GROUP THERAPY AND INDIVIDUAL THERAPY: A COMPARISON

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This is to certify that the

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ABSTRACT

A COMPARATIVE STUDY OF GROUP AND INDIVIDUAL THERAPY

by Barry Graff

The purposes of this study were to assess the relative effects of group and individual psychotherapy and to explore the suitability of the Argyris Interpersonal Competence Scale as a therapy outcome measure. Forty-four college students in three treatment categories, group therapy (N = 17), individual therapy (N = 12), and no therapy (N = 15), served as Ss. Therapy consisted of an average of fourteen sessions for all clients, two-hour sessions for groups, and one-hour sessions for individuals.

Ss participated in two assessment meetings, one before and one after therapy. In each meeting the Ss completed a Q Sort, the Interpersonal Checklist (ICl), the I, You, OK-NG measures, and the Openness (O), Data-Seeking (DS), and Self-Disclosure (SD) scales. All Ss also participated in two group problem solving sessions, to which their contributions were rated employing Argyris' Interpersonal Competence Scale. Friends of the Ss, 31 "others", described the Ss on the ICl, and the O, DS, and SD scales both before and after therapy. Before therapy, 36 Ss identified three dimensions on which they wished to change.

Significantly ($p < .01$) higher dropout rates occurred among both the individual therapy and non-therapy Ss than occurred among the group

therapy Ss, and this proved a major problem. Firstly, these differential dropouts undermined the meaning of comparisons between the three treatment groups.

An intercorrelation matrix of pre-treatment scores was examined, and a "self-enhancement" cluster made up of the Q Sort, Interpersonal Checklist dominance-submission dimension, and the I, OK-NG dimension, was most prominent among the self-ratings. Salient among problems with these measures was the frequent occurrence of false positives on the Q Sort, and the strongly favorable bias of Self-Disclosure self-ratings.

The hypotheses that group therapy Ss and individual therapy Ss would evidence greater positive change than no therapy Ss were not supported. Hypotheses that individual therapy would be superior on the Q Sort, and that group therapy would be superior on the Argyris Scale were not supported.

An uncertain tendency of the individual therapy remnant to change more positively than the group therapy sample must be considered in the light of the substantial dropout rate differences. Also, considering the number of significance tests run, these few "significant" differences could well be attributable to chance.

The inability to secure adequate and comparable group and individual therapy samples precluded any rigorous testing of the central hypotheses. However, several tentative explanations were offered of the near chance level findings which emerged in an attempt to facilitate further research.

Thusly, a number of alternative explanations of the failure of group and individual therapy to evidence a clear advantage over no therapy were offered, one being the inappropriateness of the control group. Also cited

was the presence of antithetical processes, that is, some clients changing negatively and canceling out positive change in other clients, in therapy experimental groups. Additionally, there was the relative inexperience of the therapists, especially as group therapists, and the rather brief period of psychotherapy, again especially group therapy. Finally, the difference between group therapy process and individual therapy process was discussed.

The Argyris Scale was found to have high scorer reliability, but low test-retest stability ($r = .10$). Perhaps due to the Ss lack of involvement in the group problem solving sessions, it did not relate meaningfully to therapy outcome. Corrective suggestions were offered.

A number of future studies were suggested to explore and control the various problems which appeared in this research. A comparison of premature terminators with clients who remained in therapy was proposed as an attempt to understand the "dropout" problem. Improved research design and control were considered necessary to the solution of this problem.

An "own control" design was proposed to control client motivation, and repeated testings were suggested as an effective means for comparing group and individual psychotherapy process.

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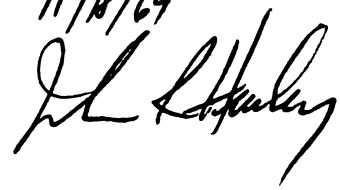

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By

Barry D. Graff

A THESIS

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To

Bonnie, my individual,

and the interns, my group

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There are many people who are a part of this project, most of whom deserve far more praise than the brief mention I will make of them here.

The help of John Hurley has been frequent and significant. It made the completion of this project possible.

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My wife, Bonnie, contributed the warmth and support to this endeavor that she has contributed to all my endeavors. It is special.

Kees Hofman was a diligent and effective co-rater. His aid was well-received.

Many friends' interest and kind words were of inestimable value in keeping the work moving along.

Finally, the therapists and Ss provided the life blood of this study, giving many hours of their time.

I thank all these people for their generous contributions.

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CHAPTER 1

INTRODUCTION

Statement of the Problem

The purpose of this study is two-fold. First, to study the relative and differential effects of group therapy, individual therapy, and no therapy. Secondly, to test the reliability and validity of a new therapy outcome measure, an interpersonal competence scale.

Review of the Literature

The outcome of psychotherapy has been a subject of the research literature for over half a century. From the case studies of Freud (1958), to more recent therapist-centered genuineness, warmth, and empathy studies (Truax, 1963, and Truax and Carkhuff, 1965), the question has often been, "Does psychotherapy work?" Unfortunately, the continued research has made it obvious that this is not a very meaningful question.

There have been many problems in this research, one of the greatest being the choice of an appropriate outcome measure. A root of this difficulty is that therapeutic outcome remains an ambiguous and elusive concept. Many theoretical attempts have been made, but few therapists, with the possible exception of behavior therapists, believe it useful to name specific criteria for improvement in the individual client. Little wonder, then, that when their clients are used in research studies, the success of their therapy contacts is difficult to ascertain. These problems multiply when individual and group psychotherapy are studied simultaneously.

To attack these problems, it seems useful first to inspect the

theoretical and experimental literature comparing group and individual therapy. In both cases, articles have been scarce. Authors have seemed to dwell on one or the other, rarely attempting to focus on their parallel, although often divergent, aims and characteristics.

In an early paper, Shea (1954) compared analytic group and individual therapy, with a focus on the comparison of the client's resistance reactions in each. Using case studies, he found that group analytic therapy had the practical advantage of costing less than individual therapy, thus making it available to more people. In addition, group therapy was found to be a more efficient way of effecting changes in certain resistances. Some were dissolved more quickly than would have been the case in individual; others disappeared that had not been affected at all by individual therapy. On the other hand, he found group therapy to be inferior in some cases. He cited the relative lack of control over the course of treatment by the group therapist as a cause of these inferiorities.

Finally, Shea listed contraindications for group therapy. These were patients with a diminished ability for interpersonal relationships, patients with brittle character structures, and patients with very ambitious therapeutic goals.

Kubie (1958) asked questions about the two therapies rather than making theoretical statements, and he especially wondered about the potentialities of group therapy. For example, he questioned whether a group can communicate a client's unconscious material to him, a task the individual analyst is alleged to do quite well. Kubie further speculated whether group therapy can produce as deep and as far-reaching changes as individual analysis does. These questions arise, he stated, because group

therapy departs from the essence of analysis, the attempt to understand one unconscious at a time.

In addition, though, he postulated that group therapy might form a bridge between individual therapy and the "real world", because of the presence of people besides the theoretically uninvolved, unreactive analyst.

Although limited to discussions of analysis, these papers do present two of the basic questions that studies of these two techniques must answer: (1) Are they equally effective? and (2) Are there people or processes that can be affected by one, and not the other? The few research studies in this area begin to answer these questions.

Baehr (1954) used a "Discontentment Scale" to compare individual and group therapy with each other and with a combination of both. Sixty-six hospitalized World War II veterans served as Ss; non-directive therapy was practiced by both group and individual counselors. There were a number of methodological difficulties. For example, the group clients often had a few individual sessions and vice versa. Therefore, the three experimental treatment groups were quantitatively, rather than qualitatively, differentiated. The combined therapy category had the highest relative movement index, and the group therapy category the lowest, but none of the differences were significant. Nevertheless, when the one treatment categories were brought together statistically, combined therapy was found to be significantly higher than one therapy on the relative movement index at the .02 level.

Novick (1965) found that either group or individual therapy proved to be effective in changing nondesirable behavior in children. Ss were

forty-four, eight to ten year-olds undergoing outpatient therapy at a number of community mental health clinics. All therapists were eclectic, and used a combination of activity play and verbal communication in the sessions. Groups consisted of three to five children. Because of their apparent equivalent effectiveness and practical economy, Novick suggested the increased use of group methods in the treatment of this type of problem.

Suinn (1968) used desensitization techniques to treat college students with high test anxiety. Group and individual methods both were effective in producing significant decreases in the test anxieties of Ss. In addition, generalization to other anxieties occurred as a result of both methods. Suinn, like Novick, cites the economical use of therapist time as an advantage of group treatment.

These three studies combine to make two conclusions quite clear. First of all, the comparative study of group and individual therapy is in the infant stage; a careful perusal of the reviews of the literature in the International Journal of Group Psychotherapy from 1954 to the present finds no other experimental studies which directly attack this problem. Secondly, a clear, but obviously tentative, equivalence can be postulated between the two methods for some relatively divergent problems. Three differing populations, child, late adolescent, and adult, treated with three different therapy techniques, non-directive, play, and desensitization, all responded to group as well as individual therapy.

However, because of their narrow foci, these studies do not portray the many complications inherent in comparing two complex treatment methods. Sundberg and Tyler (1962) cite a number of these complications.

First is the usual problem of psychotherapy research, that of equating experimental and control groups. Many factors are relevant to this equation, but one of the most difficult to control is the motivation of the Ss. Therapy applicants are usually more motivated to change than non-clients.

Even more difficult is the problem of equating therapists. Using the same therapists for both the individual and group therapy Ss equates their general ability. However, there is no guarantee that the same therapist has equivalent skills as an individual and as a group leader.

Finally, the difference between the processes of group and individual therapy affect outcome a great deal. Discovering the stages of each process which evidence the most change is crucial if meaningful comparative research is to be done.

Sundberg and Tyler (1962) present a study which portrays some of these complexities, although it does not solve them. Fairweather et al. (1960) used a number of outcome measures to assess change in three diagnostic groups given four different treatments. The diagnostic groups were: a) non-psychotics, b) short-term psychotics, and c) long-term psychotics. The treatments were: a) control or no special treatment, b) individual psychotherapy, c) group psychotherapy, and d) group psychotherapy and group living. A three by four analysis of variance design was used.

The results were varied, and occasionally inconsistent. There were some significant differences between diagnostic categories, some between treatments, and some between interactions, depending on the outcome measure used. For example, there were differences in length of therapy for the various treatments, but length of therapy did not relate to post-hospital adjustment. Full time employment was the only follow-up measure

which found each of the three treatments to be superior to the control group. It is easy to see that even an ambitious study such as this one is only a beginning step.

The present study worked on the same principles as the Fairweather et al. (1960) study. It attempted to control for the complexities as much as was practically and methodologically feasible (see Method section), while being broad enough to portray those which remained semi- or uncontrollable.

Attempting to portray these complexities returns us to the problem of outcome measures. A number of dissimilar measures must be used, so that more differentiations between the two techniques than those referring to economy can be made. Even with this array of measures, the narrow range of clients (no psychotics, all college undergraduates) will restrict the generalizability of the results.

Therefore, this study began with a search for instruments which would reflect the values of the author, his colleagues, and other contemporary therapists in their work with real clients, in individual and group psychotherapy.

The instrument given the major focus in this study is the Argyris Interpersonal Competence Scale (1965). In studies with T-groups, this instrument has shown a high degree of reliability and validity in measuring the attribute, interpersonal competence, that its name implies. Its use is enhanced by Argyris' use of three types of behaviors to indicate interpersonal competence: owning, opening up to, and experimenting with ideas and feelings. These three types of behavior are often a focus of therapy with an interpersonal emphasis. Because of the newness of this

scale, only two studies employing it have been published (Argyris, 1965, I & II), it will have a dual role in this study. It will serve as an outcome measure, as well as having its own reliability and validity further tested.

A number of the other instruments we will use attempt to measure behavioral attributes similar or related to those presumably appraised by the Argyris Scale.

The Interpersonal Checklist (ICl; Leary, 1957) plots a multitude of categories into two orthological dimensions, love-hate and dominance-submission, which describe the S's interpersonal contacts. In a factor analytic study of the ICl, Briar and Bieri (1963) found three main factors: dominance, love, and inferiority feeling. Thus, although their octants were slightly different, their study supported the existence of Leary's dominance-submission and love-hate dimensions. This instrument has been used often in personality research, using self and others' ratings. Armstrong (1958) used two groups of 50 Ss each, one normal group and one alcoholic group, to measure its internal consistency. Six different ratings were found to be highly reliable ($p < .01$) for both groups.

The Self-Disclosure dimension was first studied by Jourard (1958), and in its initial form showed inconsistent validity (Hurley, 1967). A newer instrument (Hurley, 1967) oriented to self-disclosure, employing both self and others' ratings, seemed to show that self ratings alone tend to be invalid.

The Openness and Data-Seeking dimensions attempt to measure behaviors similar to those measured by the Argyris Scale, although they have not been studied in research. Openness seems to correspond to Argyris' owning,

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and data-seeking corresponds both to Argyris' openness and experimentation categories. Together, these dimensions attempt to reflect the size of the window between the individual and the outside world.

It will be noticed that the Argyris Scale has the advantage over these three instruments of using behavior in a real interpersonal situation as its source of raw data. The others depend, in great measure, on perceptions, by self and others, as interpersonal data.

An instrument having a very different focus, and which frequently appears in individual psychotherapy research literature, is the Butler-Haigh Q Sort. The self of the individual is studied, rather than his interpersonal contacts, through his self and ideal perceptions. Its reliability has been found to be high (Frank, 1956, and Nahinsky, 1963), and it has shown validity in discriminating normals, neurotics, and psychotics (Nahinsky, 1963 and 1966). Its main use has been in assessing the change resulting from individual psychotherapy. Both Rogers (1954) and Butler (1968) showed that self-ideal correlations went up as a result of individual therapy.

In a study especially relevant to the present research, Satz and Baroff (1962) attempted to assess the effects of individual occupational therapy alone (thirteen one-hour sessions) and individual occupational therapy plus group therapy (thirteen one-hour individual sessions and ten once-a-week two-hour group sessions) upon sixteen non-paranoid schizophrenics. The self-ideal correlations were slightly lower for the two treatment groups after therapy, and the correlations for the control group were slightly higher. The difference between the control and the two experimental treatment groups combined was non-significant at the .10

level. The authors suggest a number of plausible explanations for this result, among them the possibility that the experimental period was too short.

Williams (1962) reports a quite divergent result. Using a modified Q-technique, sorting into two rather than nine piles, he found that two or three sessions of individual educational-vocational counseling significantly increased adjustment scores, as measured by self-ideal-ordinary person correlations.

Some studies (Phillips et al., 1965), however, have questioned this instrument's validity in measuring psychotherapy induced changes, and Sundland (1962) has criticized the statistical soundness of it, especially the spurious self-ideal correlations obtained when the individual items are highly intercorrelated with each other. A new 80-item sort (Butler, 1968), which eliminates some of these items, is being used in this study.

The I, You, OK-NG dimensions are theoretical constructs (Berne, 1966), and have not seen much research use as yet. Again, self-perceptions are used to assess an individual's attributes; in addition, this instrument, like the Q Sort, makes predictions about an individual from his perceptions of others rather than others' perceptions of the individual.

This range of instruments has been chosen for two reasons. First, because of their tentative nature as valid outcome measures, and secondly, because both group and individual therapy are being studied. The first group of instruments, especially the Argyris Scale, seem to be more atuned to group therapy variables; the Q Sort and the self-perception aspects of other instruments seem to be more atuned to individual therapy variables.

CHAPTER II

METHOD

Subjects

Forty-four undergraduates at Michigan State University served as Ss, sixteen male and twenty-eight female. Seventeen were group therapy clients, six male and eleven female. Twelve were individual therapy clients, three male and nine female. Fifteen were not involved in therapy; seven were male, and eight female. The group clients were drawn from five groups, each containing from six to eight members and two therapists. All therapists were interms or senior staff members at the Michigan State University Counseling Center. Two group clients and one individual client were treated by senior staff members, and the rest were treated by interns.

The interns were all Ph.D. candidated in Education or Clinical Psychology. They had had from three to five years of part-time supervised psychotherapy experience. The senior staff members were Ph.D.'s in Clinical or Counseling Psychology. They had had from five to seven years of psychotherapy experience. All of the therapists' training began with experience in individual psychotherapy, and later included experience in group psychotherapy. They had spent more hours doing individual therapy than doing group therapy. In addition, they had all received supervision as individuals and in groups, the choice being unrelated to the type of psychotherapy they were performing at the time. Finally, they had all undergone their own personal therapy, individual and group.

Criteria for Selection: All forty-four Ss were students who initiated contacts with the Michigan State University Counseling Center. The twenty-nine clients sought psychotherapy, the fifteen non-clients sought psychotherapy or other services, such as education-vocational counseling.

All Ss went through the usual screening procedure at the Counseling Center. This consisted of a screening interview, and assignment to therapy by the screening committee. The clients were assigned to group or individual therapy according to their own choices; however, the screening committee had the power to override this choice if it seemed in the client's best interest.

None of the clients were psychotic. All Ss were volunteers for the research. They were shown letters (see Appendix C) describing the research by the screening counselor. When they agreed to participate, the E contacted them by phone to set up an appointment for the pre-testing sessions.

Procedure

Therapy

Psychotherapy consisted of an average of fourteen sessions, with a range of twelve to fifteen sessions, once per week for all clients.* All individual sessions were one hour long; all group sessions were two hours long. The non-client group all attended zero or one session subsequent to the screening interview. Of those who attended one session, six were educational-vocational counseling sessions, and four were individual therapy sessions. The latter four terminated therapy after the first

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*One group client attended eight therapy sessions; upon consultation with her therapists, she was left in the group therapy sample. She is S number RB7805.

session.

The group and individual psychotherapies had an interpersonal emphasis, although they contained many eclectic elements. The content of the sessions often concerned the clients' present day relationships, although relevant past history data was explored if appropriate. Present day relationships included the "here and now" interactions between client and therapist, or, in the groups, between clients.

Non-verbal techniques were often part of the therapy. The non-verbal techniques were used as appropriate in the course of therapy, rather than as pre-planned exercises. These techniques were similar to those presented by Schutz (1967). Because most of these techniques involve interactions between a number of people, they were much more predominant in the group therapy.

Spontaneous non-verbal expressions of feelings, such as affection, were an accepted part of the therapy, although client, and, possibly, therapist defenses often prevented these expressions from occurring. Verbal discussion and insight often followed non-verbal interactions, whether they involved techniques or spontaneous expression of feelings.

The two psychotherapies thus converged in a number of ways. Theoretical bases, content of the sessions, and techniques used were all similar. The differences, such as the greater use of non-verbal techniques in the group sessions, resulted from the differences in number of participants, rather than differing modes of attack by the therapists.

Measures

Q Sort: An eighty-item Q Sort recently devised for psychotherapy research (Butler, 1968) was used. Each subject was asked to make self

and ideal sorts, and the two sorts were correlated. The eighty items were sorted into nine categories, labeled 0 to 8, with 3, 6, 9, 13, 18, 13, 9, 6, and 3 items placed in each category respectively.

Interpersonal Checklist: This device contains 134 items which are to be checked true or false. The items are then combined algebraically into two orthogonal dimensions: love-hate and dominance-submission; the love and dominance ends of the scales are theoretically considered positive. The two dimensions are looked at together, rather than individually, when assessing change. Thus, a subjective element is often present when one dimension evidences positive change while the other evidences negative change. Several instances of rater disagreement occurred when the author and the dissertation chairman reviewed these scores.

Dimension Ratings: Five dimensions, Self-Disclosure, Openness, Data-Seeking, I, OK-NG (not OK), and You, OK-NG, will be rated to describe the Ss. The Self-Disclosure dimension, originally identified by Jourard (1958), and more recently used by Hurley (1967), is studied here through use of the Hurley Self-Disclosure Rating Scale (1967), an eight-point scale from not self-disclosing to self-disclosing, with definitions at each scale point.

The Openness and Data-Seeking dimensions combine to form a "window to the world", so to speak, for individuals who exhibit these behaviors. Each are nine-point scales from minimal to maximal, with a definition of each dimension supplied.

The I, You, OK-NG dimensions also are rated on nine-point scales, the end points merely being labeled as not OK and OK. Descriptive adjectives are supplied for the end points of each dimension. High or low

ratings on these two dimensions combine to form the four basic positions of Berne (1966): 1) I am OK, You are OK; 2) I am not OK, You are OK; 3) I am OK, You are not OK; and 4) I am not OK, You are not OK. Thus, as in the case of the ICl, the two dimensions are looked at together when change is being assessed.

Argyris Interpersonal Competence Scale: This scale, developed by Argyris (1965), rates interpersonal competence manifested by individuals in group situations. The Ss verbal productions are ranked on the individual and interpersonal scales, which are then combined to form the interpersonal competence score. The behaviors which facilitate interpersonal competence on the individual scale are owning, openness, and experimenting, all on the ideational or feeling levels. Behaviors which inhibit competence on this scale are notowning, not being open to, and rejecting experimenting with ideas or feelings. On the interpersonal scale, the same three qualities and their opposites are used, except that the criterion is helping or not helping others to exhibit these qualities. All categories are weighted in the final computation (see Appendix B). The total of the weighted scores is tabulated for each S, and this total corrected if the number of productions of the S is less than the average for his particular problem solving group.

Dimensions Chosen by Ss: Thirty-six Ss were asked to name three attributes on which he wanted to change, and to rank himself on a scale from 1 to 9 schowing where he was functioning on that attribute.

Testing Procedures

Data were collected in three ways. First of all, each S picked two friends, one male and one female. These friends were to fill out the

Interpersonal Checklist, and the Openness, Data-Seeking, and Self-Disclosure rating forms about the Ss. The E mailed the test forms to the friends with an explanatory letter (see Appendix C). The completed forms were then mailed back to the Michigan State University Counseling Center. Five group clients had both friends respond before and after therapy, and eight had one friend respond. Three individual clients had both friends respond before and after therapy, and six had one friend respond. One non-therapy client had both friends respond before and after therapy, and eight had one friend respond.

The last two forms of data collection were two testing sessions in which the Ss participated. The first was a group problem solving session, with four Ss participating. No more than two of each four were from any one of the three experimental treatment groups. The Ss worked on one of two problems, the NASA Moon Problem or the George Edwards Case (see Appendix B). For each, the Ss were asked to read about the problem situation and suggest a solution in the form of ranked alternatives. After their individual rankings were collected, they worked on a group solution and rankings together. This final phase was tape recorded.

For the second testing session, each S produced two Q Sorts describing himself and his ideal, completed the Interpersonal Checklist, and ranked himself on the five dimensions.

The friend ratings and two testing sessions occurred twice, the pre-tests were before the second therapy session, and the post-tests were after the fifteenth (or last) therapy session. The non-clients had the two testings separated by the same span, sixteen weeks, as the clients. (This consisted of fourteen weeks of therapy, and two weeks of spring

vacation.)

In the post-test group problem solving sessions, each S worked on the George Edwards Case if he had earlier worked on the NASA Moon Problem, or vice versa. The groups of four were rotated, so that no more than two of the four had worked together in the first session.

Typed transcripts of the tape recordings of the group problem solving sessions were rated by two judges independently. The judges were the E, and a fellow graduate student in Clinical Psychology. They learned the rating system through the writings of Argyris (1965), and personal correspondences with him. They used the criteria in Argyris (1965a) to score each production. The reliability of these ratings was calculated. Finally, the two judges conferred on the judgments where they disagreed and tried to reach agreement. These final corrected ratings were used as the basis for the interpersonal competence scores to be used for hypothesis testing.

Hypotheses

1) The group therapy clients will show more positive change than the non-clients on all of the outcome measures.

2) The individual therapy clients will show more positive change than the non-clients on all of the outcome measures.

3) The group therapy clients will show more positive change than the non-clients on the Argyris Interpersonal Competence Scale.

4) The individual therapy clients will show more positive change than the group clients on the Q Sort data.

5) The Argyris Interpersonal Competence Scale will reliably and validly measure change resulting from group and individual therapy.

Exploratory Qeustion

How will the group and individual clients compare on the remaining therapy outcome measures?

Treatment of Data

A number of operations were used to compare the results for the two experimental treatment groups and the control group. First, the mean changes of each group on each outcome measure were compared. Then, the proportions of each group showing positive change on each outcome measure were compared.

An overall change measure for each S was also calculated. Weights were assigned to each measure; these weights attempt to reflect the amount of data contained in each measure. The measures which produce one datum, the Openness, Data-Seeking, and Self-Disclosure dimensions, were given a weight of one. The I, You, OK-NG, scale produces two dimensions, and, thus, was given a weight of two. The E estimated that the ICl, A Sort, and Interpersonal Competence Scale produce approximately four times as much data as the unit measures; thus, they were given a weight of four. A positive or negative change on each measure was multiplied by that respective measure's weight. The weighted scores, ranging from -4 through 0 to +4, were then totaled.

The three treatment categories were then compared in two ways. First, the proportion of Ss in each category who showed a positive change on the weighted sum of individual measure positive change scores were compared. Secondly, the mean overall positive change scores for each category were totaled, and these three totals compared.

Finally, four experienced* therapists suggested levels on six outcome measures that they expected clients to reach at the end of therapy (see Appendix A). These measures were the Q Sort, the Interpersonal Checklist, and the Openness, Data-Seeking, Self-Disclosure, and I, You, OK-NG Scales. Then, criteria were averaged, and the number of Ss in each experimental treatment group who reached the criteria before and after therapy on each measure was calculated. Significance tests of the difference between proportions in each group on each measure from pre- to post-testing were calculated.

Hypothesis 6 was treated in the following way. The reliability of the Argyris Scale was measured by calculating the percent agreement on all scored units between the two tape recording raters. In addition, the raters discussed the units they scored differently and attempted to reach agreement. A second percent agreement was then calculated. Also, the test-retest reliability was calculated using the pre- and post-test scores.

The second part of the hypothesis concerns the concurrent validity of the scale. To measure this, the therapists ranked the clients on a scale from 1 to 5. A score of one meant that the client had changed less than almost all of the clients that that therapist had ever seen; a score of three meant that the client had changed an average amount; and a score of five meant that the client had changed more than almost all of the clients that that therapist had ever seen. Clients with scores of 4 or 5 were put in an "improved" category, and clients with scores of 1 or 2 were

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*All had at least five years of experience in psychotherapy.

put in a "not improved" category. These Ss were then divided into halves, improved and not improved, using the Argyris Scale scores. Correlations between this division of Ss and the therapist assignments to improved and not improved categories were then calculated, and significance tests run on the values obtained.

CHAPTER III

RESULTS

Dropout Rate

Fifty-two Ss completed the pre-testing; 17 in the group therapy treatment group, 20 in the individual therapy group, and 15 in the non-therapy group. One group therapy S dropped out of the therapy after eight sessions, but remained in the research; four individual therapy Ss dropped out of the therapy after one session, but remained in the research, and were switched to the non-therapy group; four additional individual therapy Ss dropped out of the research; and four non-therapy Ss dropped out of the research. The grave sampling issues posed by these reductions in the original treatment groupings will be recognized by using the term "remnant" in subsequent discussion (but not tables) of the reduced individual treatment sample; "reconstituted" will be similarly applied to the no-treatment sample. Using two-tailed z tests (Peatman, 1963), the group therapy treatment group was found to have significantly fewer ($p < .01$, two-tailed test) dropouts than either the individual therapy group or the non-therapy group.

Hypothesis Testing

Table 1* presents the pre-treatment means of these three groups on all of the outcome measures. The means of these three groups varied on all measures, but the only statistically significant differences were between the reconstituted non-therapy group and the other two treatment groups on the self-reported Self-Disclosure Scale. Obviously, the

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*Reduced Ns for the "others" measures in all tables are due to the failure of the Ss' friends to return the test forms. The reduced Ns for Argyris Scale resulted from mechanical failure in the recording of one problem-solving group.

TABLE 1

Pre-Treatment Means and Mean Differences
of the Three Treatments

Measures	Treatments			Differences		
	Group(G) N-17	Individual(I) N=12	None(N) N=15	G-I	G-N	I-N
Self						
Q Sort	.23	.44	.35	- .21	- .12	.09
ICl_{DS}	-6.5	-5.8	-2.1	- .7	-4.4	-3.7
ICl_{LH}	5.9	0.5	3.3	5.4	2.6	-2.8
I, OK-NG	5.1	5.3	6.4	- .2	-1.3	-1.1
You, OK-NG	5.5	6.4	5.6	- .9	- .1	.8
Openness	5.8	5.1	6.3	.7	- .5	-1.2
Data-Seeking	5.2	4.8	5.9	.4	- .7	-1.1
Self-Disclosure	5.8	5.5	6.9	.3	-1.1*	-1.4*
Other						
ICl_{DS}	$-1.9^{(13)}$	$-0.9^{(8)}$	$4.2^{(9)}$	-1.0	-6.1	-5.1
ICl_{LH}	$5.9^{(13)}$	$-1.5^{(8)}$	$3.6^{(9)}$	7.4	2.3	-5.1
Openness	$5.5^{(13)}$	$6.2^{(9)}$	$5.1^{(9)}$	- .7	.4	1.1
Data-Seeking	$5.7^{(13)}$	$5.8^{(9)}$	$5.7^{(9)}$	- .1	0	.1
Self-Disclosure	$5.8^{(12)}$	$5.9^{(9)}$	$5.6^{(9)}$	- .1	.2	.3
External						
Argyris	$.80^{(16)}$	$.65^{(10)}$	$.58^{(13)}$	.15	.22	.07

Note. -- Ns as indicated at top except when given in parenthesis; include only those "others" who gave both pre- and post-treatment data.

*p <.05, two-tailed

lower pre-treatment means provide greater room for change, and these differences must be considered when assessing any significant between-groups findings.

Correlations Between Pre-Treatment Measures

Table 2 contains the product-moment intercorrelations of the remaining 44 Ss on the fourteen variables - the ICl has been divided into its dominance-submissiveness (DS) and love-hate (LH) factors and the I, You, OK-NG measure has been divided into its two dimensions for use in Table 2. In five cases, the "other" scores were not available; substituted in these instances was the mean score of the other Ss in the same treatment category on each missing outcome measure. Twenty-three of the Ss had one friend respond before therapy, and sixteen Ss had two friends respond.* Employing the two-tailed test of significance, twenty-two of the ninety-one correlations were significant at or beyond the .05 level; three of these were negative.

Among the self-ratings - The intercorrelations between the self-rating on the Self-Disclosure Scale and the other "self" measures were significant at the .05 level or better in five of seven instances, one of these being negative. The self-rating of the Self-Disclosure Scale also forms a cluster with the self-ratings of the Openness and Data-Seeking Scales, each intercorrelation being significant at the .05 level. Finally, the self-rating of the ICl_{DS} Scale, the Q Sort, and the

*Table 2 cannot be reconstructed from the pre-treatment data given in the Appendix because these latter excluded some cases of unmatched (from different "other" persons) pre- and post-treatment data, while all available data were included in the Table 2 intercorrelations.

TABLE 2

Correlations Between Pairs of Outcome Measures Using Pre-Test Data

Measures	Measures												
	Argyris	Self-reported								Other-reported			
	1	2	3	4	5	6	7	8	9	10	11	12	13
Self													
(2) Q Sort	-.01	----											
(3) ICl_{DS}	-.11	.58[c]	----										
(4) ICl_{LH}	.05	-.05	-.19	----									
(5) I, OK-NG	-.05	.43[b]	.46[b]	.14	----								
(6) You, OK-NG	-.24	-.13	-.16	.21	.02	----							
(7) Openness	-.11	.17	.22	.20	.37[a]	.02	----						
(8) Data-Seeking	.15	.08	.20	.00	.14	-.04	.29	----					
(9) Self-Disclosure	-.02	.25	.44[b]	.07	.48[c]	-.33[a]	.37[a]	.35[a]	----				
Other													
(10) ICl_{DS}	-.07	.27	.29[a]	-.19	.41[b]	-.06	.14	.38[b]	.42[b]	----			
(11) ICl_{LH}	-.09	-.06	.00	.59[c]	.21	.28	.31[a]	-.01	-.05	-.32[a]	----		
(12) Openness	-.09	.07	-.11	.20	-.04	.06	.02	.12	-.02	-.03	-.13	----	
(13) Data-Seeking	-.10	.17	.20	-.04	.26	-.26	.12	.17	.31[a]	.31[a]	-.05	.20	----
(14) Self-Disclosure	-.36[a]	.22	.08	.24	-.01	.06	.20	.21	.01	.02	.21	.45[b]	.39[b]

[a] $p < .05$, two-tailed
[b] $p < .01$, two-tailed
[c] $p < .001$, two-tailed

I, OK-NG dimension form a cluster, all intercorrelating at the .01 level or better.

Among "others" ratings - The Self-Disclosure Scale is again most prominent, intercorrelating with two of the other four measures at the .01 level.

Between the self and "others" ratings - Five scales were rated by both the Ss and others; these are the ICl_{DS} and ICl_{LH}, the Openness, Data-Seeking, and Self-Disclosure Scales. Of the five intercorrelations between the self and others ratings, only two, ICl_{DS} and ICl_{LH}, achieved the .05 level.

Argyris Scale - The Argyris Scale intercorrelates at the .05 level, and then inversely, with only one other pre-treatment measure, the "others" rating of Ss on the Self-Disclosure Scale.

Group Therapy Versus No Therapy

Table 3 compares the mean change scores for the group and reconstituted no treatment samples, employing the single-tailed t test (Peatman, 1963). For the Interpersonal Checklist and I, You, OK-NG Scales, positive change is assessed by using both subscales in each measure respectively; therefore, significance tests were not run on individual subscale changes.

None of the tested differences were significant. In fact, the reconstituted no-treatment group evidenced slightly more positive change on most of the measures; this sample also shows a significant increase in their mean Q Sort score ($p < .05$).

Table 4 compares the proportions of all three groups showing positive change on each of eleven outcome measures. One-tailed z tests were used to test significance (Peatman, 1963). Again, none of the differences are

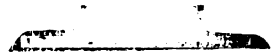

TABLE 3

Mean Changes and Mean Between-Groups Differences by the Three Treatments

Measures	Treatments			Differences		
	Group(G) N=17	Individual(I) N=12	None(N) N=15	G-I	G-N	I-N
Self						
Q Sort	.08	.11	.26*	- .03	- .18	- .15
ICl_{DS}	1.3	2.5	2.8	-1.2	-1.5	-0.3
ICl_{LH}	-1.5	0.9	-0.8	-2.4	-0.7	1.7
I, OK-NG	0.5	0.7	0.7	-0.2	-0.2	0.0
You, OK-NG	-0.1	-0.9	-0.2	0.8	0.1	-0.7
Openness	-0.5	0.9	0.4	-1.4	-0.9	0.5
Data-Seeking	-0.6	0.6	0.7	-1.2	-1.3	-0.1
Self-Disclosure	0.1	1.3*	-0.1	-1.2**	0.2	1.4**
Other						
ICl_{DS}	$0.1^{(13)}$	$1.1^{(8)}$	$-1.1^{(9)}$	-1.0	1.2	2.2
ICl_{LH}	$-2.4^{(13)}$	$5.5^{(8)}$	$-1.4^{(9)}$	-7.9	-1.0	6.9
Openness	$0.3^{(13)}$	$-0.2^{(9)}$	$0.6^{(9)}$	0.5	-0.3	-0.8
Data-Seeking	$0.0^{(13)}$	$-0.2^{(9)}$	$0.1^{(9)}$	0.2	-0.1	-0.3
Self-Disclosure	$0.1^{(12)}$	$0.2^{(9)}$	$0.4^{(9)}$	-0.1	-0.3	-0.2
External						
Argyris	$0.01^{(16)}$	$0.04^{(10)}$	$-0.10^{(13)}$	-0.03	0.11	0.14

Note. -- Ns as indicated at top except when given in parenthesis; include only those "others" who gave both pre- and post-treatment data.

*$p < .05$, one-tailed

**$p < .05$, two-tailed

TABLE 4

Comparisons of Proportion Changes by Treatments

Measures	Treatments			Differences		
	Group(G) N=17	Individual(I) N=12	None(N) N=15	G-I	G-N	I-N
Self						
Q Sort	.53	.75*	.74*	- .22	- .21	.01
ICl	.59	.58	.47	.01	.12	.11
I, You, OK-NG	.53	.58	.47	- .05	.06	.11
Openness	.29	.58	.40	- .29	- .11	.18
Data-Seeking	.29	.58	.54	- .29	- .25	.04
Self-Disclosure	.29	.50	.20	- .21	.09	.30
Others						
ICl	.38(13)	.75(8)	.22(9)	- .37	.16	.53**
Openness	.62(13)	.44(9)	.44(9)	.18	.18	.00
Data-Seeking	.38(13)	.33(9)	.56(9)	- .05	- .18	- .23
Self-Disclosure	.42(12)	.44(9)	.33(9)	.02	.09	.11
External						
Argyris	.50	.40	.39	.10	.11	.01

Note. -- Ns as indicated at top except when given in parenthesis; include only those "others" who gave both pre- and post-treatment data.

*p <.05, one-tailed

**p <.05, two-tailed

significant. A significant ($p < .05$) proportion of the reconstituted no-treatment group shows positive change on the Q Sort.

Table 5 compares the group therapy and reconstituted no-treatment samples using the weighted sum of all of the change measures. No significant differences were found between the proportions of Ss showing overall positive change.

TABLE 5

Overall Results - Positive Change for Three Treatment Groups Combining All Outcome Measures

Statistic	Treatments			Differences		
	Group(G) N=17	Individual(I) N=12	None(N) N=15	G-I	G-N	I-N
Proportion	.47	.67	.47	-.20	.00	.20
Mean	.04	.21	.02	-.17	.02	.19

The findings portrayed in Tables 3, 4, and 5 plainly offer no support for the hypothesis that group therapy would produce more positive change than non-therapy on these outcome measures.

Individual Therapy Versus No Therapy

Table 3 also compares the mean changes in the remnant individual and reconstituted no-treatment samples. The individual therapy remnant group changes significantly more than the reconstituted no-treatment group on the Self-Disclosure Scale, self-rating ($p < .05$), although it only reaches the pre-treatment level of the reconstituted no-treatment group.

Table 4 compares changes in proportions in the individual and non-therapy remnants. The individual therapy remnant group showed a greater positive change on the Interpersonal Checklist, others rating ($p < .05$).

Again, however, this "change" capitalized on a substantial pre-treatment difference between these groups (see Table 1).

Table 5 compares these remnants using the weighted sum of all of the outcome measures. The individual therapy remnant has a higher proportion of Ss showing overall positive change, and a higher overall mean change, but neither difference is significant.

Taken together, these findings provide extremely tenuous support for the hypothesis that individual therapy would produce more positive change than no therapy. Considering the probability of obtaining at least one or two significant differences out of these 24 significance tests, the "meaning" of this support becomes even more murky.

Group Therapy Versus Individual Therapy: The Argyris Scale

Table 3 shows that the group therapy sample had a very slightly higher mean change score than the individual therapy remnant on the Argyris Scale, and Table 4 shows that the group therapy group had a slightly higher proportion of Ss showing positive change on the Argyris Scale. These minor differences failed to even remotely approach statistical significance. Plainly, the hypothesis that group therapy clients would show more positive change than individual therapy clients on the Argyris Interpersonal Competence Scale is not supported.

Individual Therapy Versus Group Therapy: The Q Sort

Table 3 shows that the mean change for the remnant individual clients was non-significantly higher than the mean change for the group clients on the Q Sort, and Table 4 shows that a non-significantly higher proportion of the individual clients evidenced a positive change on the Q Sort. Therefore, the hypothesis that individual therapy would produce more

positive change on the Q Sort than group therapy is not supported.

Argyris Scale

Reliability: Based on pre- versus post-treatment scores, the Argyris Scale showed little test-retest stability ($r = 0.10$). Inter-judge reliability proved, however, to be high. Using tape recording transcripts, the two judges agreed on 82.2% of the scored items ($N = 2829$) before consultation, and 100% of the items after consultation. Consultation consisted of an effort to find the most appropriate scoring, rather than an attempt to produce arbitrary agreement. That is, agreement could have been less than 100%. Both results were very significant ($p < .001$).

Validity: The Argyris Scale did not significantly relate to therapist's ratings of client change. In fact, changes in Argyris scores tended to be linked with low therapist ratings as their intercorrelation was -.375 ($p < .06$, two-tailed).

Exploratory Question

Table 3 shows that only the self-reported Self-Disclosure Scale differentiated significantly between the group therapy sample and the individual therapy remnant. The individual clients evidenced more positive change ($t = 2.64$, $p < .05$). This difference would not have achieved statistical significance, however, if the pre-treatment differences between these groups had been considered.

Table 4 compares the two groups on the proportion of Ss showing positive change, and finds none of the differences to be significant. On self-ratings, however, positive change is shown by 61% of the individual group remnant as contrasted with only 41% of the group treatment sample. The "meaning" of this difference is obscured, of course, by the 40% dropout

rate from the initial individual treatment sample.

Other Findings

Ratings on Dimensions Chosen by Ss

Two findings seem of interest concerning the Ss ranking of themselves on dimensions they wished to change on at the time of the pre-test. First of all, most (64 of 108) of the dimensions were forgotten by the Ss. The group clients forgot 21 of 36, or 58%, of these dimensions, the remnant individual clients forgot 16 of 33 dimensions, or 49%, and the reconstituted no-treatment clients forgot 27 of 36 dimensions, or 75%. Secondly, the Ss reported changing positively on 34 of the 44 remembered dimensions. This proportion of dimensions evidencing positive change is highly significant ($p < .001$), using the two-tailed z test (Peatman, 1963).

Expert Criteria

Table 6 shows the number of Ss in each group who reached the experts' criteria for post-therapy status on a number of the outcome measures. It shows the number reaching these criteria in the pre-test and post-test results. The only significant change came on the Self-Disclosure self-ratings for the individual therapy remnant ($p < .01$).

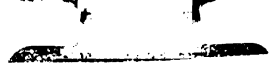

TABLE 6

Number of Participants Reaching Experts' Criterion on Each Outcome Measure Before (B) and After (A) Therapy

Measures	Treatments					
	Group N=17		Individual N=12		None N=15	
Self	B	A	B	A	B	A
Q Sort	0	1	0	2	2	4
ICl	0	0	0	0	0	0
I, You, OK-NG	1	2	2	3	2	4
Openness	8	6	4	5	9	9
Data-Seeking	2	3	1	0	4	5
Self-Disclosure	8	6	4	10**	11	9
Other						
ICl	0	0(13)	0	0(8)	1	1(9)
Openness	3	3(13)	5	3(9)	2	4(9)
Data-Seeking	2	0(13)	0	0(9)	0	2(9)
Self-Disclosure	4	5(12)	2	3(9)	2	2(9)

Note. -- Ns as indicated at top except when given in parenthesis; include only those "others" who gave both before and after therapy data.

**$p < .01$, one-tailed

CHAPTER IV

DISCUSSION

Dropout Rate

The findings show that Ss in the group therapy treatment category were more likely to remain in both therapy and in the research than Ss in the other two groups. This might be due to a greater initial commitment from clients who agree to enter group therapy, or it could be a result of group therapy exerting a strong hold on its clients. The first seems feasible because committing oneself to two hours and eight people a week appears more demanding than committing oneself to one hour per week to only a psychotherapist, let alone to merely two testing sessions. The second also seems feasible; a group therapy client would probably be less likely to fool himself into a premature termination due to the contradictory feedback he would receive from his fellow group members. Whatever the explanation may be, in this study group therapy provided the distinct advantage of more frequently keeping its clients.

The individual clients who terminated after zero or one session may have fooled themselves into leaving therapy prematurely. This could exemplify the Hathaway "Hello-Goodbye" effect, as cited by Sundberg and Tyler (1962). Briefly, a client wants to believe he is "sick" when he enters therapy, and "well" when he leaves, especially when he is being tested on his progress.

The significant dropout rate differences must be considered when interpreting all other findings of the present study. The seemingly slight advantage shown by the remnant individual therapy treatment group must be viewed in the perspective of its dropout rate of 40% (8 of 20),

as compared with the 6% (1 of 17) group treatment rate.

The shift of four Ss from individual therapy to the reconstituted no-treatment group also affected the reconstituted no-treatment group results. All four Ss showed positive Q Sort changes. These change scores of +.232, +.393, +.464, and +.50 (averaging +.510) were exceptionally high; the average S remaining in either group or individual treatment averaged a Q Sort gain of only +.090. These data may demonstrate the "Hello-Goodbye" effect, with the Ss trying to convince themselves of their readiness for termination by making their self and ideal images coincide. The three of these four Ss with the higher Q Sort change scores had no friends respond in the post-testing. This may have been a result of their need to avoid contradictory feedback which might be inconsistent with their "Goodbye" perception.

The overall research design was seriously compromised by both this shift and by the "dropout" of four persons from the original individual treatment group, and four more from the original no-treatment group. Because data from these reclassified and missing Ss could conceivably have reversed the few statistically significant between-treatment group findings described, these losses and shifts undermine any clear statements about the pertinent original hypotheses. Thus, the outcomes of comparisons between treatments administered to such vaguely defined samples as 100% of the group Ss, 60% (12 of 20) of the original individual Ss, and 73% (11 of 15) of the original no-treatment Ss can only be viewed as suggestive.

In addition to the specific reasons already cited, a general reason for the failure of Ss and "others" to participate in the post-testing was the time of the year. The final testing coincided with the final two

weeks of the school year, and, since all Ss and most of the "others" were college students, their busy schedules kept a number of them from participating. These busy schedules may have been convenient excuses used to mask resistance, but this cannot be assessed.

Pre-Treatment Measures

Intercorrelations of Variables

Among the self-ratings - The measure accounting for the most covariance within the matrix of self-reported pre-treatment scores was the self-rating of the Self-Disclosure Scale. Interestingly, this was the only outcome measure which differentiated between the treatment groups in terms of mean changes. The cluster this measure formed with the self-ratings of the Openness and Data-Seeking Scales may be due to a common "communication" factor, although this common variance could also be a result of the similarities among the three instruments.

The most prominent cluster of variables contained the Q Sort, ICl_{DS} dimension, and the I, OK-NG dimension. After the Self-Disclosure Scale, this cluster contributes much of the remaining total covariance. Their common variance might be due to a "self-enhancement" factor. Future studies might aim at better identifying this factor, and the "communication" factor, more directly. A problem would seem to be that the "Hello-Goodbye" effect could easily cause spuriously high self-ratings, especially during post-testing. An example is the already referred to Q Sort scores of the individual therapy dropouts.

Among "others" ratings - The importance of the Self-Disclosure Scale is enhanced by the fact that it also provides the greatest portion of the total covariance among the "others" ratings. The ICl_{DS} is the second most

salient measure, with the other three providing approximately equivalent amounts of the remaining total.

Between the self and "others" ratings - Three of the four pre-test measures rated by both Ss and "others" do not correlate significantly at the .05 level. Only the "other" reported ICl_{DS} and ICl_{LH}, the two dimensions which combine to form one measure, the ICl, correlated significantly with self-reported scores on these same variables. These results are similar to those found in a number of studies in the literature. Rogers and Dymond (1954) found friend ratings to be unrelated to clients' self-ratings. Fairweather, et al. (1960) discovered two clusters of inter-correlated measures, subjective self-evaluations and objective interpersonal evaluations. The latter contained therapists' ratings. This result emphasizes the importance of careful use of outcome measures in psychotherapy research. Increased familiarity with the specific value and meaning of various outcome measures is mandatory.

Representativeness and adequacy of measures

Self-Disclosure Scale - Although the self-rating of the Self-Disclosure Scale has gained major focus in this study, there is some question about the meaningfulness of these scores. Forty-six of the eighty-eight ratings are of scores of seven or eight. It seems highly improbably that this is an accurate characterization of these Ss. The self-ratings on the Openness (O) and Data-Seeking (DS) Scales, two measures which correlate significantly ($p < .05$) with the Self-Disclosure Scale, support this hypothesis. Well over half of the O and DS ratings (106 out of 176) were below seven on a nine-point scale. Therefore, there seems to be something special about the Self-Disclosure Scale which produced such high ratings.

The special characteristic might be the detailed definitions of each SD scale score point (See Appendix B, p. 89-90). All scores below seven contain some negative descriptive phrase. For example, "rarely reveals own personal feelings" is part of the description of point six. These negative elements may elicit defensiveness in the self-raters, and frequent ratings of seven.

However, these definitions have not prevented self-ratings lower than seven in another, more sophisticated sample. Ratings lower than seven predominated in the study by Hurley (1967), which used members of a graduate course in group counseling methods as Ss.

Q Sort - The Q Sort scores seem somewhat more representative than the Self-Disclosure Scale scores. The overall pre-test mean of .33 is somewhat higher than the pre-test means, ranging from .16 to .32, reported by Ends and Page, as cited by Truax, Schuldt, and Wargo (1968, p. 53), in their study of group psychotherapy with male alcoholics. However, these hospitalized alcoholics seem like a much more disturbed sample than the present Ss, and even lower pre-test scores would be expected. Also, the pre-treatment mean of the present group therapy Ss was almost identical to the pre-treatment mean of all of the alcoholics entering group psychotherapy in the Ends and Page study.

However, the adequacy of the Q Sort as an outcome measure in this study is questionable. Perhaps most pertinent are in the high Q Sort gain scores of the four persons attending only one individual treatment session. No significant positive change appeared on the Q Sort for the group or remnant individual treatment groups. This can be explained, as in Truax, Schuldt, and Wargo (1968), merely by assuming that the therapies

did not produce significant positive change. The absence of change on almost all of the other outcome measures supports this assumption. This fails, however, to account for the significant positive change which the reconstituted non-therapy group produced on this measure. It has been suggested that the four non-therapy Ss who dropped out of individual psychotherapy wanted to portray themselves as having gained. Two additional non-therapy clients produced Q Sort scores so divergent that it was difficult to accept their credibility. The self-ideal correlation of one S changed 1.342 from pre- to post-testing (from -.445 to +.897), and another had a post-test self-ideal correlation of +.990. This latter S had also exhibited a good deal of negativistic behavior in the pre-testing session. It seems that these two non-therapy Ss wanted to demonstrate that they had changed, either to themselves, to the E, or to both.

These data seem to converge with the Truax, Schuldt, and Wargo (1968) findings of a high correlation between high self-ideal correlations and high scores on the Edwards Social Desirability Scale. The Q Sort appears to have produced a number of "false positives" in this study. More important, the instrument may be very susceptible to this form of distortion, especially when clients want to show that they have changed. Ibelle, as cited by Berry and Miskimins (1969, p. 103), reported that this type of self-concept measure often cannot distinguish schizophrenics from normals. These convergent findings raise questions about the usefulness of the Q Sort as a therapy outcome measure.

Frank's (1956) findings seem to offer contradictory evidence. Using ten Ss, he found test-retest reliabilities on the Q Sort to range from .93 to .97. However, there is no evidence that his Ss were attempting to

portray themselves as having changed in the second testing. In fact, they may have been trying to be consistent with their initial results. If they were, this further supports the present evidence that the Q Sort is susceptible to the needs of the Ss.

Argyris Interpersonal Competence Scale - The Argyris Scale commanded a major focus in this study. Inspection of the transcript score sheets clarifies one important problem. Of the 2829 scored units, 2820 were scored as ideas; only nine were scored as feelings. This greatly restricted the scores, and, in fact, caused this overall sample to be portrayed as relatively incompetent, interpersonally.

Data to assess the representativeness of these scores come from two studies. Argyris (1965a) ran sensitivity groups with business executives, with pre- and post-testing. The Ss in the present study were comparable to his "low learners" groups, who produced almost no feeling scores.* Hofman (1969) compared "healthy" and clinic married couples. Their interpersonal competence score means were slightly lower, on a corrected (Hofman used a base score of 1, the present study a base score of 16) scale, than the pre-test means in the present study; the overall mean for his study was .40, compared to the present overall pre-test mean of .69. However, the most important piece of data again is that his groups produced more feeling scores, 114 out of 4235, as compared to 9 out of 2829, than the Ss in the present study.

It might be asserted that the problem was not with the Argyris measure, but rather that this sample was an interpersonally incompetent one.

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*Exact percentages were not available for the Argyris study.

However, it seems highly unlikely that not one S would produce more than two or three feeling scores, especially in the light of high scores on other measures, most notably therapists' ratings.

A lack of ego involvement in the problem-solving tasks employed in the present research seem a more parsimonious explanation of this lack of feeling scores. Evidence for this hypothesis appears if we assume that the ego involvement has two potential sources: the problem itself might have personal relevance, or the individual might be interpersonally involved with other members of the group. In this study, the problems had little or no personal relevance, and the members of the group were meeting for the first time. The importance of these factors did not become apparent until after the post-testing, when all the tape transcripts were scored. Occasional observations of the sessions by the E revealed intellectual involvement; that is, the Ss wanted to solve the problems correctly. However, personal feelings did not seem to be a part of the interaction. In the Hofman study (1969), married couples solved similar artificial problems. The results contained many more feeling scores than the present research. Again, the problems had little personal relevance, but the Ss did have a great deal of interpersonal involvement. Finally, in the study reported by Argyris (1965a), members of a business organization participated in sensitivity groups. The problems discussed had a great deal of personal relevance, and Ss were also involved with each other. The results again contained an abundance of feeling scores. Thus, it appears that feeling scores, and potentially significant results, might arise from ego involvement on the part of the Ss. Furthermore, the involvement may be related to either the problem or the problem-solving

group.

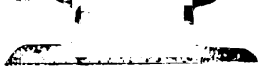
Future research might use tapes from group and individual therapy sessions as their raw data. This would provide the necessary involvement, although the special nature of a dyadic individual therapy situation might present new complications. Another possibility would be forming the problem-solving groups out of the Ss and two or three friends of their choosing. This would be especially helpful if they focused on one of their mutual real-life problems, and would have the additional advantage of providing for the inclusion of non-therapy Ss in the sample.

However, even if this problem were solved, other deficiencies in the Argyris Scale seem to remain. Its one obvious strength, the high scorer reliability, is offset by the lack of stability it showed in test-retest scores. This finding, possibly attributable to the lack of ego involvement, suggests that the Argyris Scale may be highly susceptible to situational factors.

Finally, scores on the Argyris measure tended to correlate negatively ($r = -.375$, $p < .06$) with therapists' ratings of Ss improvement in addition to not correlating positively with any of the other pre-test measures. Since a number of these variables have shown at least some usefulness in past research, this points to another major limitation of the Argyris Scale as used in the present study.

Taken together, these problems underline the limitations of this instrument as an outcome measure in this study. It remains to be determined if this measure can be usefully applied to other psychotherapy outcome research.

Other measures - Since most of the other instruments have not been used in research before, it is difficult to assess their adequacy at this



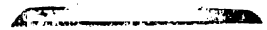
time. One favorable datum involved the ICl. The self and "others" ratings of both the ICl_{DS} and ICl_{LH} dimensions have significant positive intercorrelations ($p < .05$). This may be an indication that the ICl is somewhat less susceptible to false positives, especially those resulting from the "Hello-Goodbye" effect. This is a distinct potential advantage for psychotherapy outcome research.

Overall Evaluation

These numerous problems serve to underline the difficulties with psychotherapy outcome measures mentioned early in this paper. However, the dropout problems evidenced in the remnant individual therapy group and the reconstituted non-therapy group prevent the measures, especially the Argyris Scale and the Q Sort, from being evaluated completely. These interrelated deficiencies greatly hinder, if not completely eliminate, the possibility of making any definitive statements about even the slight differences found between the three treatment groups. Therefore, results already considered questionable must be inspected even more tentatively.

General Findings

The possibility of making any clear statements about the hypothesized differences among the three treatment groups was eliminated by this combination of "dropout" and measurement complexities. Morever, of the 42 mean differences identified between the treatment groups in Table 3, only two - both involving the dubious self-ratings on self-rated Self-Disclosure, were statistically significant. Of the 33 differences among these same treatment groups in "proportions gaining", as listed in Table 4, only one (ICl) statistically significant difference occurred. These findings that only 3 of 75 differences achieved the .05 level of



significance is plainly below the chance level. However, it seems useful to attempt to explain the results that were obtained, if only to stimulate further research thought in this area of study. It must be understood, of course, that these explanations have a weak empirical base.

The three treatment categories will be discussed simultaneously when attempting to explain the results. In this way, hypotheses 1, 2, 3, and 4, and the exploratory question can be attended to at the same time. The remnant individual therapy group, although inconsistently so, evidenced the most positive change. It produced a significantly higher mean change than either of the other two treatment groups on the Self-Disclosure Scale, self-rating ($p < .05$), and it showed a significantly greater ($p < .05$) positive proportion change on the ICl, others rating, than the reconstituted no-treatment group. Finally, an average of 61% of the individual group remnant showed positive change on each of the self-rating measures. The group therapy and reconstituted no-treatment categories evidenced an essentially equivalent lack of change, with the group therapy sample showing a slight, non-significant tendency toward negative change. An average of only 41% of these Ss evidenced positive change on the self-rating measures.

There are a number of alternative ways of explaining this result. The first, obvious, explanation is that in the present case, neither group nor individual therapy was effective, with group therapy being even more ineffective. This is feasible, but seems to be an overambitious interpretation of the findings.

A common interpretation of equivocal outcome results, initially cited by Bergin (1963), is the presence of antithetical processes in the therapy

experimental treatment groups. Some therapists produce negative change in some clients, which cancels out the positive change that they or other therapists may stimulate in other clients. An attempt to test this is portrayed in Table 7. Clients rated as changing more than most clients by their therapists were compared with clients who were rated as changing less than most clients (average ratings were omitted). The overall change score was used for comparison purposes. The clients rated low change by their therapists showed a tendency ($p > .10$) to score low on the overall change score. Therefore, there is some support for the existence of Bergin's canceling out effect.

TABLE 7

Relationship Between Therapist Ratings and Overall Outcome Scores

Overall Score	Therapist Rating		Totals
	Low	High	
Low	5.5	5	10.5
High	2.5	8	10.5
Totals	8	13	21

$X^2 = 1.81 \quad p > .10$

The inability of both the individual and group therapy treatments to produce significant outcome measure change may also have been a result of the relative therapist inexperience. Most were psychology interns with three years of part-time therapy experience. This could also explain the difference between the remnant individual and group categories, since all of the therapists had had most of their previous experience working with individual clients. Most psychotherapy training programs emphasize

individual therapy, especially in the early stages of the program. Therefore, it seems that research using relatively inexperienced therapists as their own controls may be an inappropriate design. Only therapists with approximately equal amounts of experience in group and individual therapy would be appropriate for such research designs.

Another interpretation of the results is that the period of psychotherapy was too short to produce significant positive change. A number of studies have cited this explanation, among them the study by Satz and Baroff (1962) referred to in the review of the Q Sort literature. This interpretation also can offer an explanation for the "differences" between the remnant individual and group therapy groups. Despite the "economy" studies of Baehr (1954), Novick (1965), and Suinn (1968), a number of authors feel that group therapy takes longer to produce positive changes. Sundberg and Tyler (1962) cite an article by End and Page which showed that thirty group sessions in six weeks produced significantly more change than fifteen group sessions in six weeks. They refer to End and Page's conclusion that the group therapy clients were just beginning their period of greatest change after fifteen sessions. This, of course, coincides with the maximum number of sessions used in this study.

On the surface, it might appear that group clients have less therapy time than individual clients since sessions have to be divided up six to eight ways. However, the focus of the groups in this study often was an interaction between two or more group members, and the techniques used often involved up to all of the group members simultaneously. In the group for which E served as co-therapist, non-verbal techniques

accomplished this. For example, in one session the clients used the therapy room as their interpersonal universe, and placed themselves as distant from each other as they felt. They then discussed the experience.

It remains true that less "therapist time" was invested in the group treatment, on the average, than went into the individual treatment. From that perspective, the failure of the individual group remnant to exceed the group treatment in gains can be viewed as supporting the view that group treatment is as efficacious, and less expensive, than individual therapy.

It seems that this controversy about "economy" can only be settled by researchers becoming more familiar with the processes of group and individual therapy. This author would agree with End and Page, and would hypothesize that the dormant fifteen sessions actually consists of each group client receiving a great deal of feedback about his interpersonal defenses and postures. This might well cause an initial negative change, at least in self-evaluations; the finding that less than 50% of the group Ss changed positively on the self-rated measures hints at such a process. Once this feedback began to be used appropriately, change might occur quickly, because a larger part of the client's environment (7 or 8 relationships) would already be involved in the change.

Anecdotal evidence partially supports this hypothesis. Upon consultation with the other therapists, the E found the experience with his group to be fairly typical. The group continued for a total of twenty sessions, until summer vacation caused termination. At least five of the six members had started to change, and another ten to twenty sessions would have provided the experiences necessary to reinforce their gains.

It is further hypothesized that the processes underlying group and individual therapy process are quite dissimilar. The individual client, as a result of a more intense, consistent impact with the therapist, exhibits more facile initial change. However, the major hurdle for the individual client would be transferring this change to the outside world. A large number of new and old relationships must be restructured. These processes are not considered to be all or none. Inidivdual clients certainly work on other relationships during therapy, and group clients may certainly have one most meaningful interaction, either in or out of the group, with the concomitant changes in self-perception.

Again, anecdotal evidence is relevant. A number of the individual clients had successfully terminated at the time of the post-testing. None of the group clients had. Some individual clients had apparently exhibited their initial change.

The results also provide some evidence that these processes were occurring in the therapy clients in this study. A greater percentage of remnant individual clients than of group clients showed positive change on the "self-rating" measures. Two interpretations of this result seem logical. Either the individual clients have not yet had a chance to change in relation to others besides their therapist, or significant others have not had a chance to recognize the change. These need not be contradictory, and both fit in the hypothesized conception of individual therapy process.

Another convergent finding is the significant increase in the number of remnant individual clients who reached the expert's criterion on the Self-Disclosure Scale, self-rating, after therapy. This is likely to be a result of a "healthy" amount of self-disclosure with the therapist. In

the light of previous comments, this can be interpreted as a first necessary step toward overall change, as well as a change limited to one relationship.

It was hoped that the Argyris Interpersonal Competence Scale would help portray these hypothesized process differences, especially in contrasting between "in relationship" changes and "self-perception" changes, such as on the Q Sort. Unfortunately, the limitations of the design and both measures prevented this.

Two of the factors mentioned as potential sources of the negative results, therapist experience and length of therapy, may be interactive or additive processes. A reasonable hypothesis is that as therapist experience increases, length of time needed for successful therapy decreases. Unfortunately, the results do not speak to this issue.

The Argyris Scale

Hypothesis 5 was partially supported when the Argyris Scale showed high interscorer reliability, although even this 82% agreement was somewhat less than that reported by Argyris (1965). When the two raters in this study inspected their disagreements, approximately 80% of these seemed attributable to a miscommunication of two minor scoring rules. After correcting these errors, and after discussion of the few remaining disagreements, the raters agreed on all of the items. This would seem to indicate that future scorings by these raters would be able to match the percent agreement score reported by Argyris. This, moreover, can apparently be accomplished with only typed transcripts, rather than tape recordings as in the Argyris study, thus greatly speeding up the process.

Argyris "gain" scores tended to correlate negatively ($r = -.375$,

two-tailed $p < .06$) with therapists' ratings of client gain. This result undermines the appropriateness of using the Argyris as an indication of the comparable effectiveness of group versus individual therapy. Explanations for this failure have been offered.

Dimensions Chosen by Ss

The task of remembering all three dimensions on which Ss wanted to change at the pre-testing period proved to be too difficult for thirty-five of the thirty-six Ss at the time of post-testing. This might be expected of the non-therapy Ss since they probably did not come to the Counseling Center to change these sorts of personal dimensions. But, while it is true that the non-therapy Ss had the highest forgetting percentage, the forgetting rate of the therapy Ss is too high to attribute this phenomon to a lack of motivation for change. An alternative explanation is that the dimensions were unimportant to the Ss, that is, not worth remembering.

This interpretation brings up a question about the treatment of symptoms by simplistic behavioristic methods. What is the advantage of attacking a symptom presented by a client as needy of change, when it may not be important enough to remember if left alone? A more feasible alternative would seem to be a response to the client's need to change, with whatever therapeutic tehcniques seem appropriate, rather than a response to the specific symptom that he identifies as the proposed focus of change.

The second result, the remembering of dimensions that changed in a positive direction, suggests an alternative explanation of this forgetting phenomenon. It is simply that Ss will remember dimensions on which they have changed positively. However, this second result might also have

occurred because Ss change positively on self-rated dimensions of their own choosing regardless of whether they can remember them. This might be another example of the "Hello-Goodbye" effect.

The following procedure would explicate why remembered dimensions exhibit positive change. In the post-testing, the Ss would be asked to remember and rate themselves on their own dimensions. Then, they would be informed of the dimensions they forgot, and asked to rate themselves on these. The difference between the percentage of positive changes in the two groups, remembered and forgotten, would be the crucial statistic.

Future Research

Because of the diverse problems encountered in this study, an attempt to replicate it by using the same basic design seems inappropriate. Therefore, this section will suggest a number of alternatives, each designed to study one of the specific difficulties that affected this research.

The most serious was the "dropout" problem, relating to the therapy and the research. The meaning of premature termination might better be understood if clients who dropped out were compared with clients who remained in therapy. A pertinent finding in this study was the changes in Q Sort scores of the four individual therapy dropouts. The hypothesis that this change was an example of the Hathaway "Goodbye" effect could be checked by asking premature terminators if therapy had changed them. The hypothesis would be that "yes" answers would be associated with high positive change scores. An underlying assumption would be that one session does not produce genuine therapeutic change. A third group to add to this comparison would be clients who wished to remain in therapy, but didn't, for reasons such as therapist absence. This control would help separate

the effects of motivation or expectation from actual therapy effects.

The research dropout problem must be solved through the use of better research design and control. The extrinsic motivation of being paid $3.00 for the post-testing did not prevent dropouts in this study. Neither did the research task, which the Ss reported to be interesting. The most appropriate step might be an attempt to obtain a strong commitment from the Ss before they participate in the pre-testing. This might restrict the sample to well-motivated Ss, but this probably is already true of this type of research.

A second major problem concerns the outcome measures. It appears that even an instrument such as the Q Sort, which has been the focus of much research, needs a great deal of further study and evaluation before its validity can be assumed with any confidence. This was supported by Ibelle as cited by Berry and Miskimins (1969, p. 103), who demonstrated that the Q Sort often cannot differentiate schizophrenics from normals. In general, this evaluation needs to be done apart from the complexities of research comparing group and individual psychotherapy.

The seeming susceptibility of the Q Sort to false positives and to the "Hello-Goodbye" effect demands further study. When comparing premature terminators with clients who remain in therapy, their Q Sort scores should be inspected closely. Another tactic would be to administer the Q Sort pre- and post-test, and use two different E or S expectancies (or two different sets of instructions) as the experimental variables. The first E could expect change, as in a psychotherapy study, and the second could expect stability, as in a reliability study. The extent that the results fulfilled these expectations would reflect the susceptibility of

the Q Sort to Ss' needs to portray themselves in certain ways.

Another method to inspect this problem would be a review of the Q Sort literature, with special attention being paid to factors which might have elicited "false positives."

Future research with the Argyris Scale has already been suggested. Tasks to which this scale can effectively be applied must be devised or found; aritificial problem solving may be inappropriate. The positive results reported by Argyris (1965) may only be replicable within highly engaged sensitivity or psychotherapeutic groups.

The pre-treatment mean differences might best be handled through the use of appropriate statistical methods, such as an analysis of covariance. Another possibility would be to obtain larger pre-test samples, and then form treatment groups by matching pre-test scores. This matching could, of course, be a complex task when a number of outcome measures were used.

A number of lesser difficulties came to light in this study, and steps must be taken to control their effects in future studies comparing group and individual psychotherapy. One variable needing control is client motivation. This study used control Ss who had come to the Counseling Center desiring some change, even though it was not of a psychotherapeutic nature. An "own control" design seems to be a better approach toward assuring client comparability in this type of setting. This presents a conflict between research and service, in that Ss might have to wait through a relatively long control period before receiving help. This conflict might be overcome by using students who come to the Counseling Center just before summer vacation as Ss. These students are not usually seen until fall, and thus, a three-month control period is automatic.

Unfortunately, this might be an atypical sample, made up of people who could ask for help only at a time when they were unlikely to receive it. A separate study might be needed to determine the representativeness of such a sample. They would have to be compared with clients who sought therapy at other times of the year. It is unclear at this time which measures could best make this comparison.

The effect of level of therapist experience must also be considered, especially when experience in individual and group work differs greatly. Number of years of experience and number of sessions per year will be helpful as objective measures of this variable. However, less easily quantifiable aspects of experience, such as variety of experience, clientele, and techniques will also have to be taken into account. Finally, the interactive or additive effects of therapist experience and length of therapy will have to be assessed. This would be done most easily with a therapist experience by length of therapy analysis of variance design.

Meaningful outcome research may require a more adequate consideration of the divergent processes involved in individual and group psychotherapy. One way of exploring this area would be repeated testings of the Ss throughout the therapy experience. The use of a number of outcome measures would be useful, as they might be alternated to decrease the problems of repeated testing with the same measure. The Self-Disclosure Scale might be appropriate for this task, as it did differentiate between the treatment groups in this study. Alternatives would be measures which intercorrelated highly with the Self-Disclosure Scale; possibilities would be the Openness and Data-Seeking Scales used in this study. However, it is obvious that the use of these measures depends on their validation in further research.

In addition, process testing would have to continue for some time after treatment was terminated. This testing would help assess the validity of the hypotheses made earlier in this paper about individual and group therapy.

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APPENDIX A

ADDITIONAL TABLES

TABLE 8

Pre-Test Scores of Group Therapy Threatment Group

Subjects	Sex	Measures													
		External	Self							Others					
		Argyris	Q Sort	ICl_{DS}	ICl_{LH}	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl_{DS}	ICl_{LH}	Openness	Data-Seeking	Self-Disclosure
EJ3292*	F	1.38	.672	-07.3	19.7	6	6	5	5	6	(B) 1.0	(B) 12.7	(B) 5.5	(B) 5.5	(B) 7
IS3554	M	0.51	-.839	- 9.7	13.7	3	7	2	2	3	(F) -12.6	(F) 17.8	(F) 6	(F) 3	(F) 5
JC0513	M	1.00	.113	- 1.7	5.5	6	5	7	5	7	(M) 1.7	(M) - 6.3	(M) 7	(M) 7	(M) 7
JH0566	F	-1.00	.589	13.5	-19.5	6	5	4	6	7	(F) 1.7	(F) -18.1	(F) 4	(F) 6	(F) 4
JJ6429	F	0.04	.752	- 0.4	17.4	7	5	7	4	7	(M) 2.8	(M) 8.2	(B) 5	(B) 7	(B) 6.5
PV5412*	F	1.12	.573	3.0	8.8	8	5	7	5	7	(M) - 3.8	(M) 9.6	(M) 6	(M) 5	(M) 5
RD7262	M	0.87	.177	-14.6	- 3.0	3	4	8	8	7	(F) 5.4	(F) 2.8	(B) 4	(B) 3	(B) 5
RM0849	M	0.16	.760	- 1.9	4.7	7	8	7	5	7	(M) - 6.4	(M) 2.6	(B) 8	(B) 4.5	(B) 6.5

* Treated by senior staff therapist
(F) Score from female other
(M) Score from male other
(B) Average score from both others

TABLE 8 (Continued)

Subjects	Sex	Measures													
		External	Self							Others					
		Argyris	Q Sort	ICl_{DS}	ICl_{LH}	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl_{DS}	ICl_{LH}	Openness	Data-Seeking	Self-Disclosure
RM3242	F	1.12	.346	- 3.7	20.3	6	6	5	7	7	(F) 6.1	(F) 6.9	(F) 5	(F) 5	(F) 6
TE7924	F	0.76	.500	4.6	6.6	7	6	6	7	6	(M) 5.5	(M) 10.3	(M) 7	(M) 8	(M) 7
WM0513	M	1.04	.421	- 9.4	0.0	3	5	4	4	4	(B) - 5.2	(B) 5.9	(B) 6.5	(B) 5	(B) 6.5
AM0706	F	0.19	.175	1.5	5.3	4	6	8	8	5	(M) -10.1	(M) 28.5	(M) 2	(M) 8	(M) 8
AV8116	M	1.48	-.193	-16.0	2.4	6	4	7	7	7	(F) -10.9	(F) - 3.7	(F) 6	(F) 7	(F) 2
JS0352	F	1.12	.209	-13.6	5.4	2	4	5	2	4	(M) -14.2	(M) 8.8	(M) 7	(M) 5	(M) 6
RB7805	F	0.44	.316	-20.5	10.3	5	5	3	4	4					
EE3677	F	0.80	-.371	-20.6	- 1.4	3	8	7	4	4					
AS0295	F	0.77	-.281	-13.3	4.5	4	5	6	6	6					

TABLE 9

Pre-Test Scores of Individual Therapy Treatment Group

Subjects	Sex	Measures													
		External	Self							Others					
		Argyris	Q Sort	ICl_{DS}	ICl_{LH}	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl_{DS}	ICl_{LH}	Openness	Data-Seeking	Self-Disclosure
											(F)	(F)	(F)	(F)	(F)
HH4540	M	0.36	.536	- 0.4	-20.4	5	4	3	7	7	10.4	-16.8	8	7	7
											(B)	(B)	(B)	(B)	(B)
EE6603	F	1.00	.132	- 8.3	- 2.5	2	8	3	7	6	1	1.5	5	4.5	5
											(M)	(M)	(M)	(M)	(M)
CE8109	M	-0.07	.149	-15.5	8.3	3	6	8	1	7	- 6.7	- 6.5	7	6	7
											(B)	(B)	(B)	(B)	(B)
AS3789	F	1.13	.272	- 9.4	0.4	6	5	4	4	7	- 5.8	-11.7	4	6	3
											(M)	(M)	(M)	(M)	(M)
RF6274	F	0.40	.361	- 8.0	1.8	8	7	7	2	4	1.1	13.7	8	7	6
											(B)	(B)	(B)	(B)	(B)
RJ0440	M	0.84	.530	-11.3	11.5	8	8	4	5	6	- 2.4	9.2	5.5	6	6
											(F)	(F)	(F)	(F)	(F)
RA7091	F	0.40	.322	- 7.5	- 7.5	5	8	2	2	4	- 7.2	4.4	3	2	5
											(F)	(F)	(F)	(F)	(F)
LM1337	F	0.64	.548	-12.2	6.6	3	7	3	8	4	2.7	- 6.1	8	8	7
											(M)	(M)	(M)	(M)	(M)
JI6596	F	0.47	.498	0.7	12.7	5	6	7	6	6	- 1.9	- .8	7	6	7

*Note. -- Treated by senior staff therapist
(F) Score from female other
(M) Score from male other
(B) Average score from both others

TABLE 9 (Continued)

Subjects	Sex	Measures													
		External	Self								Others				
		Argyris	Q Sort	$IC1_{DS}$	$IC1_{LH}$	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	$IC1_{DS}$	$IC1_{LH}$	Openness	Data-Seeking	Self-Disclosure
											(M)	(M)	(B)	(B)	(B)
RF3781*	F	0.89	.583	2.3	-14.1	6	4	5	6	5	1.4	-11.2	5	8	8
											(M)	(M)	(M)	(M)	(M)
LA8505	F	0.81	.683	6.3	11.9	6	5	6	5	8	- 3.7	21.3	7	9	7
											(M)	(M)	(B)	(B)	(B)
PL0721	F	0.60	.649	- 6.1	- 2.5	6	9	9	5	2	2.3	5.4	4.5	4.5	6

TABLE 10

Pre-Test Scores of Non-Therapy Treatment Group

Subjects	Sex	Measures													
		External	Self							Others					
		Argyris	Q Sort	ICl_{DS}	ICl_{LH}	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl_{DS}	ICl_{LH}	Openness	Data-Seeking	Self-Disclosure
JG9175	M	1.00	.541	- 0.1	- 7.3	7	5	6	5	7	(M) 11.9	(M) - 1.1	(M) 3	(M) 7	(M) 2
JN5113	F	0.56	.021	- 7.8	- 3.8	2	5	2	6	4	(M) 14	(M) -20.2	(M) 8	(M) 5	(M) 6
HD0722	F	0.24	.385	6.5	- 9.1	7	5	7	3	7	(F) - 1.2	(F) 9.4	(F) 3	(F) 4	(F) 4
FC0616	F	0.91	.811	1.7	1.5	6	5	7	6	7	(F) 10.5	(F) - 6.5	(F) 6	(F) 6	(F) 7
HM4180	M	0.36	.013	-14.9	3.3	6	5	2	2	6	(F) 5.1	(F) 4.9	(F) 2	(F) 7	(F) 6
JD0325*	F	0.64	.513	1.0	3.2	7	4	8	7	7	(B) - 1.6	(B) 10.1	(B) 5	(B) 3	(B) 6.5
MH0244	F	0.60	.861	9.6	8.8	7	6	9	8	8	(F) 2.5	(F) 15.7	(F) 6	(F) 7	(F) 7
AS6493	M	1.12	.593	- 8.1	17.1	7	7	7	7	6	(F) - 9.6	(F) 11	(F) 7	(F) 5	(F) 5
EJ9297	F	0.23	-.445	- 8.1	6.9	6	8	8	8	8	(M) 5.9	(M) 8.9	(M) 6	(M) 7	(M) 7

*Note. -- These Ss were originally in the individual treatment sample.
(F) Score from female other
(M) Score from male other
(B) Average score from both others

TABLE 10 (Continued)

Subjects	Sex	Measures													
		External	Self							Others					
		Argyris	Q Sort	ICl_{DS}	ICl_{LH}	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl_{DS}	ICl_{LH}	Openness	Data-Seeking	Self-Disclosure
PT6756	F	1.18	.430	- 7.0	3.8	7	5	7	6	8	---	---	(F) 6	(F) 8	(F) 7
DS0609	M	0.00	.647	- 3.7	0.3	7	5	6	7	7	---	---	(M) 9	(M) 9	(M) 8
CM7875*	M	1.00	-.359	-10.6	8.4	7	6	6	8	6	---	---	(F) 5	(F) 5	(F) 4
GH5574*	M	-0.07	.193	- 1.0	5.2	8	7	7	8	8	(M) 6.0	(M) 8.8	(B) 7.5	(B) 6	(B) 7.5
MA9392*	F	0.43	.397	0.4	7.8	6	5	8	5	7					
RM7954	M	0.52	.715	10.2	3.2	6	6	4	3	7					

TABLE 11

Post-Test Scores of Group Therapy Treatment Group

Subjects	Sex	Measures															
		External	Self								Others						
		Argyris	Q Sort	ICl DS	ICl LH	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl DS	ICl LH	Openness	Data-Seeking	Self-Disclosure	Therapist Rating
EJ3292*	F	0.76	.677	- 3.7	13.8	6	7	5	6	6	(B) - 1.4	(B) 3.3	(B) 5	(B) 5	(B) 5	2
IS3554	M	1.04	-.093	-19.0	7.6	3	6	2	1	4	(F) -12.6	(F) - 3.8	(F) 3	(F) 6	(F) 4	1
JC0513	M	0.48	-.046	-10.5	2.5	4	5	3	5	7	(M) - 3.4	(M) - 3.0	(M) 8	(M) 7	(M) 7	4
JH0566	F	0.93	.521	10.1	-21.5	6	5	6	3	6	(F) 10.2	(F) -17.8	(F) 6	(F) 6	(F) 7	4
JJ6429	F	0.56	.669	5.8	4.0	6	6	3	3	6	(M) - 1.2	(M) 17.8	(B) 6	(B) 6	(B) 6	3
PV5412*	F	1.36	.401	7.6	3.8	6	7	5	4	6	(M) - 4.4	(M) 4.4	(M) 8	(M) 5	(M) 8	4
RD7262	M	0.68	.576	- 5.1	- 5.7	6	6	8	4	7	(F) - 2.1	(F) - .3	(B) 5.5	(B) 4	(B) 6	3
RM0849	M	1.07	.349	- 4.9	4.7	6	6	7	4	7	(M) - 6.4	(M) - 1.8	(B) 6	(B) 5.5	(B) 7	2

* Treated by senior staff therapist
(M) Score from male other
(F) Score from female other
(B) Average from both others

TABLE 11 (Continued)

Subjects	Sex	Measures														
		External	Self								Others					
		Argyris	Q Sort	ICl_{DS}	ICl_{LH}	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl_{DS}	ICl_{LH}	Openness	Data-Seeking	Self-Disclosure	Therapist Rating
											(F)	(F)	(F)	(F)		
RM3242	F	0.48	.573	- 2.0	21	7	8	9	8	7	5.9	13.0	6	7	---	4
											(M)	(M)	(M)	(M)	(M)	
TE7924	F	0.22	.725	- 1.9	11.7	8	6	7	5	7	5.5	6.3	8	6	7	2
											(B)	(B)	(B)	(B)	(B)	
WM0513	M	----	.670	- 6.0	- 2.4	6	4	5	5	4	- 4.6	6.3	6.5	6	6.5	4
											(M)	(M)	(M)	(M)	(M)	
AM0706	F	0.80	.490	2.8	1.8	7	8	8	8	6	-10.5	19.5	4	6	2	4
											(F)	(F)	(F)	(F)	(F)	
AV8116	M	0.72	.215	0.0	- 3.2	8	3	4	6	7	1.3	2.3	4	4	5	4
JS0352	F	0.56	.836	- 3.8	5.0	7	4	7	5	5	---	---	-	-	-	4
RB7805	F	0.89	-.520	-20.8	16.4	2	2	3	3	5	---	---	-	-	-	1
EE3677	F	0.96	-.435	-21.6	0.4	3	6	5	6	4	---	---	-	-	-	3

TABLE 12

Post-Test Scores of Individual Treatment Group

Subjects	Sex	Measures														
		External	Self							Others						
		Argyris	Q Sort	ICl_{DS}	ICl_{LH}	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl_{DS}	ICl_{LH}	Openness	Data-Seeking	Self-Disclosure	Therapist Rating
HH4540	M	1.08	.683	1.6	-13.4	5	4	4	6	7	(F) 2.5	(F) 1.7	(F) 6	(F) 7	(F) 7	5
EE6603	F	0.30	.745	- 0.7	6.3	7	8	6	4	7	(B) - 3.3	(B) 2.9	(B) 4	(B) 4	(B) 6	5
CE8109	M	0.67	.824	0.0	7.0	7	5	7	6	7	(M) - 2.9	(M) 2.9	(M) 8	(M) 7	(M) 7	1
AS3789	F	0.72	.593	- 6.2	2.6	6	6	5	5	7	(B) - 3.7	(B) -11.5	(B) 4.5	(B) 5.5	(B) 5	4
RF6274	F	-0.40	-.371	-13.1	1.1	3	6	4	5	4	(M) - 7.6	(M) 19.2	(M) 8	(M) 7	(M) 5	3
RJ0440	M	0.56	.755	- 3.0	2.4	7	7	6	7	7	(B) 4.9	(B) 5.3	(B) 7	(B) 7	(B) 6.5	4
RA7091	F	----	.662	- 4.8	- 4.8	7	7	6	4	7	(F) 8.9	(F) 2.7	(F) 4	(F) 4	(F) 6	-
LM1337	F	0.92	.646	- 5.4	7.6	6	5	8	5	7	(F) 3.1	(F) 8.3	(F) 8	(F) 6	(F) 7	3
JI6596	F	0.50	.574	1.7	12.3	7	5	7	6	6	(F) ---	(F) ---	(M) 4	(M) 3	(M) 5	1
RF3781*	F	0.60	.573	2.2	-15.8	5	4	5	7	7	---	---	-	-	-	3

* Treated by senior staff therapist
(F) Score from female other
(M) Score from male other
(B) Average score from both others

TABLE 12 (Continued)

Subjects	Sex	Measure															
		External	Self								Others					
		Argyris	Q Sort	ICl_{DS}	ICl_{LH}	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl_{DS}	ICl_{LH}	Openness	Data-Seeking	Self-Disclosure	Therapist Rating
LA8505	F	0.76	.851	- 2.3	13.7	7	6	7	7	8	---	---	-	-	-	-
PL0721	F	----	.093	- 9.9	- 2.1	4	3	7	3	7	---	---	-	-	-	4

TABLE 13

Post-Test Scores of Non-Therapy Treatment Group

Subjects	Sex	Measures													
		External	Self								Others				
		Argyris	Q Sort	ICl DS	ICl LH	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl DS	ICl LH	Openness	Data-Seeking	Self-Disclosure
JG9175	M	0.64	.556	11.9	- 2.5	7	5	7	6	6	(M) 12.9	(M) - 5.5	(M) 3	(M) 5	(M) 5
JN5113	F	0.08	.454	-10.3	- 3.3	7	4	7	7	5	(M) 10.0	(M) -18.6	(M) 8	(M) 8	(M) 6
HD0722	F	0.12	.562	1.3	- 8.5	7	6	6	7	6	(F) - 5.7	(F) - 7.1	(F) 2	(F) 2	(F) 3
FC0616	F	0.96	.685	1.4	0.6	6	5	7	4	7	(F) 10.9	(F) 9.5	(F) 8	(F) 8	(F) 7
HM4180	M	0.84	-.100	-10.7	5.3	7	6	3	7	5	(M) 1.9	(M) - 9.3	(M) 6	(M) 4	(M) 6
JD0325*	F	-0.10	.745	8.5	2.1	7	4	6	6	6	(B) - 3.2	(B) 4.6	(B) 4.5	(B) 6.5	(B) 6
MH0244	F	----	.864	11.4	5.2	9	6	8	8	8	(F) 7.9	(F) 22.5	(F) 7	(F) 8	(F) 6
AS6493	M	0.12	.599	- 8.8	17.8	8	7	7	8	7	(F) - 2.3	(F) 9.3	(F) 6	(F) 7	(F) 7
EJ9297	F	0.35	.897	8.3	9.5	9	9	9	7	8	(M) - 5.2	(M) 14.4	(M) 7	(M) 3	(M) 8

*Note. -- These Ss were originally in the individual treatment sample.
(F) Score from female other
(M) Score from male other
(B) Average score from both others

TABLE 13 (Continued)

Subjects	Sex	Measures													
		External	Self								Others				
		Argyris	Q Sort	ICl_{DS}	ICl_{LH}	I, OK-NG	Other, OK-NG	Openness	Data-Seeking	Self-Disclosure	ICl_{DS}	ICl_{LH}	Openness	Data-Seeking	Self-Disclosure
PT6756	F	0.96	.344	-10.1	5.7	4	2	7	5	7	---	---	-	-	-
DS0609	M	1.14	.526	- 3.0	- 1.0	7	5	7	8	8	---	---	-	-	-
CM7875*	M	0.81	.591	- 6.2	3.0	6	3	6	8	6	---	---	-	-	-
GH5574*	M	-0.12	.586	0.4	- 0.6	7	7	6	5	8	---	---	-	-	-
MA9392*	F	0.47	.861	9.2	2.4	8	7	8	8	7	---	---	-	-	-
RM7954	M	----	.990	7.2	2.2	7	5	6	5	7	---	---	-	-	-

TABLE 14

Expert Criteria for Post-Therapy Status on Outcome Measures

Measures	Expert				Average
	1	2	3	4	
Q Sort	.8	.8	.8	.7	.78
ICl_{DS}	10	20	--	10	13.3
ICl_{LH}	10	20	--	10	13.3
I, OK-NG	8	7	7	7	7.3
You, OK-NG	7	6	7	7	6.8
Openness	7	7	7	8	7.8
Data-Seeking	9	8	7	7	7.8
Self-Disclosure	7	7	7	7	7

APPENDIX B

MEASURES

ARGYRIS SYSTEM OF CATEGORIES

Individual		WT.	Interpersonal		(Plus) WT.		Outputs
Experiment	i,f	4,16	Help others to experiment	i,f	7,16	↑ Performed Difficulty	
Open	i,f	2,10	Help others to be open	i,f	6,10		Increased Competence
Owning	i,f	1,9	Help others to own	i,f	5,9		
zero----------			----------			----------	----------
Not owning	i,f	-8,-14	Not help others to own	i,f	-3,-5	↓ Defensiveness	
Not open	i,f	-9,-15	Not help others to be open	i,f	-3,-6		Decreased Competence
Reject Experimenting	i,f	-14,-16	Not help others to experiment	i,f	-4,-7		
					(Minus)		

Most people want to change in some way. Think of three ways that you would like to change in the next few months, and label each with a word or phrase (e.g., height, ability to climb telephone poles). Then, rate these three qualities from 1 to 9 on the scales provided here. A rating of 1 indicates that you have none of this quality, and a rating of 9 indicates that you have all of this quality that you feel you need.

Quality--

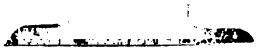
1 2 3 4 5 6 7 8 9
NONE AVERAGE ALL

Quality--

1 2 3 4 5 6 7 8 9
NONE AVERAGE ALL

Quality--

1 2 3 4 5 6 7 8 9
NONE AVERAGE ALL



During your first test session, you named three ways that you wanted to change. Fill in these three qualities here with the same labels you used originally. Then, rate these three qualities from 1 to 9 on the scales provided here. A rating of 1 indicates that you have none of this quality, and a rating of 9 indicates that you have all of this quality that you feel you need.

Quality--

1 2 3 4 5 6 7 8 9
NONE AVERAGE ALL

Quality--

1 2 3 4 5 6 7 8 9
NONE AVERAGE ALL

Quality--

1 2 3 4 5 6 7 8 9
NONE AVERAGE ALL

INTERPERSONAL CHECKLIST

INSTRUCTIONS: Please indicate whether you view each of the qualities listed below as being either mostly true (T) or mostly false (F) as they apply to you. It is very important that you indicate either T or F for each item, even if you are somewhat uncertain of your choice. Fill in only the true items on the attached IBM sheet; leave the false items blank. Also, try to work quickly; most people can complete this information in less than 15 minutes.

1. Able to give orders
2. Appreciative
3. Apologetic
4. Able to take care of self
5. Accepts advice readily
6. Able to doubt others
7. Affectionate and understanding
8. Acts important
9. Able to criticize self
10. Admires & imitates others
11. Agrees with everyone
12. Always ashamed of self
13. Very anxious to be approved of
14. Always giving advice
15. Bitter
16. Bighearted and unselfish
17. Boastful
18. Businesslike
19. Bossy
20. Can be frank and honest
21. Clinging vine
22. Can be strict if necessary
23. Considerate
24. Cold and unfeeling
25. Can complain if necessary
26. Cooperative
27. Complaining
28. Can be indifferent to others
29. Critical of others
30. Can be obedient
31. Cruel and unkind
32. Dependent
33. Dictatorial
34. Distrusts everybody
35. Dominating
36. Easily embarrassed
37. Eager to get along with others
38. Easily fooled
39. Egotistical & conceited
40. Easily led
41. Encouraging others
42. Enjoys taking care of others
43. Expects everyone to admire him
44. Faithful follower
45. Frequently disappointed
46. Firm but just
47. Fond of everyone
48. Forceful
49. Friendly
50. Forgives anything
51. Frequently angry
52. Friendly all the time
53. Generous to a fault
54. Gives freely of self
55. Good leader
56. Grateful
57. Hard-boiled when necessary
58. Helpful
59. Hard-hearted
60. Hard to convince
61. Hot-tempered
62. Hard to impress
63. Impatient with others' mistakes
64. Independent
65. Irritable
66. Jealous
67. Kind and reassuring
68. Likes responsibility
69. Lacks self-confidence
70. Likes to compete with others
71. Lets others make decisions
72. Likes everybody
73. Likes to be taken care of
74. Loves everyone
75. Makes a good impression
76. Manages others
77. Meek
78. Modest
79. Hardly ever talks back
80. Often admired

81. Obeys too willingly
82. Often gloomy
83. Outspoken
84. Overprotective of others
85. Often unfriendly
86. Oversympathetic
87. Often helped by others
88. Passive and unaggressive
89. Proud and self-satisfied
90. Always pleasant and agreeable
91. Resentful
92. Respected by others
93. Rebels against everything
94. Resents being bossed
95. Self-reliant & assertive
96. Sarcastic
97. Self-punishing
98. Self-confident
99. Self-seeking
100. Shrewd & calculating
101. Self-respecting
102. Shy
103. Sincere & devoted to friends
104. Selfish
105. Skeptical
106. Sociable and neighborly
107. Slow to forgive a wrong
108. Somewhat snobbish
109. Spineless
110. Stern but fair
111. Spoils people with kindness
112. Straightforward and direct
113. Stubborn
114. Suspicious
115. Too easily influenced by friends
116. Thinks only of self
117. Tender and soft-hearted
118. Timid
119. Too lenient with others
120. Touchy and easily hurt
121. Too willing to give to others
122. Tries to be too successful
123. Trusting and eager to please
124. Tries to comfort everyone
125. Usually gives in
126. Very respectful to authority
127. Wants everyone's love
128. Well thought of
129. Wants to be led
130. Will confide in anyone
131. Warm
132. Wants everyone to like him
133. Will believe anyone
134. Well-behaved

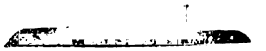
INSTRUCTIONS

Butler-Haigh Q Sort

Self-Sort: Sort these cards to describe yourself as you see yourself today, from those that are least like you (zero), to those that are most like you (8). Work quickly.

Ideal Sort: Sort these cards to describe your ideal person - the person you would most like within yourself to be.

	Least like me					Most like me			
Pile No.	0	1	2	3	4	5	6	7	8
No. of Cards	3	6	9	13	18	13	9	6	3



80 Item Q-Statements

1. I express my emotions freely.
2. Most of my troubles are not my own fault.
3. I feel happy much of the time.
4. I feel secure within myself.
5. It's quite important for me to know how I seem to others.
6. I put on a false front.
7. I often feel that I want to give up trying to cope with the world.
8. I have confidence in myself.
9. I am kept going by hopes for the future.
10. I have courage -- the willingness to keep trying.
11. I usually like people
12. I am a strong, competent person.
13. I am full of life and good spirits.
14. I feel free and unhampered.
15. I can stand up for my rights if I need to.
16. My decisions are not my own. I feel controlled by others.
17. I am liked by most people who know me.
18. I am ashamed of myself.
19. I have some originality or inventiveness in me.
20. I don't remake myself to satisfy each person who is important to me.
21. I have initiative. I can get started on my own.
22. It takes everything I've got just to keep going.
23. If I can't have perfection, I don't want anything. Nothing in between will satisfy me.
24. I am shy.
25. Basically I like myself.
26. I am no one. I am not a person in my own right.
27. I am fearful, often dreading what may happen.
28. My energies and abilities are fully available to me.
29. I am intelligent.
30. I have a feeling I'm just not facing things.
31. I am different from others.
32. I forgive easily -- don't try to hold grudges or try to "get even."
33. I tend to feel envy at other people's good fortune.
34. I am afraid of sex.
35. I have to protect myself with excuses, with rationalizing.
36. I am satisfied with myself.
37. I am sexually attractive.
38. I am worth being loved.
39. I shrink from facing a crisis or a real hard test of myself.
40. I understand myself.
41. I have a feeling of hopelessness.
42. I often feel resentful.
43. I feel helpless.
44. I am disorganized.
45. I am too much the result of past experiences to hope for much change.
46. I feel inferior
47. I am a failure.
48. I am emotionally mature.
49. I am confused.
50. I am optimistic.

51. I am pretty sociable, and really enjoy being with people.
52. I get pleasure out of life.
53. I am critical of people.
54. I am superior to most other people.
55. I get upset when old and familiar things are changed.
56. I am a pretty calm and relaxed person. Few things really bother me.
57. I feel that sex is a source of pleasure, without shame.
58. I generally am fortunate.
59. I am really self-centered -- don't care much about other people.
60. It is pretty hard to really be myself.
61. I am usually an aloof, reserved person.
62. I do care for others and want them to be happy.
63. I am an angry, hostile person.
64. I live largely by other people's values and standards.
65. I really am disturbed -- close to the breaking point.
66. I often feel guilty.
67. I trust my emotions.
68. I am kind and gentle.
69. I have warm emotional relationships with others.
70. I just have to drive myself to get things done.
71. I am a submissive person.
72. I feel able to make up my own mind and stick to it if I want to.
73. I am worthless.
74. I am adaptable. A strange situation is not a crisis to me.
75. I just wish I could be someone else, and forget all about me.
76. I just can't tell anyone my real feelings.
77. I feel adequate.
78. I am a pretty stable person.
79. I can give my love to another.
80. I am conscientious and honorable -- can be depended upon.

Ratings of Behaviors

You are asked to rate yourself on several different dimensions of behavior using the definitions given below.

Openness: Focus on how fully you share personal reactions, thoughts, and feelings with others. The emphasis is on "here and now" interaction, such as how one feels when confronted, challenged, or ignored by others; "back home" experiences, or "childhood traumas" are largely irrelevant except when related to "here and now" interactions. Persons who offer very limited or disguised presentations of themselves should be rated lower than persons who fully and authentically share themselves. Give yourself a rating from 1 to 9.

	MINIMAL				AVERAGE				MAXIMAL
OPENNESS:	1	2	3	4	5	6	7	8	9
	____	____	____	____	____	____	____	____	____

Data-Seeking: Consider how fully you attempt to obtain authentic reactions and information about how others experience you. How fully do you seek to elicit and encourage others to share their reactions and views of you? Persons may block others from providing data in many ways, including a threatening manner, being too timid, by keeping in the background, or even by disguising their interpersonal difficulties. Again, the focus is on the "here and now", so consider only how fully you seek to obtain a better grasp of how you relate to others. Give yourself a rating from 1 to 9.

	MINIMAL				AVERAGE				MAXIMAL
DATA-SEEKING:	1	2	3	4	5	6	7	8	9
	____	____	____	____	____	____	____	____	____

SELF and OTHERS: OKAY and NOT OKAY

These ratings are to obtain your ideas of how "okay" or "not okay" you view yourself and **others**. First, rate yourself in terms of whether you usually experinece yourself as being an "okay" or "not okay" person. Because people rarely consider themselves to be totally "okay" or "not okay", a 9-point scale is provided for this rating. For self-ratings, "okay" is commonly associated with such attributes as: valuable, energetic, bright, warm, secure, vivacious, confident, trustworthy, effective, competent, genuine, etc. Similarly, "not okay" tends to be linked with such qualities as: dull, distant, insecure, cold, rigid, unfeeling, confused, ineffective, unreliable, etc. Give yourself a rating from 1 to 9.

```
       NOT OK                      NEUTRAL                      OK
SELF:    '.....'.....'.....'.....'.....'.....'.....'.....'
         1     2     3     4     5     6     7     8     9
```

Next, rate other people in general (not just your close friends) as to how "okay" to "not okay" you tend to regard them. For this rating, "okay" tends to be associated with such qualities as: accepting, friendly, giving, approving, supportive, sincere, reasonable, understanding, considerate, trustworthy, etc. "Not okay" is often linked to such qualities as: critical, exploitative, cold, hostile, inconsiderate, irresponsible, threatening, rejecting, untrustworthy, etc. Again, encircle the point which best approximates your general view of others. Give them a rating from 1 to 9.

```
       NOT OK                      NEUTRAL                      OK
OTHERS:  '.....'.....'.....'.....'.....'.....'.....'.....'
         1     2     3     4     5     6     7     8     9
```

MOON PROBLEM

INSTRUCTIONS

Instructions: You are a member of a space crew originally scheduled to rendezvous with a mother ship on the lighted surface of the moon. Due to mechanical difficulties, however, your ship was forced to land at a spot some 200 miles from the rendezvous point. During re-entry and landing, much of the equipment aboard was damaged and, since survival depends on reaching the mother ship, the most critical items available must be chosen for the 200-mile trip. Below are listed the 15 items left intact and undamaged after landing. Your task is to rank order them in terms of their importance for your crew in allowing them to reach the rendezvous point. Place the number 1 by the most important item, the number 2 by the second most important, and so on through number 15, the least important.

Box of matches _____

Food concentrate _____

50 feet of nylon rope _____

Parachute silk _____

Portable heating unit _____

Two .45 calibre pistols _____

One case dehydrated Pet milk _____

Two 100 lb tanks of oxygen _____

Stellar map (of moon's constellation) _____

Life raft _____

Magnetic compass _____

Five gallons of water _____

Signal flares _____

First-aid kit containing injection needles _____

Solar-powered FM receiver-transmitter _____

THE CASE OF GEORGE EDWARDS

On March 12, 1966, George Edwards, a freshman at Morgan Park High School, was arrested for rolling drunks (stealing money from drunkards who had fallen asleep in the streets). He was arrested with three other teenagers who had been members of his street gang -- The Ellis Chiefs. The members of the gang were arraigned before the Cook County Juvenile Court where they were tried and found guilty of petty thievery. It was not the duty of the judge to sentence them. Before passing sentence on George, the judge reviewed the reports of the family service agent of that district, the court marriage counselor, George's teachers, and the social worker. Excerpts of these are printed below.

REPORT FROM THE FAMILY SERVICE AGENT -- EXCERPT ON HISTORY OF FAMILY

George's family moved to the slum area, where this felony took place, when he was seven years old. Previously, his family had lived in a lower middle class suburb where George's father owned a small tailor shop. The father's initiative and ability had made the shop a success. At this time, according to reports of each member of the family, the family was a happy one. The parents also reported that George was a quiet, studious boy. Then the father mangled his hand in a pressing machine. No longer able to run his business, he had to sell out at a loss. Injured as he was, the only job he could obtain was that of parking lot attendant. Subsequently, George's family moved into the slum area around Ellis Avenue. George's mother went to work as a private secretary in order to help support the family, and very shortly was earning more money than her husband. The family entered a period of stress. George said in an interview that he had once been very close to his parents; but when this started to

happen, he began to seek companionship outside the home which was no longer a pleasant place to be. George turned to people of his own age for companionship and joined the Ellis Chiefs. The more he associated with this group, the more he tended to adopt their values. As he grew older, he turned away from school where he had once shown great promise. By the age of fourteen, George had become the leader of the Chiefs.

REPORT OF THE MARRIAGE COUNSELOR

The family is extremely unstable. The husband, Charles Edwards, seems to have lost all goals, and is moody and apathetic. The only time he showed any interest in his conversation with me was when he spoke of his past successes as a tailor. He said, "If I could only get on my feet again. I know I could be successful running a grocery store like I was with my tailor shop. But where am I going to get the money?" About his wife, he said, "I still love her although she has become a stranger to me. Since she's gotten that job, things have been different. I don't think she respects me. She's always mentioning that she's the one that earns the money for the family."

The wife is very depressed with the family situation. Her only source of pleasure is her work which today provides the major source of income for the family. She said, "I don't know what to do about Charles. We were once so close to each other but now he seems to resent me. It's getting so I hate to come home because of the continual fights we have. I like to work because it gives me a chance to leave the house. And Charles doesn't even appreciate that I am working to help the family. If it weren't for the children, I would have left before this. As it is, I'm applying for a divorce now."

REPORT FROM GEORGE'S TEACHERS

George's teachers were unanimous in agreeing that George is alert and intelligent. They recommended that he take the college preparatory course; and they said that if he applied himself, he would stand an excellent chance of getting a scholarship to college. George discussed this with his father who said, "If you don't get a scholarship, I won't be able to send you to college. There is no money. If you take the college preparatory course and don't go to college, you won't get any kind of a decent job. I don't think you should take the risk. Stay in the commercial course. At least when you get out, you'll be assured of a job as a bookkeeper."

REPORT OF THE SOCIAL WORKER

The social environment in which George moves is very unhealthy. Unless he is removed from association with the Ellis Chiefs, it is difficult to see how he can be rehabilitated. The neighborhood Youth Center would seem to provide a means for this change. There are, however, problems connected with this. We must realize that George's presence, since he is a gang leader, may be a danger to our youth program. The big question is what are his potentialities for responsible group behavior.

As the judge read these reports, he began to realize that more was involved here than the simple question of punishing the boy. The lives of three people were involved. It would be comparatively easy to send George to the State Reformatory for boys, but it seemed worth while to try to rehabilitate him if it were possible. If it were not, then sending George away would be best. Then the judge realized that if George were to remain at home, several other decisions involving his rehabilitation would

have to be made.

First was the matter of helping Charles Edwards get started. The judge had previously been able to help others who appeared before his court to get loans from the local bank. But it was always important in these cases to be reasonably certain the individual was a good risk. Could he take the chance with Charles Edwards? He didn't know.

Then there is the matter of the wife. He would have to make a recommendation regarding the divorce and certainly one about the wife's job. Closely tied in with this is the question regarding the college preparatory courses. Finally, there was the matter of recommending that George have the potentialities for responsible group behavior? He knew that if he did not decide to send George to the State Reformatory for boys, he would have to make recommendations in each of these fields.

You have been called in as a member of a Juvenile Advisory Panel to consider this case and make recommendations to the judge. YOU WILL BE EXPECTED TO GIVE THE JUDGE A SPECIFIC SET OF CONCRETE RECOMMENDATIONS. If you decide to rehabilitate George you will have the services of the court, marriage counselor, and the local family service agent to help you carry out your program. Make a list of five recommendations from best to fifth best, each recommendation involving all family members.

RECOMMENDATIONS

1.

2.

3.

4.

5.

DECISION BY CONSENSUS

Instructions: This is an exercise in group decision making. Your group is to employ the method of Group Consensus in reaching its decision. This means that the prediction for each of the five recommendations must be agreed upon by each group member before it becomes a part of the group decision. Consensus is difficult to reach. Therefore, not every ranking will meet with everyone's complete approval. Try, as a group, to make each ranking one with which all group members can at least partially agree. Here are some guides to use in reaching consensus:

1. Individual judgments are not necessarily the best approach.
2. Avoid changing your mind only in order to reach agreement and avoid conflict. Support only solutions with which you are able to agree somewhat, at least.
3. Avoid "conflict-reducing" techniques such as majority vote, averaging or trading in reaching decisions.
4. Difference of opinion can be helpful in decision making.

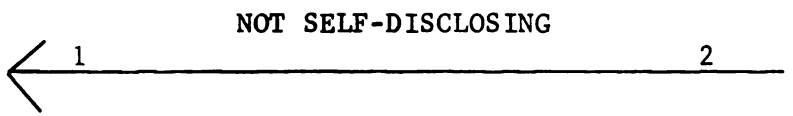
SELF-DISCLOSURE RATING SCALE

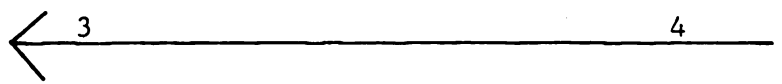
1. Makes an obvious effort to project some desired self-image. Seems to continually express opinions, rationalize or make defensive statements which are often predictable. Personality structure seems very rigid. Person seems not to hear or accept ideas or feelings of others.

2. The effort to project a desired self-image is less obvious than type 1. Rigidity of thinking is partially concealed by a pleasant facade. Seems to hear and accept opinions of others momentarily, but quickly re-establishes a new defensive position with other rationalizations.

3. Seems quiet and withdrawn from interpersonal interaction and uses passivity as a defense against involvement with others. Resists efforts to elicit social participation. Hostility or indifference is often conveyed by non-verbal expressions of boredom, sulkiness or anger.

4. Seems quiet and withdrawn from interpersonal interaction and uses passivity as a defense against the exposure of anxiety and fear. Conveys by expression or other non-verbal behavior an attitude of wanting to communicate with others but of not knowing how or of being afraid to try.





SELF-DISCLOSURE RATING SCALE (Continued)

5. Plays the role of a conventionally friendly person but rarely reveals self. May be outgoing and congenial but is limited by conformity to a social code restricting conversation largely to ideas and safe topics rather than feelings or intimate topics. Seems more inhibited than defensive in emotional expression.

6. Often participates in interpersonal interaction and seems genuinely involved and concerned for others' feelings and problems but rarely reveals own personal feelings. The person who frequently plays helper but hardly ever plays helpee epitomizes this type.

7. Seems in good contact with own feelings and reveals them from time to time. Seems genuinely motivated toward self-honesty which can be shared with others, but sometimes appears uncomfortable with this goal. Expresses more about self than reactions to others.

8. Is actively involved in sharing thoughts and feelings about self and others in interpersonal interactions. Although not always transparent, the person seems to be highly motivated toward being self-disclosing and seldom appears uncomfortable with this goal.

APPENDIX C

ADDITIONAL FORMS

A number of measures are to be used to assess psychotherapy outcome. Please indicate where on each of these measures you would expect a client to be when he successfully terminates therapy.

1. Q sort - What would the self-ideal correlation be? Fill it in here - _____.
2. Interpersonal Checklist - Mark an asterisk on the attached diagram to indicate where a client should be in the circle formed by the orthogonal love-hate and dominance-submission dimensions (L-H and D-S).
3. I-you, OK-not OK - Mark a number from 1 to 9 in each of the two dimensions on the attached sheet.
4. Openness and Data-Seeking - Mark a number from 1 to 9 on each of the two dimensions on the attached sheet.
5. Self-Disclosure Scale - Mark a number from 1 to 8 on the attached sheet.

THERAPIST RATING SHEET

_____ _____ is (was) one of your clients. Rank him (her) on the amount of change he has undergone since you first saw him. Do not rank between numbers.

1. Less than almost all of the clients you have treated.
2. Less than most of your clients.
3. An average amount.
4. More than most of your clients.
5. More than almost all of your clients.

MICHIGAN STATE UNIVERSITY East Lansing, Michigan 48823

Counseling Center - Student Services Building

Dear Students:

We at the Counseling Center believe that one of the ways we have of becoming increasingly helpful to students like yourself is through careful study of your problems and of our effectiveness in helping you with them. We ask that you help us in our study of student problems by participating in a research project that we are currently undertaking at the Counseling Center.

If you agree to participate, your commitment would consist of completing some tests and inventories that we would administer to you before and after counseling, and participating in a group problem solving effort. We would also want you to permit us to tape record your counseling sessions. Finally, two of your friends would be asked to fill out a number of inventories.

All of your responses to the test material are strictly confidential and we can assure you that your responses will be used anonymously in our research endeavors. Since our use of the information will be for scientific purposes, your counselor will not see the results of the tests, unless coincidentally, I am your counselor.

The pre-testing and post-testing will each take about three hours of your time. It is important that you complete the pre-testing before you see your counselor for the first time. We recognize that three hours of testing is a considerable investment of your time, but our experience has indicated that the information from the various tests and inventories is very helpful in understanding student problems.

We would like to administer the tests as soon after this interview as is possible. You will be contacted by phone, and a mutually agreeable time will then be set up.

In summary, your participation consists of your investing three hours of time before and again after counseling, and in permitting us to record your counseling interviews. If you agree to participate, you will be contacted in approximately one week.

We hope that you will be able to participate in this project. Any questions can be directed to Barry Graff, 355-8270 or 351-8076.

Sincerely,

Barry Graff
Psychology Intern

William Mueller
Assistant Director of Research

MICHIGAN STATE UNIVERSITY East Lansing, Michigan 48823

Counseling Center - Student Services Building

Dear

One of the ways we at the MSU Counseling Center attempt to improve our services is by studying the nature of our contacts with students. Presently, we are undertaking a project with which we would like your assistance.

_____ is a voluntary participant in this project; he (she) has supplied us with your name and has given us permission to use any data about him that you supply.

If you agree to participate, please fill out the enclosed materials, using your knowledge of the above-named subject to designate his characteristics. Fill out all forms about the above-named subject, not about yourself. Then, place this letter and the four test sheets in the enclosed envelope and mail it back to the Counseling Center.

All materials obtained in this research are confidential. Your results will only be used for professional purposes, and will not be shared with the subject without your permission.

In addition, we ask that you do not reveal any of your data until after the research is over, sometime in June. Any questions you might have can be directed to Barry Graff at the Michigan State University Counseling Center. Thank you.

Cordially,

Barry Graff
Psychology Intern

William J. Mueller
Assistant Director of Research

Use your knowledge of the subject as he is now in filling out these forms. If you filled out forms about him before, use only interactions with him in the past few weeks to make your judgments. Similarly, if this is the first time that you have filled out forms, use only your interactions from the past two or three weeks with the subject as data.

Name-

Code Number-first initial of father's first name, first initial of mother's first name, and middle 4 numbers of your student number. For example, father's first name-Albert, mother's first name-Beatrice, student number-123456, then code number = AB2345.

Code Number- _ _ _ _ _ _

Check here if you have turned in the names and addresses of a male and a female friend who will receive test materials to fill out.

CLIENT'S RELEASE BLANK

I, _____, student number _____, agree that information obtained during the course of my counseling and testing sessions may be used for scientific purposes. This permission covers the use of test results, counselor's reports, and sound recordings. This permission is given with the understanding that all information will be treated in a professional manner and that adequate safeguards will be taken to insure anonymity.

Signed_____

Date_____

Code No._____

Please write the names and addresses of the male and female, preferably peers, who know you best. They will be asked to fill out test materials about you.

Code No. _____

Please write the names and addresses of the male and female, preferably peers, who know you best. They will be asked to fill out test materials about you. They must have had frequent contact with you in the past month. If they fulfill this requirement, you should supply the names of the two people who filled out the test materials about you at the beginning of the research.