

THE CLIENT'S PERCEPTION OF THERAPIST  
POTENCY AND CHANGES IN PSYCHOTHERAPY

THESIS FOR THE DEGREE OF PH. D.  
MICHIGAN STATE UNIVERSITY

NICHOLAS J. BORRELLI  
1965

THESIS

0.2



3 1293 20076 8186





OVERDUE FINES:

25¢ per day per item

RETURNING LIBRARY MATERIAL:

Place in book return to  
charge from circulation

W-141

## **ABSTRACT**

### **THE CLIENT'S PERCEPTION OF THERAPIST POTENCY AND CHANGES IN PSYCHOTHERAPY**

**By Nicholas J. Borrelli**

The primary purpose of this study was to test the hypothesis that there is direct relationship between client's perception of therapist potency and changes in psychotherapy. Past research and availability of relevant data suggested two secondary functions: (1) the investigation of relationships between client's perception of therapist activeness and client's evaluation of the therapist and changes in psychotherapy; and (2) the investigation of relationships between client's perception of counselor-client similarity in potency, activeness and evaluation and changes in psychotherapy.

Clients were twenty-six self-referred M.S.U. undergraduates fifteen females and eleven males, who had been seen at the M.S.U. Counseling Center for personal-social counseling for a median of fifteen interviews. Therapists were primarily relationship-therapy oriented and were either practicum students, interns or regular Counseling Center staff members.

Client's perception of therapist variables was obtained from S's Semantic Differential factor scores on the concept "counselor". Client's perception of counselor-client similarities was obtained by subtracting "counselor" factor scores from the concept "me" factor scores. Client changes were based upon the differences between pre-and post-therapy scale scores on the Hs, D, Hy, Pt and Sc MMPI scales (C. I. S.).

One-tailed rank order correlations were computed to determine the degree of relationship between the potency variable and each of the remaining perceptual variables and the C. I. S. The results of this initial analysis failed to support the major hypothesis or any of the secondary hypotheses. A more refined data analysis was undertaken in which rank order correlations were computed between the potency variable and each of the remaining perceptual variables and change scores for the five individual MMPI scales. The results supported the major hypothesis of a direct relationship between client perception of therapist potency and changes on the Hy scale at the .05 level. This result was interpreted as being in general agreement with the Kell-Mueller (1965) view of clients with hysteroid features.

None of the five secondary hypotheses were supported. However, the results of earlier studies testing the relation-

Nicholas J. Borrelli

ship of perception of therapist evaluation and therapist activity to change, were reinterpreted as being in general agreement with the findings of the present study.

Methodological difficulties in the present study were discussed and suggestions made for future research testing hypotheses similar to those of this study.

**THE CLIENT'S PERCEPTION OF THERAPIST  
POTENCY AND CHANGES IN PSYCHOTHERAPY**

**By**

**Nicholas J. Borrelli**

**A THESIS**

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

**DOCTOR OF PHILOSOPHY**

**Department of Psychology**

**1965**

**DEDICATION**

**To my wife Pat**



## **ACKNOWLEDGMENTS**

The author wishes to express his deep appreciation to his committee chairman, Dr. Bill Kell, and to his committee members, Dr. Josephine Morse, Dr. Charles Hanley and Dr. Norman Abeles whose individual and collective efforts and continuing encouragement proved invaluable in the completion of this thesis.

A very special thanks also to Dr. William Mueller for his many helpful suggestions regarding the design and implementation of this study.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS . . . . .	ii
LIST OF TABLES . . . . .	v
LIST OF APPENDICES . . . . .	vi
INTRODUCTION . . . . .	1
The Purpose of the Study . . . . .	1
BACKGROUND OF THEORY AND RESEARCH . . . . .	4
Therapist Potency . . . . .	4
Therapist Activity . . . . .	5
Therapist Evaluation . . . . .	5
Client-Counselor Similarity . . . . .	6
HYPOTHESES TESTED . . . . .	6
METHOD . . . . .	7
The Sample . . . . .	7
Instruments . . . . .	8
The Semantic Differential . . . . .	8
The MMPI . . . . .	11
RESULTS . . . . .	12
DISCUSSION . . . . .	15
SUMMARY . . . . .	19
REFERENCES . . . . .	22
APPENDICES . . . . .	27

## LIST OF TABLES

TABLE	Page
1. Rank order correlations for hypotheses 2-6 . . . .	13
2. Rank order correlations for tests of hypotheses 2-6 across five MMPI scales . . . . .	15
3. Factor loadings, means and standard deviations for combined concepts "me" and "counselor" . . . . .	30
4. Summary of results of studies on MMPI test-retest reliability with college or psychiatric populations . . . . .	32

## LIST OF APPENDICES

APPENDIX	Page
A. The Semantic Differential . . . . .	28
B. The MMPI . . . . .	31
C. Results of studies on MMPI scale value changes following psychotherapy . . . . .	33
D. Rank orders for tests of hypotheses 1-6 . . .	36
E. Mean change scores and variances of five MMPI scales for Kaufman test-retest control group and Borrelli experimental group . . . .	37
F. Change rank orders for five MMPI scales . . .	38

## Introduction

The major purpose of this study was to test an hypothesis generated by the author's clinical experience. The author had noted in his own and his colleagues' therapy contacts, that a particular kind of client-perception of the therapist was likely to lead to client improvement. The author defined this interaction as potency perception since clients invariably seemed to respond to therapists on the basis of some quality of perceived strength. What elicited and maintained a potency perception varied from client to client and included such therapist features as knowledgeability, power, ability to tolerate anxiety, ability to control client's aggressive feelings, or in short, any quality of psychological strength meaningful to the client. The significance of the potency perception, however, seemed to be universal for clients in that it provided the client with a kind of external stability against which he could allow himself to experience greater affect and within which he could experiment with new behavioral patterns.

The author's observations suggested that a direct relationship might exist between perception of counselor potency and change in psychotherapy; that is, that the greater

the perceived therapist potency, the greater the positive change in the client, and conversely, the less the perceived potency the less the positive change. It remained then only to state these observations and tentative conclusions in testable form. Hence, the primary purpose of this study, which was to test the hypothesis of a direct relationship between client's perception of therapist potency and changes in psychotherapy.

Availability of relevant data made it additionally possible to test secondary client-perceptual hypotheses suggested by previous research or the data itself. Some of the studies cited in the review below, for example, imply a direct relationship between both therapist's activeness and client evaluation of the therapist and change in psychotherapy. This author's position, however, is that the above stated relationships are of secondary importance to perception of therapist potency. The rationale for this view is that mere activity per se contributes little to client change since therapist activity can sometimes be defensive, particularly when it is prompted by client's attempts to manipulate the therapist. Likewise, positive client evaluation of the therapist, in the author's experience, in itself is neither a necessary nor sufficient condition for client change. This seems particularly evident when one considers the fact that negative transference need not necessarily mitigate against client gains. Conceivably, what can make both these client perceptions important to client gains, however, is the degree

to which they have some commonality with the potency function - that is when, for example, therapist activity is also regarded by the client as indicative of therapist potency. Insofar as this linkage occurs, E would then expect evaluation and activity to be related to client changes, but not necessarily otherwise. In the review of the literature below, the reader may note that activity alone was never related to therapy change. Rather, in all the activity studies, it was activity in conjunction with an additional therapist quality which was related to change - e.g. in the Griggs and Goldstein study (1957) the additional quality was therapist directiveness. At a minimum, this suggests the probable contamination of the activity measure - possibly, by a measure of potency.

The data also lent itself to testing of hypotheses regarding the relationship of client-counselor similarity to change. The research reported below is mixed concerning these relationships. E's intent here was to explore the relationship of counselor-client similarity to change insofar as the data permitted, using a somewhat different methodology than had been previously employed.

The present study then had in addition to its primary function, two secondary functions; (1) the examination of relationships between client's view of therapist's activity and client's evaluation of the therapist and changes in psychotherapy; and (2) the exploration of client's perceptions of client-counselor similarities and the relation of these

perceptions to therapy changes. (Note: Throughout this study the terms counselor and therapist, and the words counseling and psychotherapy, are used interchangeably).

### Background Theory and Research

Rogers (1952) considers the client's perception of the therapist's attitudes and procedures to be of crucial importance in psychotherapy. In the discussion below E shall summarize theory and research related to the dimensions of client perception with which this study is concerned.

#### Potency:

With regard to the potency variable, several authors stress the necessity of the clients perceiving the therapist as possessing social power and/or power by virtue of superior knowledge in order to establish a therapeutic relationship (Borilari and Asnaourow, 1932; Maeder, 1955; Stransky, 1946). Cartwright and Cartwright (1958) concede that blind faith in the therapist's power to help may possibly be important for client changes, while Kell and Mueller (1965) argue that client-perceived counselor strength is a prerequisite for client improvement.

The Rosen et. al. study (1961) lends some credence to the above assertions by demonstrating that people who are seen as helpful (therapists?), are also seen as possessing power. Further support comes from Mulder (1960) who demonstrated that in certain interpersonal situations people will



tend to identify with more powerful others, leading to both behavioral and perceptual changes. Finally, the Dana study (1954) reports upon the differential effects of attitudes toward authority on therapy success--adequate attitudes leading to greatest success.

#### Activity:

Rogers (1952) feels it essential that the therapist be perceived as more than just a passive listener for client changes to occur. Studies relating to this therapist function almost universally report positive relationships between therapist activity and psychotherapy success. Rogers' (1952) summary of several studies showed that the most helpful physicians (i.e. in terms of psychotherapy success rates) were active and participated personally in the treatment process. Griggs and Goldstein (1957) demonstrated that psychotherapy was judged more successful by the client if counselors were active and somewhat directive than if counselors were seen as passive listeners. Similarly, Overall and Aronson (1963) conclude that when therapists didn't fulfill client's expectations of being active but permissive, clients were less likely to return to treatment.

#### Evaluation:

A logical extension of the foregoing theory and research would suggest that when client's overall evaluation of the therapist is positive, successful therapy is more likely to occur. Sapolsky's (1965) finding of a positive correlation between patient's high evaluation factor scores

(i.e. with the Semantic Differential) on the concept "doctor" and patient improvement following several kinds of therapeutic programs, lends some support to the above assertion.

#### Client-Therapist Similarity:

Theory and supporting evidence regarding the relationship between client-therapist similarity to treatment progress is mixed. Moreover, the bulk of the reported research relates to actual, rather than client-perceived similarities. Mendelsohn and Geller (1965), for example, found a positive relationship between client-counselor similarity as measured by the Myer-Briggs Type Indicator and client-perceived comfort-rapport in therapy for one sample, but not for another. Ourth (1964), however, found no relationship between client-counselor similarity as measured by the author's own instrument (i.e. the External-Internal Orientation Measure) and either stay or improvement in psychotherapy. Carson and Heine (1962) found a curvilinear effect when dyad similarity was measured by the MMPI. The one study dealing specifically with client-perceived similarities (Sapolsky, 1965), demonstrated a positive and significant relationship between therapist-client similarity, as measured by the Semantic Differential activity and evaluation factor scores, and psychotherapy improvement.

#### Hypotheses Tested

The theoretical viewpoints and research evidence cited above, albeit at times indirectly, supports E's position

with regard to the importance of the potency variable to client change. This position stated in testable form is as follows:

Major Hypothesis

1. Client's perception of therapist's potency is directly related to client changes in psychotherapy.

The foregoing review also suggested the following secondary hypotheses to be tested:

2. Client perceived counselor-client similarity in potency is directly related to client changes in psychotherapy.
3. Client's perception of therapist's activeness is directly related to client changes in psychotherapy.
4. Client-perceived counselor-client similarity in activeness is directly related to client changes in psychotherapy.
5. Client's positive evaluation of his therapist is directly related to client changes in psychotherapy.
6. Client-perceived counselor-client similarity in evaluation is directly related to changes in psychotherapy.

Method

The Sample:

Some of the data employed in this study were also

used in an ongoing research project at the M.S.U. Counseling Center. As a part of the Counseling Center project a group of fifty-four counselees were given a form of the Semantic Differential before therapy, after every fourth interview, and at termination. Ss were asked to respond on the basis of sixteen scales to twenty-one concepts, among which were the concepts "counselor" and "me". MMPI profiles were also obtained for some of the fifty-four Ss in the Counseling Center project before the first therapy contact and at termination.

For this study's purposes, E selected only those Ss from the Counseling Center project for whom both the Semantic Differential data and the pre-and post-therapy MMPI profiles were available. The final usable sample consisted of twenty-six self-referred M.S.U. undergraduates, eleven males and fifteen females, who had been seen for personal-social counseling by either a practicum student, an intern or a regular Counseling Center staff member. Clients had a median of fifteen counseling interviews. Therapists were fifteen males and seven females and were primarily relationship-therapy oriented.

#### Instruments: The Semantic Differential

Measures of client's perception of therapist variables and of client-perceived counselor-client similarities were obtained from S's Semantic Differential responses to the concepts "counselor" and "me". Whenever possible, E used S's post-therapy Semantic Differential administration

to obtain the above measurements. When this was not possible -- i.e. When S had no post-therapy Semantic Differential -- E used S's Semantic Differential administration which was closest in time prior to therapy termination. (See Appendix A for a more complete description of the Semantic Differential).

Although Osgood et. al. (1957) provide tables showing the factorial meaning of a number of scales used in this study, E thought it desirable to establish the particular factorial structure of all the scales used in this study for this particular study sample. To this end E combined the concepts "counselor" and "me" and factor analyzed (Principal Factor Solution with Quartimax Rotation Method) the Semantic Differential responses to both concepts of all Ss from the Counseling Center project sample of fifty-four counselees who had at least three consecutive Semantic Differential administrations ( $N=40$ ; 240 observations on 16 scales). The factorial meaning of the scales thus established is as follows: potency scales - large-small, thin-thick; evaluation scales - easy-difficult, optimistic-pessimistic, free-constrained, fair-unfair, bad-good, destructive-productive, changing-stable, safe-dangerous; activity scales - colorless-colorful, sharp-dull, active-passive, slow-fast. Two scales - modest-vain and weak-strong - did not load clearly on any of the factors and hence were excluded from the study. The fourteen scales used in this study together with their factor loadings are reported in Appendix A, table 3.

To test the study hypotheses, it was necessary to obtain: (1) factor scores on the "counselor" concept for each S for each of the three factors (i.e. potency, activity and evaluation); and (2) factor score differences between the "counselor" and "me" concepts for each S for each of the three factors.

Four steps were needed to obtain Ss' factor scores. First, as outlined above, data composed of forty Ss' responses to the concepts "me" and "counselor" were factor analyzed and the factor solution for each of the three factors obtained for the combined concepts. The next step was to deviate the raw scale score of each S in the sample from the normative group mean for each particular scale and divide by the normative group standard deviation appropriate to that particular scale. This yielded a Z score. Next, the Z score for each S for each scale was multiplied by the factor loading of that particular scale according to the formula  $\frac{r}{1-r^2}$  (Thomson, 1951). This yields a factor score for each S on each scale. The final step was to sum across these factor scores for each S for each of the three factors for the concepts "counselor" and "me". In this instance, the higher the factor score total, the greater the client's perception of the variable measured- e.g. the greater the potency factor score on the "counselor" concept, the greater the degree of potency the client attributes to the counselor. Each of the three factor score totals for the "counselor" concept were then independently ranked in descending order (see Appendix D).



Osgood's (1957) D score was used as the measure of client-perceived similarity between himself and his therapist. D scores were obtained by subtracting the client's Z-transformed scale scores on the concept "me" from his Z-transformed scale scores on the concept "counselor" and summing these differences across each scale. E repeated this operation for each of the three factors which yielded a factor score difference total for each factor. In this case, the smaller the factor score difference total (D), the greater the degree of client-perceived similarity between client and counselor. D scores for each factor were then ranked in ascending order (see Appendix D).

### The MMPI

Research across differing types of therapy and kinds of clients has shown that some MMPI scales are more sensitive measures of psychotherapy change than others (see Appendix C). Using the above empirical rationale as the selection criterion then, only five MMPI scales were incorporated into the study.

Measures of change were obtained by subtracting the post-from the pre-therapy MMPI scale scores for each client on the D, Pt, Sc, Hs and Hy scales. In all cases E was looking for changes in psychotherapy. Thus, when, for example, an S's post-therapy scale score became elevated, indicating negative change, the score was given a negative sign and the difference between the pre-and post-therapy scale scores taken. When a post-therapy scale score was depressed, indicating



positive change, the difference score was given a positive sign. Accordingly, the difference scores for each S across the five MMPI scales were added algebraically so that the higher the total, the greater positive change in a client. In addition, E thought it advisable that account be taken of the number of changing scales as well as the absolute magnitude of change. Thus, the author took the mean of the scale unit changes across the five scales and multiplied this mean by the number of changing scales. Adding this total to the algebraic summation total yielded the final measure of change - the Change Index Score (C. I. S.), which again, was greater the greater the positive change in clients. Change Index Scores were then ranked in descending order (see Appendix D).

### Results

The data subjected to statistical analysis consisted of: (1) three rank orders based upon factor scores, indicating client's perception of counselor's potency, evaluation and activity - one rank ordering for each of the factors; (2) three D score rank orders, indicating client-perceived counselor-client similarity along the three Semantic-Differential factors; and (3) a rank order of client Change Index Scores.

One tailed rank order correlations (Siegel, 1956) were computed to determine the degree of relationship between the potency variable and each of the remaining client-perceptual

variables and change index scores. In order to test the major hypothesis, a rank order correlation was computed between the rank ordering of the potency factor scores and the rank ordering of the Change Index Scores. The resultant correlation of .231 was not significant at the .05 level.

Testing of secondary hypotheses two through six proceeded in identical fashion as described above. The results of these computations, none of which yielded correlations significant at the .05 level are presented in Table 1 below.

TABLE 1

## RANK ORDER CORRELATIONS FOR HYPOTHESES 2-6.

Hyp. II	Client-perceived counselor-client similarity in potency by C. I. S.	- .061
Hyp. III	Client's perception of therapist's activeness by C. I. S.	- .025
Hyp. IV	Client-perceived counselor-client similarity in activeness by C. I. S.	.164
Hyp. V	Client's evaluation of therapist by C. I. S.	.052
Hyp. VI	Client-perceived counselor-client similarity in evaluation by C. I. S.	.001

Although significant results were not obtained in the foregoing data analysis, the presence of a supporting trend for the major hypothesis suggested that a more refined analysis of the data might be of value. The author felt that the effect of combining the individual MMPI change scale scores into a composite change score (i.e. the C. I. S.) was to obscure

the individual relationships of the MMPI scales to the perceptual variables. The finding of a supporting trend thus recommended that a test of the study hypotheses using individual MMPI scale change scores as the criterion of change would be in order.

The reduction of the C. I. S. into its component scales was of additional value in that it allowed E the means to demonstrate that client changes were attributable to psychotherapy and were not merely random changes. This demonstration was attempted by comparing the change score variances for the five MMPI scales used in this study to those of a control group used in another study (Kaufman, 1950). These comparisons are presented in Appendix E.

Using the above rationale, E reduced the C. I. S. into its component scales and computed rank order correlations between the potency variable and each of the secondary variables and change scale scores for each of the five individual MMPI scales. (Change rank orders for the five MMPI scales are reported in Appendix F).

The results of these computations yielded rank order correlations significant at the .05 and .10 levels between client's perception of therapist potency and the Hy and Pt scales respectively. Correlations of .103, .137 and .055 were also obtained between the potency variable and the Hs, D, and Sc scales, none of which were significant at the .05 level.

None of the rank order correlations for secondary hypotheses two through six were significant. These correlations are reported in Table two below.

TABLE 2  
RANK ORDER CORRELATIONS FOR TESTS OF HYPOTHESES 2-6  
ACROSS FIVE MMPI SCALES.

Hypothesis		MMPI Scale				
		Hs	D	Hy	Pt	Sc
Hyp. II	Client-perceived counselor-client similarity in potency	.098	-.154	.022	-.161	-.062
Hyp. III	Client's perception of therapist activeness	-.101	-.005	-.068	.096	-.014
Hyp. IV	Client-perceived counselor-client similarity in activeness	.095	.110	.152	.099	.016
Hyp. V	Client's evaluation of therapist	-.043	.244	.073	.144	.008
Hyp. VI	Client-perceived counselor-client similarity in evaluation	-.105	.085	-.307	-.033	.108

### Discussion

The results obtained in the more refined analysis of the data lends partial support to the major hypothesis of a direct relationship between client's perception of therapist potency and changes in psychotherapy. The failure to obtain confirmation for this hypotheses across all five MMPI scales, however, leads E to suspect that perception of counselor potency has a differential relationship across different areas

of psychopathology. By this, E simply means that the relationship of perception of potency to change may vary depending upon the type or area of pathology being measured. Why this should be true may be a function of the dynamic meaning of the pathology measured.

One plausible explanation as to why this direct relationship holds for the Hysteria scale has to do with the Kell and Mueller (1965) view of clients with hysteroid features. This view maintains that one of the central dynamics of such clients is anxiety arising out of fantasied sexual omnipotence. What is needed on the part of the therapist to counteract this anxiety is acknowledgment of the anxiety and some effective display of psychological strength (i.e. potency), which, in effect, lets the client know that controls are available. When the therapist is able to accomplish this, hysterical anxiety is likely to be reduced and positive change occurs. When this is not accomplished clients may become more anxious.

The reader may observe that a direct relationship between two variables implies not only that increase in one variable is associated with increase in the other, but conversely, that decreases in the two variables are likewise associated. The fact then that the present study did establish a direct relationship between perception of potency and change on the Hysteria scale, corresponds quite readily with the Kell-Mueller position, for it confirms their interpretation of the meaning of therapist potency to both positive

and negative client changes; that is, that perception of high therapist potency may effect positive client change and that perception of low potency may accentuate client's hysteroid features.

The failure to find support for any of the five secondary hypotheses with either of the data analyses requires additional explanation. Differences between the present study and other studies testing similar hypotheses, in sample composition and size, methodology and adequacy of the data may partially account for the present study's negative results -- particularly with regard to those hypotheses concerning relationships between counselor-client similarity and change. The failure to find support for a relationship between perception of therapist activity or therapist evaluation and change, however, reinforces E's view of the secondary importance of both these perceptual variables to potency perception. Recalling E's earlier criticism of previous studies testing these relationships, the reader may remember that activity, in particular, was always coupled with a second therapist feature in its relation to client change. E had implied that this second therapist feature might in some way be a measure of therapist potency. In the present study, however, by means of factor analysis, E used as pure a measure of activity and evaluation as possible, yet E was unable to replicate the results of earlier studies relating activity or evaluation to change. Now, if E's assumption concerning the probable contamination of activity

and evaluation with potency in earlier studies is correct, it may well be that earlier studies, like the present study, were measuring primarily a potency relationship, but merely labeling it differently. In that case, the results of the present study would be in agreement with those of earlier studies.

While the author points particularly to inadequacy of the data as a contributing factor in the failure to support some of the secondary hypotheses, E also feels that the handling of the Semantic Differential data in this study is a more superior method of analysis than any the author has seen thus far. Future researchers attempting tests of hypotheses similar to E's may find this methodology of particular value. The author suggests, however, that the investigator empirically establish the adjectival scales used in obtaining Semantic Differential factor scores. One way to implement this suggestion would be to allow a large sample of terminated psychotherapy clients to describe, either with adjectives or adjectival phrases, the ways in which their therapists had been potent, active, etc. Commonalities in these client descriptions could be sought and these commonalities could then be used as the basis for forming adjectival scales to measure the three Semantic Differential factors.

Two additional methodological refinements seem necessary for adequate tests of hypotheses similar to those of the present study. The reader will recall that the relation of perception of therapist potency to change held for

the Hysteria scale, but not for any of the remaining four MMPI scales used in this study. This result suggests that the potency variable, as well, perhaps, as other client-perceptual variables, may have a differential relationship to client change across different areas of psychopathology; that is, that the perceptual variable may be significantly related to change for some areas of psychopathology, but not necessarily related or less strongly related for other areas of psychopathology. With this probability in mind, future researchers may wish to allow for this variable relationship by controlling for diagnosis and testing perceptual hypotheses across varying kinds of diagnostic groups.

Secondly, it would be most desirable to use multiple criteria of client change whenever possible. This procedure allows E to protect against a possible bias introduced by the use of any single estimate of change alone.

### Summary

The primary purpose of this study was to test the hypothesis that there is direct relationship between client's perception of therapist potency and changes in psychotherapy. Past research and availability of relevant data suggested two secondary functions: (1) the investigation of relationships between client's perception of therapist activeness and client's evaluation of the therapist and changes in psychotherapy; and (2) the investigation of relationships between



client's perception of counselor-client similarity in potency, activeness and evaluation and change in psychotherapy.

Clients were twenty-six self-referred M.S.U. undergraduates, fifteen females and eleven males, who had been seen at the M.S.U. Counseling Center for personal-social counseling for a median of fifteen interviews. Therapists were primarily relationship-therapy oriented and were either practicum students, interns or regular Counseling Center staff members.

Client's perception of therapist variables was obtained from S's Semantic Differential factor scores on the concept "counselor". Client's perception of counselor-client similarity was obtained by subtracting "counselor" factor scores from the concept "me" factor scores. Client changes were based upon the differences between pre-and post-therapy scale scores on the Hs, D, Hy, Pt and Sc MMPI scales (C. I. S.).

One-tailed rank order correlations were computed to determine the degree of relationship between the potency variable and each of the remaining perceptual variables and the C. I. S. The results of this initial analysis failed to support the major hypothesis or any of the secondary hypotheses. A more refined data analysis was undertaken in which rank order correlations were computed between the potency variable and each of the remaining perceptual variables and change scores for the five individual MMPI scales. The results

supported the major hypothesis of a direct relationship between client perception of therapist potency and changes on the Hy scale at the .05 level. This result was interpreted as being in general agreement with the Kell-Mueller (1965) view of clients with hysteroid features.

None of the five secondary hypotheses were supported. However, the results of earlier studies testing the relationship of perception of therapist evaluation and therapist activity to change, were reinterpreted as being in general agreement with the findings of the present study.

Methodological difficulties in the present study were discussed and suggestions made for future research testing hypotheses similar to those of this study.

## REFERENCES

- Borilari, M. J. and Asnaourow, F. Sintopsiquia y neurosis (Snytonopsychia and neurosis). Rev. med. Latino-Amer., 1932, 206. Abstract.
- Carson, R. C. and Heine, R. W. Similarity and success in therapeutic dyads. J. consult. Psychol., 1962, 26 (1), 38-43.
- Cartwright, D. S. and Cartwright, Rosalind D. Faith and improvement in psychotherapy. J. counsel. Psychol., 1958, 5, 174-177.
- Dahlstrom, W. G. and Welsh, G. S. An MMPI handbook: A guide to use in clinical practice and research. Minneapolis: University of Minnesota Press, 1960.
- Dana, R. H. The effects of attitudes towards authority on psychotherapy. J. clin. Psychol., 1954, 10, 350-353.
- Ellis, A. in The fifth mental measurements yearbook. Buros, O. K. (ed.). Highland Park, New Jersey: The Gryphon Press, 1959.
- Gallagher, J. J. MMPI changes concomitant with client-centered therapy. J. consult. Psychol., 1953, 17, 334-338.
- Gardner, Gail G. The psychotherapeutic relationship. Psychol. Bull., 1964, 61 (6), 426-439.

- Gibson, R. L., Snyder, W. U. and Ray, W. S. A factor analysis of measures of change following client-centered therapy. J. counsel. Psychol., 1955, 2, 83-90.
- Greenfield, N. S. Personality patterns of patients before and after application for psychotherapy. J. consult. Psychol., 1958, 22, 280.
- Griggs, A. E. and Goodstein, L. D. The use of clients as judges of the counselor's performance. J. counsel. Psychol., 1957, 4, 31-36.
- Kaufman, P. Changes in the MMPI as a function of psychiatric therapy. J. consult. Psychol., 1950, 14, 458-464..
- Kell, B. L. and Mueller, W. J. Impact and change: A study of counseling relationships. Century Psychology Series. New York:Appleton Century-Crofts, 1965.
- Kleimmuntz, B. Annotated bibliography of MMPI research among college populations. J. counsel. Psychol., 1962, 9, 373-396.
- Maeder, A. Über die zwischenmenschliche Beziehung in der Psychotherapie. (Interpersonal relationships in psychotherapy.) Acta. psychother. Psychosom. Orthopaedagog., 1955, 3, 242-500. Abstract.
- Mendelsohn, G. A. and Geller, M. H. Structure of client attitudes toward counseling and their relation to client-counselor similarity. J. consult. Psychol., 1965, 29(1), 63-72. ✓
- Mosak, H. H. Evaluation of psychotherapy: A study of some current measures. Unpublished Doctoral Disser.,

University Chicago, 1950 in "MMPI changes concomitant with client-centered therapy" by Gallagher, J. J. J. consult. Psychol., 1953, 17, 334-338.

Mulder, M. The power variable in communication experiments. J. Hum. Relat., 1960, 13, 241-257. ✓

Osgood, C. E., Suci G. J. and Tannenbaum, P. H. The measurement of meaning. University of Illinois Press, Urbana, Illinois, 1957. ✓

Ourth, L. L. The relationship of similarity in therapist-client pairs to client's stay and improvement in psychotherapy. Disser. Abstr., 1964, 24(9), 3839-3840. ✓

Overall, Betty and Aronson, H. Expectations of psychotherapy in patients of lower socio-economic class. Amer. J. Orthopsychiat., 1963, 33(3), 421-430.

Parker, C. A. The predictive use of the MMPI in a college counseling center. J. counsel. Psychol., 1961, 8, 154-158.

Rashkis, H. A. and Shaskin, D. A. The effects of group therapy on personality scores. Amer. J. Orthopsychiat., 1946, 16, 343-349.

Rogers, C. R. The characteristics of a helping relationship. Personnel Guid. J., 1952, 37, 6-16.

Rosen, A. Test-retest stability of MMPI scales for a psychiatric population. J. consult. psychol., 1953, 17, 217-221.

- Rosen, S., Levinger, G. and Lippert, R. Perceived sources of social power. J. abnorm. soc. Psychol., 1961, 62, 439-441. ✓
- Sapolsky, A. Relationship between patient-doctor compatibility, mutual perception and outcome of treatment. ✓  
J. abnorm. Psychol., 1965, 70(1), 70-76.
- Schofield, W. Changes in responses to the MMPI following certain therapies. Psychol. Monogr., 1950, 64, No. 5 (Whole no. 311).
- Schofield, W. A further study of the effects of therapies on MMPI responses. J. abnorm. soc. Psychol., 1953, 42, 67-77.
- Siegel, S. Nonparametric statistics for the behavioral sciences. New York:McGraw-Hill Co., Inc., 1956.
- Stransky, E. Autorität und Subordination in der psychotherapie der verschiedenen Lebensphasen. (Authority and subordination in the psychotherapy of the various phases of life). Wien. klin. Wschr., 1946, 58, 39-41. Abstract.
- Thomson, Sr. G. The factorial analysis of human ability. (5th ed.) Boston:Houghton Mifflin and Co., 1951. ✓
- Walker, Helen H. and Lev, J. Statistical inference. New York: Henry Holt and Co., 1953.
- Watt, G. D. An evaluation of non-directive counseling in the treatment of delinquents. J. educ. Res., 1949, 42, 343-352.

Weiner, D. N. and Phillips, E. L. A study of progress in psychotherapy. J. clin. psychol., 1948, 4, 201-206.

Welsh, G. S. "An anxiety index and an internalization ratio for the MMPI" in Basic readings on the MMPI in psychology and medicine by Welsh, G. S. and Dahlstrom, W. G. Minneapolis:University of Minn. Press, 1956.

## **APPENDICES**



## Appendix A

### The Semantic Differential

The Semantic Differential was developed by Osgood and his associates (1957) as a research tool for the measurement of meaning. It is essentially a controlled association and scaling procedure wherein each concept to be differentiated is rated on a series of seven point scales composed of polar opposite adjectives. S's task for each scale is only to indicate the direction of his association and its intensity on the seven point scale.

Continuing research on the Semantic Differential has led Osgood and his co-workers to conclude that the three primary factors--evaluation, potency and activity--account for the great majority of the factorial structure operating in meaningful judgements. To test the generality of this factorial structure, Osgood et. al. undertook several studies in which they varied subjects, concepts, type of judgemental situation used in collecting the data and method of factoring the data. In each case, the same three factors emerged in roughly the same order of magnitude.

#### Reliability:

Reliability measures of the Semantic Differential generally are quite acceptable. Osgood et. al. (1957) report

test-retest coefficients ranging from .87 to .93 with a mean  $r$  of .91. Again, citing the results of their own item reliability check, the authors report an rho test-retest correlation of .85. Reported error measurements of the semantic differential on the average are .67 scale units--much less than the expected deviation.

Validity:

Reporting on the general validity of the instrument, the authors cite as evidence many instances where validity criteria of specific sorts are available--e.g. evaluative location of the T. A. T. pictures judged by Ss against the Semantic Differential were found to correlate significantly with clinical judgements of stories told about the pictures by the same Ss. A validity estimate of the instrument's factorial structure is obtained in the demonstration that representation of concepts by the Semantic Differential reveals essentially comparable structures as yielded from the method of trials. Finally, other validity measures were obtained by comparing the Semantic Differential with the Thurstone and Guttman scales, which yielded correlations of the order .90 and .78.

Appendix A (Continued)

TABLE 3

FACTOR LOADINGS, MEANS AND STANDARD DEVIATIONS FOR THE COMBINED  
CONCEPTS "ME" AND "COUNSELOR". BASED ON THREE  
CONSECUTIVE ADMINISTRATIONS OF THE SEMANTIC  
DIFFERENTIAL FOR FORTY SS.  
(240 observations)

Scale	Factor				
	Evaluation	Activity	Potency	Mean	S.D.
Large-Small	.1044	-.0698	-.7815	3.4625	1.3869
Thin-Thick	-.0502	.0054	.7130	3.9417	1.3184
Colorless-Colorful	-.1641	.7332	-.0661	4.8792	1.3624
Easy-Difficult	-.6651	.0576	.0512	3.5542	1.7070
Safe-Dangerous	.7607	.0667	.2573	2.8875	1.4577
Sharp-Dull	.2602	-.6885	-.0764	3.1583	1.2315
Optimistic-Pessimistic	-.5849	-.3267	-.1920	2.9708	1.5449
Free-Constrained	-.6514	-.3087	-.3001	3.4792	1.8528
Fair-Unfair	-.7724	-.2359	-.0243	2.5083	1.2715
Active-Passive	-.3451	-.6679	-.0932	2.9917	1.5942
Bad-Good	-.6933	.1913	-.0511	5.6583	1.1401
Destructive-Productive	-.6843	.3216	.0830	5.4375	1.1602
Slow-Fast	-.0399	.7136	-.0439	4.3000	1.3454
Changing-Stable	-.6152	-.2046	.1565	3.9625	2.0541

## Appendix B

### The MMPI

The MMPI was developed to serve as an objective device for diagnosing psychopathology (Dahlstrom and Welsh, 1960). In its most common form the instrument consists of at least nine clinical scales and three validating scales. S is asked to respond to a series of questions designed to assess symptomatology indicative of various types of psychopathology. S's responses are readily converted into numerical scores for each of the clinical scales. In this way an objective measure of psychopathology is obtained. Currently, however, common practice is to interpret profile patterns in combination with scale scores in arriving at a diagnosis.

#### Validity:

Commenting on the MMPI validity, Ellis (1959) cites Calvin and McConnel who assayed eighty MMPI studies from 1940 to 1950 and reported findings of significant discriminations between different kinds of groups in seventy-one and eighty studies. Ellis himself reviewed one hundred and sixty MMPI studies between 1946 to 1951 and found one hundred and two (64%) of these showed significant between-group discriminations. Both reviews cited above suggest that the MMPI's discriminative powers are better than that of the average personality

inventory (Ellis, 1959). Ellis concludes, however, that the question of the MMPI's absolute validity has not been finally settled. More recently, Kleinmuntz (1962) reviewed MMPI validity studies with college populations under three headings-- concurrent, predictive and construct validity. The bulk of these studies report results favorable for MMPI validity.

### Reliability:

Table four below lists in summary form the results of several studies on MMPI test-retest reliability with college or psychiatric populations.

TABLE 4

### SUMMARY OF RESULTS OF STUDIES ON MMPI TEST-RETEST RELIABILITY WITH COLLEGE OR PSYCHIATRIC POPULATIONS.

<u>Study</u>	<u>Results</u>
<u>Parker, C. A. (1961)</u> 65 <u>Ss</u> from General and Educational Psych. classes. Test-retest interval 14.7 months. Long and short form MMPI.	No significant differences between test-retest scale scores except for Pd scale.
<u>Greenfield, N. S. (1958)</u> 31 college <u>Ss</u> . MMPI's obtained at college admission and at time of contact with college health center. Test-retest interval 11 months.	No significant differences between test-retest scores.
<u>Dahlstrom, W.G. and Welsh, G.S. (1960)</u> College <u>Ss</u> . Test-retest interval 1 week	Correlations reported range between .71-.92 for clinical scales.
<u>Rosen, A. (1953)</u> 40 male psychiatric hospital patients. Test-retest interval 4 days.	Test-retest reliabilities were between .80 to .88 for clinical scales in common use, except for L, K, <u>Mf</u> , <u>Pa</u> , and <u>Ma</u> scales which were between .55 to .75.

## Appendix C

### Results of studies on MMPI scale value changes following psychotherapy.

<u>Study</u>	<u>Results</u>
<u>Kaufman, P. (1950)</u> 51 <u>Ss</u> receiving conference therapy at U. of Wisconsin. <u>Ss</u> diagnosed primarily as anxiety states; one incipient psychotic and one developed psychotic.	D, Pt, Sc and F scales most modifiable. Hs and Mf same as above but to lower degree. MMPI scale changes agree with therapist improvement ratings.
<u>Welsh, G. S. (1956)</u> Several populations	Anxiety index found sensitive to psychotherapy changes. $AI=1.33$ $D+Pt-.67$ (Hs + Hy).
<u>Gallagher, J. J. (1953)</u> 41 non-psychotic <u>Ss</u> receiving client-centered therapy from Penn. State counseling center.	Significant differences between pre-and post-therapy MMPI mean scale scores on F, K, Hs, D, Pt and Sc. Feeling or discomfort scales (D, Pt, Hs) showed greatest tendency to change. MMPI scale changes agree with multiple measures of psychotherapy success at .05 level. Agreement between scale changes and (1) client rating of success and (2) positive-negative feeling ration changes significant at .05 and .01 levels respectively.
<u>Rashkis, A.A. and Shaskin, D.A. (1946)</u> 22 psychiatric battle casualties and 15 anxiety patients in group therapy.	Using t score of over 70 as base, found greatest changes in direction of improvement in D, Hy, Hs and Pt scales.
<u>Schofield W. (1950)</u> A. Outpatient neurotic females treated by junior medical students.	A. No significant differences between pre-and post-therapy MMPI scale scores.

Appendix C (continued)

<u>Study</u>	<u>Results</u>
<u>Schofield, W. (1950)</u> B. Hospitalized neurotic women.	B. Hs, Hy and Pd scales changed significantly.
<u>Schofield, W. (1953)</u> 24 U. of Wisconsin males receiving out-patient psychotherapy.	Significantly lower scores on ?, F, K, Hs, D, Hy, Pt and Sc scales. All changes statistically reliable.
<u>Mosak, H. H. (1953)</u> 28 Ss seen in client-centered psychotherapy for average of 15 interviews.	Significant decreases on D, Sc, Hs, Hy and Pa scales. Same pattern as on pre-therapy MMPI, but general drop on all scales. MMPI scale decreases associated with significant improvement in feelings toward self and others as measured by the Bell Adjustment Inventory.
<u>Weiner, D.N. and Phillips, E.L. (1948)</u> 1 patient undergoing modified psychoanalysis over period of 8 months. Also retested 1 year after therapy termination.	Strong drop in D, Pt and Sc scales. Decline in scales agrees with way client evaluates his own progress and feelings in psychotherapy.
<u>Gibson, R.L., Snyder, W.U. and Ray, W.S. (1955)</u> 42 Ss receiving client-centered therapy at Penn. State U. Counselors were 15 advanced graduate students in clinical psych.	Used total of 20 psychotherapy change measures - 8 interview measures, 6 Rorschach measures and 6 MMPI measures. Decreases in D, Hy and Pt scales of MMPI associated with both independent judges and client's ratings of psychotherapy success.
<u>Watt, G. D. (1949)</u> Ss were 22 juvenile delinquents receiving non-directive counseling. Control group of matched Ss not receiving counseling.	Differences in gains made by counseled and control group significantly favorable to counseled Ss for Hs, Pd, Pt, Sc and Hypomania scales. Changes substantiated by changes on

Appendix C (continued)StudyWatt, G. D. (1949)Results

California Test of Personality which showed same gains in favor of counseled group. Trends to support changes noted on Haggerty-Olson-Wickerman Behavior Rating Schedule.



**Rank Orders for Tests of Hypotheses 1-6. Ranked by Subject 1-26.**

36

# Appendix E

Mean change scores and variances of five MMPI scales for Kaufman (1950) Test-retest control group and Borrelli experimental group.

## MMPI Scale

	<u>Hs</u>		<u>D</u>		<u>Hv</u>		<u>Pt</u>		<u>Sc</u>	
	<u>M</u>	<u>02</u>	<u>M</u>	<u>02</u>	<u>M</u>	<u>02</u>	<u>M</u>	<u>02</u>	<u>M</u>	<u>02</u>
Kaufman	-1.15	41.60*	-1.44	74.82	-1.44	34.11*	.59	62.57	.44	64.00*
Borrelli	-.73	134.84*	-5.26	102.36	-1.65	91.67*	-5.50	113.94	-6.65	155.27*

\* Differences in variance between two groups significant beyond .02 level.

### Appendix F

Change Rank Orders for five MMPI Scales. Rank ordered by Subject 1-26.

<u>Hs</u>	<u>D</u>	<u>Hy</u>	<u>Pt</u>	<u>Sc</u>
21.0	24.0	11.0	25.0	25.0
25.0	13.5	15.0	23.0	22.5
3.0	1.0	2.0	1.0	1.0
4.0	9.5	4.0	4.5	6.0
22.0	16.5	25.0	22.0	24.0
26.0	20.0	24.0	12.5	19.0
5.0	6.0	8.0	24.0	26.0
24.0	9.5	23.0	18.5	3.0
6.0	6.0	3.0	4.5	8.0
19.5	3.0	20.0	8.0	12.5
1.0	6.0	5.0	12.5	18.0
3.5	13.5	6.0	6.0	7.0
18.0	16.5	13.0	17.0	15.0
13.5	12.0	8.0	9.0	12.5
17.0	23.0	11.0	18.5	22.5
10.0	22.0	18.0	14.5	17.0
11.0	18.0	21.5	26.0	12.5
16.0	20.0	15.0	16.0	9.0
2.0	2.0	1.0	2.0	5.0
23.0	6.0	26.0	10.0	12.5
8.0	6.0	11.0	3.0	4.0
8.0	26.0	17.0	20.5	20.0
19.5	25.0	19.0	20.5	21.0
13.5	11.0	8.0	7.0	2.0
13.5	20.0	21.5	14.5	16.0
8.0	15.0	15.0	11.0	10.0