and were placed in cell two and three answered in the disagree direction and were placed in cell three.

The stated results seem to support the assumption that the subjects answered in the direction appropriate for their release. The results also tend to support the contention that most of the subjects in the experimental and control
groups had positive feelings of attraction toward the therapist and that touch did not produce a significant difference.

Truax (4) found that measuring the level of therapeutic conditions with questionnaires filled out by clients is a significantly less valid procedure than the rating of objective tape recordings. Pattison (3) concluded that behavioral measures, video and audio observations and physiological measures should be used and that global questionnaires should be avoided. The results of the study tend to support Truax's (4) findings and lends additional support for Pattison's conclusions.

Another point to consider is that population or variability might cause significant difference in the means of the experimental (touch) and control (no-touch) groups.

Evaluation of the demographic data (see appendix E) by the investigator revealed the following for the experimental (touch) and control (no-touch) groups. The experimental (touch) group contained twenty-five subjects; twenty-two were white, three black; eleven were married, ten divorced and four single; ages ranged from twenty-one to sixty with a mean age of forty; intelligence ranged from low average to superior; seven were neurotic, eleven were psychotic and seven had character disorders; all subjects were male. The control group contained twenty-five subjects;
twenty-one were white, four were black; fourteen were married, five divorced and six single; ages ranged from twenty to sixty-five with a mean age of thirty-nine; intelligence ranged from low average to superior; eight were neurotic, eight were psychotic and nine had character disorders; all subjects were male. The demographic data for the experimental (touch) group and control (no-touch) groups supports Ferguson's (2) position that the variance of the population from which the samples were drawn should be equal.

Conclusion

Results of the single initial interview criteria suggested that the control procedures were effective in increasing interpersonal attraction when measured by physical distance. The touch procedures were ineffective in increasing interpersonal attraction when measured by "Client's Personal Reaction Questionnaire," "Attitude Toward Psychotherapy and Psychotherapists Scale" and actual timed verbal measure.
Recommendations

On the basis of the findings of this study, the following recommendations are made:

1. An extensive study should be made of the instruments available for assessing interpersonal attraction, including an analysis of how each instrument relates to touch techniques used in psychotherapy.

2. The process and outcome of touch techniques in therapy should be compared to the process and outcome in other processes of therapy to determine the contributions of these touch techniques to the therapy process.

3. A study, using the touch techniques of this study, should be conducted with other behavioral and psychological measures and other paper-pencil questionnaires.

4. A similar study should be replicated with subjects other than neuropsychiatric patients, such as hospitalized medical patients, college students and children.
CHAPTER BIBLIOGRAPHY


APPENDIX
APPENDIX A

(CLIENT'S PERSONAL REACTION QUESTIONNAIRE)

Name: ___________________________ S No. _______________________

When talking to a psychologist about their problems, people have many different feelings--some good, some bad.

The following questions are being asked to learn how you felt during the interview you just had with the psychologist.

Each of the following questions has seven possible answers:

1. Strongly agree
2. Moderately agree
3. Slightly agree
4. Neither agree or disagree
5. Slightly disagree
6. Moderately disagree
7. Strongly disagree

Circle only one number for each question which best tells you you feel.

1. I'm pleased with the psychologist's interest and attention.  1 2 3 4 5 6 7

2. It was hard for me to talk about myself with the psychologist.  1 2 3 4 5 6 7

3. I felt comfortable talking with the psychologist.  1 2 3 4 5 6 7

4. Many things the psychologist said just seemed to hit the nail on the head.  1 2 3 4 5 6 7

5. If I had someone else as a psychologist I would have probably felt freer to discuss my problems.  1 2 3 4 5 6 7

6. I frequently found it difficult to think of things to say when I was with the psychologist.  1 2 3 4 5 6 7

7. I don't know exactly why, but I felt nervous during the interview with the psychologist.  1 2 3 4 5 6 7

8. I'm glad this particular psychologist was assigned to me.  1 2 3 4 5 6 7

9. The psychologist is a warm and friendly person.  1 2 3 4 5 6 7

10. The interview seemed like a waste of time to me.  1 2 3 4 5 6 7
11. I sometimes felt as if I were being put on the spot during the interview with the psychologist.

12. The things the psychologist said and did gave me confidence in him.

13. I really felt the interview was worthwhile.
APPENDIX B

(ATTITUDES TOWARD PSYCHOTHERAPY AND PSYCHOHERAPISTS SCALE)

S No. ____________ Name: ______________________

Dx: ____________ Admission Date: _____________

Distance: __________ Today's Date: _____________

DIRECTIONS

Each question on the following pages has seven possible answers:

1. Strongly agree
2. Moderately agree
3. Slightly agree
4. Neither agree or disagree
5. Slightly disagree
6. Moderately disagree
7. Strongly disagree

Circle only one number for each question on the following pages which best tells how you feel.

1. Psychologists are not very much help in solving people's problems. 1 2 3 4 5 6 7

2. Most people would go to a psychologist if they felt they had mental or nervous problems 1 2 3 4 5 6 7

3. Many of the people who go to psychologists are made worse by the treatment they get. 1 2 3 4 5 6 7

4. Talking about your problems to a psychologist is mostly a waste of time. 1 2 3 4 5 6 7

5. Every school child should be given a psychological examination. 1 2 3 4 5 6 7

6. Psychologists are warm and friendly people. 1 2 3 4 5 6 7

7. If you live a good, clean life, you shouldn't need to talk to a psychologist. 1 2 3 4 5 6 7

8. Most people feel comfortable talking to a psychologist about their problems. 1 2 3 4 5 6 7
9. Most people would be afraid to tell their real feelings during a therapy session where they talked with a psychologist.  

10. Psychologists really know more about mental and nervous conditions than other doctors do.  

11. Unhappy people should go to a psychologist for help.  

12. People with mental or nervous problems should be able to pull themselves together without the help of a psychologist.  

13. A psychologist usually says things that give patients confidence in him.  

14. Most people would find it hard to talk about themselves to a psychologist.  

15. Most people cannot understand how talking with a psychologist could do much to solve their problems.  

16. It would be easier for a person to talk with a psychologist than with most other people.  

17. Talking with a psychologist is the best way to deal with mental, nervous and emotional problems.  

18. Psychologists, as compared to other kinds of doctors, are more successful in helping their patients.  

19. Psychologist would not be needed if people had willpower of their own.  

20. When a psychologist tries to treat a person with little schooling, neither one really understands the other.
21. Talking with a psychologist gives people many ideas about their problems which help them to understand themselves better.

22. Most people would hesitate to tell a psychologist what they were really thinking.

23. Talking with your minister if you have a problem is better than talking to a psychologist.

24. It would be difficult to think of things to say during a therapy session where you talked about your problems to a psychologist.

25. Psychologists, as compared with other kinds of doctors are more interested in the well-being of their patients.
APPENDIX C

INSTRUCTION FOR TOUCH PROCEDURE

1. Go to reception area and introduce yourself to subject, extending your hand for handshake. Place your left hand firmly over subject's hand without losing eye contact or hesitating in your introduction. (4-5 sec.).

2. As subject nears office door, usher subject down the hall ahead of you and place your hand and wrist on subject's back or shoulder as you tell subject where to go and/or which seat to take (about 10 seconds). You should sit close enough to the client to allow easy reaching to touch.

3. Ten to fifteen minutes into the interview, place your hand on subject's lower arm about 4-6 seconds.

4. Twenty-five to thirty minutes into the interview, place your hand over the back of the subject's hand and hold firmly for 2-3 seconds. Pair the touch with an interruption to ask for clarification or to reflect or summarize.

5. Forty to forty-five minutes into the interview, terminate. Place hand and arm on subject's upper back or shoulder as subject leaves and go out the door and down the hall with subject (about 10 seconds).
APPENDIX D

E-G-Y -- 1946
Grace H. Kent

Name ___________________________ Date Examined ________
Date of Birth _________ Age _____ Examiner ____________

1. What are houses made of? (Any materials you can think of).
   1 point for each item, up to 4.  
   Credit Score 1-4 _______

2. What is sand used for?
   4 points for manufacture of glass.
   2 points for mixing with concrete, road building. 1 point for play or scrubbing. Credits not cumulative. 
   1,2-4_____

3. If the flap floats to the south, from what direction is the wind?
   3 points for north; no partial credits. It is permissible to say, "Which way is the wind coming from". 
   3 ______

4. Tell me the names of some fishes.
   1 point each, up to 4.  
   1-4_____

5. At what time of day is your shadow shortest?
   3 points for noon 
   3 ______

6. Give the names of some large cities.
   1 point for each, up to 4.  
   1-4 ______

7. Why does the moon look larger than the stars?
   2 points for moon is lower down,
   3 points for idea of nearer or closer. 4 points for generalized statement that nearer objects look larger than more distance objects. 
   2,3-4_____

8. What metal is attracted by a magnet?
   4 points for iron, 2 for steel 2 or 4____

9. If your shadow points to the northeast, where is the sun?
   4 points for southwest, no partial credits 4 ______

10. How many stripes in the flag?
    2 points for thirteen 2 ______

The test items are reproduced by permission of The Williams and Wilkins Company, 1946
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