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The Effects of Different Time Arrangements on a Segment of Individual Psychotherapy Sessions

Dan C. Yergensen
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THE EFFECTS OF DIFFERENT TIME ARRANGEMENTS ON A
SEGMENT OF INDIVIDUAL PSYCHOTHERAPY SESSIONS

by

Dan C. Yergensen

A thesis submitted in partial fulfillment
of the requirements for the degree
of
MASTER OF SCIENCE
in
Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1975
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Dan Yergensen
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Abstract

The Effects of Different Time Arrangements on a Segment of Individual Psychotherapy Sessions

by

Dan C. Yergensen, Master of Science
Utah State University, 1975

Major Professor: Dr. Elwin C. Neilsen
Department: Psychology

The purpose of this study was to investigate whether different time arrangements for individual psychotherapy vary in effectiveness for the therapeutic process. The following time arrangements were compared against each other: Treatment I, 1/2 hour sessions twice per week; Treatment II, 1 hour sessions once per week; and Treatment III, 2 hour sessions every other week.

Twenty-one subjects and seven therapists were selected from six mental health facilities in Utah and Idaho for this project. All therapists participating had at least 2 years experience as psychotherapists. All subjects were randomly assigned to one of the three treatments. Each therapist received one subject for each of the three treatments under study, which spread therapist differences equally across treatments.

It was found that time arrangements, by themselves, have no effect upon outcome as measured by the D, Pt, and Sc scales of the MMPI, and a
Therapeutic Progress Questionnaire which attempted to tap the subjects' evaluation of their therapeutic experience. When all subjects (Ss) were compared between pre- and posttesting, it was found that, overall, patients improved significantly (beyond the .01 level) as measured by the D and Sc scales of the MMPI. The Pt scale of the MMPI showed improvement beyond the .05 level of significance--thus, indicating that patients improved regardless of whether they were seen for 30 minute sessions, 1 hour sessions, or 2 hour sessions, when all subjects completed a total of 8 therapy hours before posttesting.
Introduction

There are various approaches to problem solving within psychotherapy—some short-term and some long-term—depending upon the nature of the problem and the technique being employed in attacking the problem. Psychotherapy takes time, not only within the therapeutic setting, but also in real life situations where the client can "try out" new behaviors discussed in therapy and receive feedback on them from the therapist and other people. It is important that the client be able to consult with the therapist about adjusting his behavior in order to satisfactorily solve his problems, and this could involve meeting several times to achieve the therapeutic goals set by the therapist and client. Therefore, psychotherapy is a combination of time with the therapist and time away from the therapist (in outside-of-therapy situations).

Typically, therapy sessions run 50 minutes in length once per week. Is this time arrangement most beneficial for behavior change, or is it simply a matter of tradition for the therapist? Would shorter sessions scheduled more frequently better facilitate behavior change in clients? Would longer sessions spaced further apart better help the client make behavior changes? Mace (1973), in his marital counseling practice, has discontinued using the 50 minute session once per week and has replaced it with 2 hour sessions on alternate weeks. He contends this arrangement is much more facilitative for marriage counseling than the traditional time arrangement. Meeting with a client once per week for 50 minutes may not be the most effective time
arrangement for the facilitation of trying out new behaviors outside the therapeutic setting.

Several research studies (Shlien, Mosak, & Dreikurs, 1962; Rogers & Dymond, ed., 1954; Farnsworth, 1966) indicate psychotherapy is effective in producing behavior changes in clients. The counseling research reported in the literature has dealt with the effectiveness of therapy as an agent of change. This research has centered on the process of psychotherapy (Truax, 1963; Truax & Wargo, 1966; Truax & Carkhuff, 1967) and on its outcomes (Garfield, Prager, & Bergin, 1971; Strupp, 1963; & Farnsworth, 1966), but has not addressed itself to whether different time arrangements for psychotherapy would have an effect on the outcomes. Therefore, the problem is the lack of research findings on the effects of different time arrangements for psychotherapy. The purpose of this study was to investigate whether different time arrangements of individual psychotherapy sessions vary in the degree to which they facilitate the therapeutic process.
Review of Literature

This review of the literature is divided into six areas: First, psychotherapy research involving time as a variable; second, psychotherapy research with a controlled variable; third, the gap between research and practice in psychotherapy; fourth, therapist and client variables effecting outcome; fifth, client expectancy effects; and sixth, outcome measures.

Psychotherapy Research Involving Time as a Variable

Research studies on the effects of different time arrangements for individual psychotherapy are scant. One major research area involving the impact of time arrangements on psychotherapy covers the studies conducted on time-limited therapy. Time-limited therapy involves setting a prearranged termination date before the onset of therapy. Shlien, Mosak, and Dreikurs (1962) studied the effects of time limits within psychotherapy by comparing unlimited client-centered psychotherapy, time-limited client-centered psychotherapy, and time-limited Adlerian psychotherapy with untreated control groups. The client-centered, time-limited group showed the most and fastest change of any of the three experimental groups. Next, was the time-limited Adlerian group, and last was the client-centered, unlimited group. These results indicate that time-limited psychotherapy can facilitate change more rapidly and to a higher degree than unlimited therapy.

A similar study on time-limited psychotherapy by Lorr. Young, Roth, Rhudick, and Goldstein as reported by Phillips and Wiener (1966), compared
the therapeutic effects of time-limited (TL) and time-unlimited (TU) individual psychotherapy. The measures which were utilized include a 70-item Adjective Rating Scale, a Somatic Distress Scale, and a Change Inventory. Upon comparison of pretest and posttest scores of the self reports, the TL patients improved significantly with respect to Somatic Distress, Tension, Depression, Bewilderment, and Fatigue; whereas the TU patients made no improvement on these measures. These results indicate that time-limited psychotherapy can facilitate change more rapidly and to a higher degree than unlimited therapy.

Muench (1964) compared short-term, time-limited, and long-term therapy in a college population. Measurements used were the Rotter Sentence Completion Test and the Maslow Security-insecurity Inventory. When the pretest and posttests were compared, there were significant changes for the short-term and the time-limited therapy, but not for the long-term therapy for both the Rotter and Maslow inventories. Short-term and time-limited therapy were superior to long-term therapy as measured by these instruments. The present study did not utilize a present termination date, as with time-limited therapy, but did preset the length of sessions and the interval between sessions.

A study by Gordon and Gordon (1966) on time-limited therapy compared three forms of psychotherapy in which unlimited therapy and an extended variation of time-limited therapy proved more beneficial than time-limited psychotherapy. Specifically, the three forms were, first, unlimited therapy,
second, time-limited psychotherapy which consisted of 10 sessions only, and a third which they termed "extensive time-limited therapy" in which the patient was seen first for 10 sessions, then returned monthly, bi-monthly, quarterly, and semi-annually on a progressive basis. They found that extensive time-limited therapy was as effective as unlimited therapy and was more effective than 10-session, time-limited psychotherapy.

Rawlings and Gauron (1973) found that with an inpatient mental health setting, an accelerated, time-limited group approach proved very beneficial in the proper utilization of therapeutic resources. Accelerated time-limited group therapy was defined as 10 2-hour sessions, over a 5 week period, including one session which was considered a marathon of 8 hours. The reasoning for this type of group in an inpatient setting was primarily a result of attempts to provide therapeutic intervention to rapid turnover inpatients. Group membership was limited to eight patients and three therapists. Of the eight patients, three were considered responders, one a minimal responder and four non-responders. Follow-up data on the four non-responders revealed that none of these patients were responsive to several other forms of therapy.

They concluded that an accelerated, time-limited approach to therapy is very beneficial to an inpatient population. Good prognosis patients (i.e., responders) receive much benefit from the experience, and poor prognosis patients (i.e., non-responders) can be identified from this group as unreceptive to group psychotherapy, which, in turn, can provide relevant information on which to structure the maximum utilization of therapeutic resources.
Mace (1973) in a discussion of marital counseling contends that short-term counseling with 2-hour sessions on alternate weeks is much more beneficial than the traditional 50 minute interview once per week. Along with this hypothesis, Mace uses a time-limited approach of five 2-hour sessions. Occasionally, he will extend this limit upon the couple's request, however, he holds that this time arrangement is sufficient for amelioration of normal marital discourse and that other problems are present if success is not reached within this time limit. The generalizability from this marital counseling technique to individual psychotherapy is unclear.

Dilling and Robin (1967) found that schizophrenics and depressives consistently misjudge the estimation of time when the estimation is of long periods (median: 31 minutes). Depressives consistently overestimate long time periods, whereas schizophrenics misjudge time periods, both over and under with about the same frequency. In this study, short time period estimations did not provide significant results. These results are consistent with those of Dobson (1954).

Johnson and Petzel (1971, 1972) did receive significant results with schizophrenics estimation of short periods of time. This was also confounded by crowded conditions when estimating short time periods. The implications of these studies for psychotherapy with schizophrenics are important, in that schizophrenics consistently misjudge time for both short and long periods. Because of these overall misperceptions of the time perspective, it is hypothesized that schizophrenics could benefit from a shorter session within
psychotherapy. Further research on time arrangements with the schizophrenic is needed to confirm this hypothesis, and it is quite likely that therapeutic technique would influence this time perspective depending on the focus of "work" within the therapeutic setting.

Several research studies have yielded information regarding the question of how much time is needed to achieve measurable changes in psychotherapy. Cartwright (1955) studied variables affecting outcome in clients who were seen at the Counseling Center of the University of Chicago. Client-centered therapy was utilized. The independent variable was the therapist ratings of success on a 9-point scale. To substantiate the reliability and validity of the measure of success, the author conducted rate-rerate reliabilities which were .86. Validity was estimated from eight studies utilizing correlations between therapist ratings and other measures of the process and outcomes of therapy. In these eight studies, all objective measures of outcome correlated with therapist ratings of outcome beyond the .05 level of significance, except for the Rorschach which did not correlate significantly.

It was found that substantial changes occurred by the end of eight sessions of psychotherapy. This trend continued until the 11th interview, at which time deterioration began to occur until the 21st interview. This deterioration was attributed to high resistance among clients to explore deep interpersonal material.

A similar study by Taylor (1956) utilizing psychoanalytic therapy instead of client-centered therapy, found results closely related to the
Cartwright study. Substantial improvement was found within the eighth session; this continued to the 11th session, then began to drop until the 21st interview. Again, this illustrates substantial improvement within 8 weeks. Therapist and consultant ratings of improvement were the independent variables and the population was 309 cases of varying diagnosis treated within a psychoanalytically oriented clinic.

Kirtner and Cartwright (1958) found that clients with a lesser degree of disturbance were successfully treated in less than 12 hours of psychotherapy. Greater disturbance patients could be successfully treated with longer psychotherapy. The failure group for both short and long term therapy were identified as having greater disturbances and as having low levels of personality integration.

The population for this study was 26 patients seen at the Counseling Center at the University of Chicago. The independent variable was the therapist's rating of outcome on a 9-point scale, with validity and reliability data being the same as the Cartwright study (1955). Clients selected had to meet the requirement of either a success group (7-9 ratings inclusive) or a failure group (1-4 ratings inclusive). This study showed that less than 12 hours of psychotherapy is needed for success if the client has a lesser degree of disturbance.

Shlien et al. (1962) in studying time-limited Adlerian and client-centered psychotherapy have shown that substantial changes do occur within 7 to 8 weeks of psychotherapy. Client-centered, time-unlimited therapy did
not show changes in 7 weeks, but this is understandable when looking at the process of strictly client-centered therapy. Bulter-Haigh Q sorts, in terms of self-ideal correlations, was the independent variable in this study. The population was persons applying for psychotherapy in either the client-centered treatment center or the Adlerian therapy clinic.

Rawlings et al. (1973) found that within 10 sessions of psychotherapy, over a 5-week period in group psychotherapy, that patients could either significantly improve or be identified as non-responders of psychotherapy. The population for this study was inpatients in a hospital setting. The independent variables to assess change were the California Personality Inventory (CPI) and the Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B).

Patterson and O'Sullivan (1974), in reviewing the literature of brief psychotherapy (defined as "up to ten sessions"), has identified three forms of psychotherapy which have shown significant effects in under 10 sessions. They are (1) crisis intervention, (2) brief behavior therapy, and (3) brief psychoanalytically oriented psychotherapy. Case studies are presented from all three modalities in which the criterion for success was established by the fulfillment of contract goals set by the therapist and client.

Significant changes on measures of self-concept and interpersonal social skills within 10 sessions of psychotherapy were found by Thomas (1973). Thirty female subjects at the University of Tennessee with equal groups of low and medium self-concepts were used in this study. The 10 sessions of psychotherapy took place over a 3-week period and showed positive changes in
self-concept and better interpersonal social skills with brief (10 sessions) psychotherapy.

Parsons and Alexander (1973) found that family therapy of 4 weeks (two sessions per week) or 8 hours of total therapy produced significant changes in family interaction as measured by behavioral checklists of independent observers of actual family interaction. These were compared against two different control groups. Subjects in this study were families in which one member had been detained or arrested at Juvenile Court for a behavioral offense.

Oxley (1973) showed improvement in six marital counseling sessions. Improvement was defined as achieving four basic therapeutic goals, which were (1) understanding and insight development, (2) effectively dealing with transference and countertransference, (3) validation and therapist modeling, and (4) experiential learning of better ways of communicating needs and feelings. The extent of change in these four areas was assessed by the therapist. The population of clients was couples seeking help from a university student health center. Although the interpretation of this treatment procedure is limited by the therapists' subjective ideas of change, the specific behaviors defined lend credence to this study.

Rhodes (1973) found that in four psychotherapy groups with children which lasted six or eight sessions, 18 of the 22 subjects made significant changes in relation to motivation for learning, improved academic functioning, improved social adjustment, better peer relations, and increased self-control.
These children maintained these behavior changes in 3 month follow-up data which was collected. These results show that eight sessions of psychotherapy as sufficient for behavior change in public school elementary age children.

Rosenthal and Levine (1970) found brief psychotherapy (8 hours) was nearly as effective as long term psychotherapy with children. Seventy-six percent of the subjects in short term therapy were evaluated as definitely or markedly improved, as rated by their parents on a 93-item symptom checklist, an adjustment form checklist, and an improvement form checklist. The therapists evaluated the subjects on an outcome form checklist. Although the parents' evaluations were primarily used for the criterion measures, both the therapists' checklist and the subjects' teacher evaluations were in general agreement with the parents. Long term psychotherapy (mean sessions = 53.5) subjects were evaluated by the same procedure and received a success rate of 79%. Of the 24% rated as not substantially improved, two factors were found to be present in these subjects. They were (1) symptoms of the most severe nature, and (2) severe and chronic marital discourse in the families of these children. The children in this study came from a child psychiatry outpatient clinic of a university medical center. The study has shown 8 weeks of psychotherapy to be nearly as effective as therapy which is five to seven times longer. Also, two criteria have been identified which would mitigate against short term therapy with children.

In discussing the number of interviews needed to provide evidence of change, Phillips and Wiener (1966) found that the many studies on short term
therapy suggest a relatively small number of interviews will show whether there will be change. They further stated "it can tentatively be assumed that only a relatively few interviews will indicate whether benefits will be achieved."

An outgrowth of the present study has been whether or not significant changes on personality measures such as the MMPI could be found in 8 weeks of psychotherapy. Several past research efforts have shown psychotherapy to be effective within 8 hours. However, few studies have shown significant changes in 8 weeks of measures other than therapist and client ratings of improvement.

Psychotherapy Research with a Controlled Variable

Measuring treatment effects by the use of control groups has not yielded favorable results for psychotherapy, due, in part, to spontaneous remission with control groups; which means that when control groups are measured against treatment groups, often the control groups improve as much or more than the treatment groups. Several reasons for this spontaneous remission within control groups have been identified and will be discussed later. The best known example of spontaneous remission is the Eysenck (1952) survey of studies on the efficacy of psychotherapy. Eysenck believed that in order to make any meaningful statements about the effects of psychotherapy, it was necessary to compare patients with "untreated control groups." In this way, the effects of psychotherapy, if any, would be demonstrated in terms of differences between control and treatment groups. He attempted to establish this by using two different control groups and measuring them against 19 reports
in the literature dealing with the outcomes of both psychoanalytic and eclectic types of psychotherapy.

The first control group was established by surveying the percentage of neurotic patients who were discharged annually as recovered or improved from New York state hospitals. The second control group was made up of 500 patients who presented disability claims due to psychoneurosis and who were treated by general practitioners with sedatives and the like. Eysenck assumed these two groups were made up of patients who did not receive "formal" psychotherapy and, therefore, could be compared against 19 psychotherapy studies in the literature. The amelioration rate for both control groups was near 72%, which he compared with the psychoanalytic and eclectic studies in the literature. He found that the psychoanalytic group improved to the extent of 44%; the eclectic to the extent of 64%. From this information, it seems that psychotherapy is ineffective in ameliorating psychopathology when compared with "no therapy" control groups.

H. H. Strupp (1963) in a critique of Eysenck's survey, established the point that there is an inverse relationship between the intensity of psychotherapy and its effectiveness. Strupp's reasoning for this conclusion was that psychoanalytic therapy is by far the most intense therapy and had an amelioration rate of 44%. Eclectic therapy, which is shorter and less intense than psychoanalytic therapy, showed an amelioration rate of 64%; while "no therapy" groups, or groups which were treated custodially or by general practitioners, showed an amelioration rate of 72%. These data are relevant to the design of
the present study in that the time arrangements for psychotherapy ranged from short, less intense sessions, spaced close together, to longer, more intense sessions spaced further apart. Strupp further said that Eysenck's variable of amelioration was deficient because the criteria for discharge from a state hospital were undoubtedly very different from those of a psychoanalytic treatment center. This implied that patients with a severe psychopathology would, by themselves, seek out long term therapy such as psychoanalysis.

Eysenck's conclusions from his survey about psychotherapy must be questioned because his control groups did receive help, though not in the form of psychotherapy, and the criteria for discharge varied between the groups that were compared.

Several other studies which are worth mentioning supported the idea that "no therapy" control groups are not effective for measuring amelioration rates of psychotherapy. Two studies (Barron & Leary, 1955; Cartwright & Vogel, 1960) both of which utilized adequate control groups—that is, groups that were considered as neurotic as the experimental groups and met the requirements of equal time limits for both experimental and control groups, found negative results with regard to the efficacy of counseling. Both studies found similar amounts of change for all groups involved; thus the data are negative in both instances when comparing experimental and control groups against each other. An interesting point in both studies is that the experimental groups showed significantly greater variability in criterion scores than did the control groups.
Four other studies (Cartwright, 1956; Fairweather, 1960; Mink, 1959; & Powers & Witmer, 1951) have produced results similar to those outlined above. The average amounts of change between experimental and control groups on mean scores was all about the same, but there were significant differences in variability of the individual scores within groups. The dispersion of posttest criterion scores is much wider for the experimental groups than for the control groups. Typically, control groups improved somewhat, with this change clustered about the mean, whereas the experimental groups' changes were typically dispersed all the way from marked improvement to marked deterioration.

Cartwright and Vogel (1960) provided data relevant to this issue of variability in criterion scores for control and experimental groups and to the design of the present study. They found that when therapists were divided into experienced and inexperienced groups, the experienced group produced positive changes whereas the clients in the inexperienced therapist group actually got worse. From the information provided by this study, the most experienced therapists available were used for the present study, in order to achieve optimum counselor effectiveness across treatments.

A study which did produce significant changes between experimental and control groups was a study edited by Rogers and Dymond (1954). However, this study utilized a normal rather than neurotic control group in which to compare change. This put serious limitations on the interpretation of results.
because it was not known whether this change would have taken place outside the therapeutic setting.

Several attempts to investigate spontaneous remission within control groups have been made. Jerome Frank (1961) reported that in a 4 1/2 year follow-up of an experiment in which patients had been seen for 6 months, one-half of them had contact with a medical or nonmedical "help giving person that was more than casual and lasted some time." Also in a survey of "How Americans View their Mental Health" conducted by Gurin, Veroff, and Feld (1960), it was found that when people become seriously upset they sought help, but with significantly greater frequency from clergy, physicians, friends, and teachers than from mental health professionals. The implication was that persons within control groups needing help would get help from various sources rather than remain untreated. Strupp and Bergin (1969) in a discussion of control groups said "It now seems clear that a true 'no therapy' control group is essentially impossible to set up and implement except in a carefully restricted institutional setting." They went on to say this was due to the fact that clients in control groups were almost always involved in a variety of help-seeking behaviors which yielded encounter with therapeutic agents. Past literature has shown that "no therapy" control groups do not provide an adequate basis against which to compare treatment groups. Therefore, no control group was used for the present study.
The Gap between Research and Practice in Psychotherapy

Past counseling research has concerned itself with the efficacy of psychotherapy and what processes or procedures produced the most change in individuals within psychotherapy. Efforts to prove the efficacy of psychotherapy have generally not produced favorable results and, in many instances, have shown psychotherapy to produce deleterious effects upon clients. Because of research variability in psychotherapy, it has failed to make a deep impact on practice and technique. Bergin and Strupp (1972) in discussing these problems stated, "reasons for this lack include the relatively short period of time systematic research has been focused on the problem of psychotherapy, deficiencies in techniques available to the researcher, and practical difficulties in designing and carrying out adequately controlled studies." They went on to state two additional problems which have limited the practical value of previous studies in psychotherapy: First, the extreme complexity of the phenomena under study, and, second, the lack of adequate communication and cooperation among researchers. These have resulted in the lack of comparability in conceptual tools, hypotheses, methods, procedures, subjects, and measuring instruments. The current research study attempts to shed some light on the process of psychotherapy for the practicing psychotherapist.

Bergin et al. (1972), contended that the traditional question "Is psychotherapy effective?" is no longer fruitful or appropriate, and said that this question should be replaced with "What specific therapeutic interventions produce specific changes in specific patients under specific conditions?"
They added that, if this question is to be answered, further implementation of empirical inquiries must be based upon full recognition of the implications of the following statements:

1. Therapists cannot be regarded as interchangeable units; therefore, different therapists, depending on variables in their personality, training, experience, etc., exert different effects under different conditions.

2. Patients, depending upon variables in their personality, education, intelligence, the nature of their emotional problems, motivation, and other factors, are differentially receptive to different forms of therapeutic influence.

3. Technique variables cannot be dealt with in isolation, but must be viewed in the context of patient and therapist variables enumerated above.

4. Outcome measures are frequently restricted to dimensions derived from specific theoretical positions, and thus evidence based upon such measures is difficult to generalize. Other measures are factorially too complex to yield useful empirical or practical meaning, and still others, though factorially pure, are but minimally correlated with other outcome criterion measures. (p. 8)

To the extent possible, the present study, in recognition of these statements, has utilized a design and appropriate outcome measures to control for these influences.

In recent years, psychotherapy research has centered on the very concerns that Bergin and Strupp have outlined. An illustration of these efforts to develop psychotherapy research to a degree that would have practical significance for the practitioner of psychotherapeutic techniques are a series of studies conducted by the Menninger Foundation (Kernberg, 1973).

It was found that patients with high initial Ego Strength improved regardless of the treatment modality and the skill of the therapist. Ego
Strength was defined as a combination of three intimately linked characteristics; (1) the degree of integration, stability, and flexibility of the intrapsychic structures (including variables such as patterning of defenses and anxiety, tolerance, and implicility, the concepts of impulse control, thought organization, and sublimatory channeling capacity); (2) the degree to which relationships with others are adaptive, deep, and gratifying of normal instinctual needs (corresponding to the variable quality of interpersonal relationships); and (3) the degree to which the malfunctioning of intrapsychic structures is manifested directly by symptoms (corresponding to the variable severity of symptoms).

The different modalities of the psychotherapeutic process which were studied included psychoanalysis, expressive psychotherapy, expressive-supportive psychotherapy, and supportive psychotherapy. The analysis of data found that supportive psychotherapy showed the least improvement in patients with high Ego Strength. The greatest improvement was found in patients with high initial Ego Strength who had undergone psychoanalysis. Kernberg emphasizes that high Ego Strength should not be confused with freedom from severe symptoms. High initial Ego Strength refers to one extreme of a continuum with the patient population.

As for patients with low initial Ego Strength, these studies showed that these patients benefited most from a modified expressive or supportive-expressive approach, which focused specifically with the transference phenomena in the treatment hours. It was concluded that the reasons for failure of
this client group (low Ego Strength) to benefit from psychoanalysis is the lack of tolerance of the regression that occurs in psychoanalysis and to their proneness to develop a transference psychosis.

From the findings of this project, the following treatment approach has been developed by Kernberg:

Patients with neurotic syndromes and/or character pathology, who are functioning on a relatively high level of ego strength and who seek treatment for symptoms only recently developed or situationally determined, may be referred for brief, "commonsense" supportive psychotherapy. This treatment approach would bank on general psychological assets, enabling these patients to overcome their immediate life stress and conflicts with minimal psychotherapeutic assistance. At a later stage, and in order to treat more radically their basic neurotic syndromes and/or character pathology, psychoanalysis or (if psychoanalysis is contraindicated or not feasible) intensive expressive psychotherapy is the treatment of choice. In the case of patients with neurotic syndromes and/or character pathology who are functioning on a borderline level of ego organization (patients with severe ego weakness), the treatment should take a basically expressive approach with systematic exploration of the transference in the "here and now," interpretation of their primitive defensive operations (particularly as they develop in the transference relationship), and sufficient structuralization of the patient's life outside the treatment hours to protect a maximally neutral and expressive approach within the treatment hours. (p. 68)

Beyond this treatment plan, which was developed, in part, by the empirical evidence from these research projects, two other important aspects of treatment were identified. The first was that a high level of manifest anxiety (independent of whether the patient had high or low ego strength) is an indication of good prognosis for treatments conducted with the framework of psychoanalytic theory. This was interpreted as suggesting that the painful experience of anxiety is an important aspect of motivation for treatment during
initial stages. The second finding, which supports several others in this review, is that a highly skilled therapist contributes significantly to the improvement of patients regardless of whether the treatment is expressive or supportive. Also, a less skilled therapist is more effective if the modality of treatment is expressive; in that the therapist takes a more active role than in supportive psychotherapy. This writer feels that the Menninger Foundation project is proof that a well-organized and clinically relevant research project can have a deep impact on the practice of psychotherapy.

**Therapist and Client Variables Effecting Outcome**

Studies which have been concerned with finding specific client and therapist characteristics which relate to outcome have identified several factors influencing therapeutic effectiveness.

Learner (1973) found that therapist authoritarianism plays an important role in determining treatment outcome. Authoritarianism was measured by the Democratic Values Scale. Utilizing three outcome measures, (1) Rorschach Psychological functioning, (2) therapist outcome ratings, and (3) client outcome ratings, it was found that the more democratic therapists tended to achieve better outcomes than did the more authoritarian therapists. When severity of initial impairment was held constant, this relationship was significant beyond the .01 level; thus, indicating that therapists' value system has a great influence on treatment outcome in psychotherapy.

Beutler, Jobe, and Elkins (1974) studied the effects of patient-therapist attitude similarity and its effect on improvement. Ss were assigned to therapy
groups on the basis of their latitude of acceptance (acceptor group) of the therapist's attitudes, and their latitude of rejection (rejector group) of the therapist's attitudes. Attitudes were grouped into high, medium, and low centrality. Results showed that the attitudes of the rejector group in medium centrality became significantly more like those of their therapists during therapy than did those of the acceptor group. This data supports the position of dissonance theory, in that increasing discrepancy between communicator and recipient (therapist and client) attitude change will increase as long as other means of reducing dissonance are controlled (Bergin, 1962). On improvement, the same group, the rejector group of medium centrality, improved to a greater extent than did the acceptor group. There was no significant difference between groups in low or high centrality. Improvement was assessed by client ratings of interpersonal satisfaction and self-satisfaction. Overall ratings of satisfaction and therapist ratings of improvement did not provide significant results when comparing patient-therapist attitudes. Thus, these data show a relationship between outcome of therapy and client initial rejection of therapists' attitudes of medium centrality. Within the realm of medium centrality, group psychotherapy produced significant changes in clients' attitudes toward the therapists' attitudes. These results indicate that psychotherapy significantly changes patient attitudes in the direction of the therapists' attitudes.

Devine and Fernald (1973) found that when Ss were shown four different types of therapy for snake phobia and were given their preferred therapy mode,
they received significantly more positive outcome results than did groups receiving non-preferred or randomly assigned treatment. Ss viewed a videotape of four therapists who described and illustrated their technique for treating snake phobia. The therapies were (1) systematic desensitization, (2) encounter, (3) rational emotive, and (4) a combination of modeling and behavioral rehearsal. Sixteen Ss were then assigned to their preferred therapy, 16 were assigned to non-preferred therapy, and 16 control Ss, who had not viewed the videotape, were randomly assigned equally to the four therapies. Analysis showed significant differences (beyond the .01 level) between the preferred group and the non-preferred and randomly assigned therapy groups. These findings show the importance of client ideas, preferences, and expectations on treatment outcome and argue for the practice of having patients learn about available therapies and then choose from them. With such an emphasis being placed on therapeutic efficacy in shorter time periods, the questions upon which this study is based have great implications for client assignment to therapy and procedures employed in these assignments within a mental health setting.

Pettit, Pettit, and Welkowitz (1974) found a significant difference in duration of treatment between social class and authoritarian/submissive scores received by patients relative to their therapist's scores. It was found that the lower the social class, the higher the scores on authoritarian/submissive scales relative to the therapist, the longer the duration of treatment was. There was no significant difference between social class and duration of therapy.
alone, therefore, the authors postulated that authoritarian/submissive patients might tend to remain in therapy precisely because of this quality. That is to say, patients of lower class tend to score higher on submissive/authoritarian scales, and this submissive attitude on the part of the clients kept them in therapy longer.

An interesting point in this research is that the patients were given a choice as to what type of therapist they preferred; likewise, the therapists could specify the type of patient they preferred. Patients' and therapists' preferences were based on such factors as age, sex, or educational background, and theoretical orientation of the therapist.

The clinical coordinator who did the interview, used this information for placement, as well as his own judgement about the type of patient and therapist who work well together. These options added two important factors not present in a setting without preference based placement of clients; (a) it gave the patient an element of choice, and thus dignity and respect, and (b) it gave the therapist an opportunity to state a preference, and, therefore, made it less likely that a patient would have a therapist who would feel or display (overtly or covertly) contempt, dislike, or disapproval on the basis of social class or values. This variation in placement, although procedurally different from the method used by Devine and Fernald (1973), achieved more complementary dyadic relationships of therapists and clients in order to enhance therapeutic outcome.
Grantham (1973) studied the hypothesis that compatibility in race, sex, and language between client and counselor would result in greater client satisfaction and depth of exploration in initial interviews. Indeed, he found, first that black clients are more satisfied with black counselors, even when the level of facilitation and comprehension of non-standard English were adjusted for by the use of analysis of covariance. Secondly, he found that depth of psychological exploration was more dependent upon sex rather than by race. Black clients explored themselves to a greater depth with female counselors than with male counselors, regardless of race. Race and depth of self-exploration did have an interacting effect, but not in the expected direction. It was found that high counselor facilitative conditions on the part of black counselors produced low levels of self-exploration of the part of black clients, whereas with white counselors, low facilitative conditions produced a higher degree of depth of self-exploration on the part of the client. This may be caused by a need on the part of black counselors to identify with the black clients rather to move immediately into the exploration of personally relevant material. He also found that the comprehension of non-standard Black English is not a significant factor in determining client satisfaction or depth of self exploration in initial interviews.

Lubin, Hornstra, Lewis, and Bechtel (1973) found that assignment to group or individual psychotherapy in a mental health clinic was highly dependent upon variables relating to socioeconomic status. The criteria used for assigning clients to psychotherapy involved things such as problems having "an
interpersonal nature to them," "ability to think in psychological terms," "and ability to assume responsibility for one's own behavior." This criteria was found in a significantly greater frequency among middle class patients. They also found that when patients were asked what treatment modality they would prefer, only 26% chose either individual or group psychotherapy. They conclude that because psychotherapy is effective with such a small proportion of patients, that "continued experimentation with new approaches to service delivery for this large group of clients is imperative." The large group of clients was referring to the group which was not suitable for psychotherapy.

Lorion (1974) in a review of literature on the treatment of low-income patients concluded that because of the unique attitudes, perceptions (or misperceptions), and economic feasibility of low-income patients, they were all too often looked over for treatment in a mental health setting. He suggested that both a behavioral therapy approach and time-limited psychotherapy with the utilization of a contract could be useful treatment alternative procedures for dealing with the unique circumstances of the low-income patient.

Grantham (1973) has shown that black clients were much more satisfied with black counselors. Beutler et al. (1974), and Learner (1973), found that therapist attitudes and values had a strong effect on positive therapeutic outcome. However, Lorion (1974) and Lubin et al. (1973) believed that the problem of treating minorities and low-income patients with therapy lied in the idea that traditional psychotherapy, by its very nature, was ineffective with these types of clients. They believed the solutions were to be found in
new techniques and ways of treating this group of patients. The present
writer believes, with the support of the findings of Buetler, Grantham, and
Learner, that the problem does not lie exclusively in the techniques and pro­
cedures of psychotherapy, but rather in the fact that these patients have been
neglected by the therapeutic community in the past, and that there is a lack of
professionals in the field representing minority groups and the values and
attitudes of the low-income population. Therefore, the problem is the lack of
professionals who can accurately identify and empathize with this group of
people. Further research is needed to confirm this hypothesis.

Beutler (1973) argued for a method of assessment which would facili­
tate, to the greatest extent possible, the most positive outcomes available to
the client. This would be done under the concept of social persuasion theory
and the belief that each therapeutic dyad was a unique relationship between
therapist and client. Many (Learner, 1973; Beutler et al., 1974; & Pettit
et al., 1974) have found a significant relationship of outcome and therapist­
client values and attitudes. Beutler felt that this "dyadic assessment" would
allow for meaningful assessment of clients along with assessments of thera­
pists which could have valuable prognostic and treatment implications. These
implications would be assessed for each case and the dyad would be assigned
on an empirically based prediction of the most favorable outcome available.
If therapists' attitudes, values, and skills could be accurately assessed and if
therapists could be assigned to clients who would benefit most from these
particular therapist's attitudes, values and skills, then chances of positive
therapeutic outcome would be fully maximized. Therefore, the assessment involved was the assessment of the therapeutic relationship, rather than the client per se. To assess the client's level of functioning or severity and classification of psychopathology do little or nothing for the intervention techniques to be employed at ameliorating the psychopathology. The work of Devine and Fernald (1973) and Pettit et al. (1974) provided evidence that giving a client freedom to select a particular treatment, and allowing him to take an active role in his own treatment decisions, produces more positive results. These efforts have shown the value of such a procedure, however, further research is needed to determine the important problematic attitudes which therapy might beneficially change, what patient-therapist variables are most significant in producing such change and to distinguish those persuasion variables that can be controlled by the therapist from trait-dependent ones. The work reported by Kernberg (1973) could help in this endeavor from a clinical viewpoint, however, the analysis of the important variables effecting the dyadic relationship are still in need of investigation. The current research project has attempted to explore the area of time arrangements and therapeutic outcome. Although the group design utilized is restricting the use of statistical data to specific therapist and client variables, specific therapists' utilization of the time arrangements could prove meaningful when assessing their particular skills, values, and attitudes, to see if any of these particular therapist variables are interacting in a positive or negative way with the time arrangements.
Maskin (1974) found a significant difference, beyond the .01 level, between counselor's self concept and client's ratings of therapeutic effectiveness. Two groups of graduate students were divided by low and high scores on self-confidence and self-control scales of the Adjective Checklist. Client evaluations were obtained from a brief client evaluation form developed by Cottle (1973). This study supported the notion that a therapist needs to be a congruent, genuine integrated person within the confines of the therapeutic relationship (Rogers, 1957). Again, this showed that therapist characteristics played a vital role in effective therapeutic intervention.

Client Expectancy Effects

The concept of "expectancy of therapeutic gain" on the part of a client has emerged to be a significant theoretical variable in the effectiveness of psychotherapy according to many. This concept has been tested by many researchers with conflicting results. Frank (1959) believed that a patient's expectancy of benefit from treatment in itself may have enduring and profound effects on his physical and mental state. He went on to state that the successful effects of all forms of psychotherapy depend, in part, on their ability to foster such attitudes in the patient. Bednar (1970) claimed that the specific treatment procedures employed are actually irrelevant to treatment outcomes. He believed the important aspect of any therapeutic intervention is the manner in which the therapist convinces the client that he "should be improving" as a result of the expert treatment he is receiving. This philosophy is a good
explanation of the research indicating that inexperienced therapists' clients deteriorate, whereas experienced therapists' clients improve. Adopting persuasion theory philosophy on this phenomena, one would conclude that the experienced therapist could successfully convince the client he should be getting better because of his expertise, whereas the novice therapist was not as skilled or as confident in himself to be able to impart these ideas onto the client in as effective a way as the experienced therapist. Several researchers have presented evidence consistent with this philosophy (Leitenberg, 1969; Oliveau, 1969; Oliveau et al., 1969; Krause, 1967; Goldstein, 1962; Shapiro, 1971; Marcia, Rubin, & Efran, 1969; Krause, Fitzsimmons, & Wolf, 1969). The evidence in these studies indicated a meaningful relationship between client expectancies of improvement and actual improvement.

However, several other studies have failed to produce this evidence of client expectation as related to positive outcome (McGlynn, Mealiea, & Nawas, 1969; McGlynn, Reynolds, & Linder, 1971a, 1971b; McGlynn & Mapp, 1970; Bedvar & Parker, 1969; Kruase, 1968; & Sloan et al., 1970). These studies found that additional instructions to expect improvement or to clarify client expectancies did not produce significant differences between patients not receiving the additional instructions. Also studies by Marcia et al. (1969) and McGlynn and Williams (1970) reported that subjects receiving desensitization with high expectancy instructions actually improved less than subjects receiving low or no expectancy instructions.
Wilkins (1973) isolated a very important and distinct difference between studies reporting positive effects of client expectations and those studies not reporting such results. In all these studies reporting the positive influence of client expectations, the therapists were aware of which subjects had received instructions designed to instill high expectations and those who had not received the instructions. In the studies which did not support the expectancy effect interpretation, the therapists, for reasons of experimental rigor, were uninformed as to which expectancies subjects had received. The obvious implication being that therapists' awareness of the client's expectancy per se, was the critical variable contributing to actual therapeutic improvement. This consistent procedural difference in these studies extremely limits the credibility of the client expectancy effect interpretation. This writer feels that indeed, the client expectancy of improvement is an important factor in therapeutic intervention. However, the interaction of these expectancies and the therapist's expectations of client improvement, seem to be a more critical issue, rather than the client expectation alone. Further research is needed in this area to clarify these effects on therapeutic outcome.

Outcome Measures

A major problem with outcome psychotherapy research is that of measurement of outcome criteria. Several researchers (Truax, 1963; Truax & Wargo, 1966; & Truax & Carkhuff, 1967) have approached the measurement problem by using multiple measures of outcome. In this way, if
one measure was not sensitive to change within psychotherapy, other measures might be. Strupp and Bergin (1969) also accepted this philosophy, but went on to say that there were two main domains of outcome criteria, external and internal states of experience. They recommended, because external and internal criteria measure different human characteristics, and because, with therapy, change occurs in both these domains, that future studies include measures representative of both sides of the dichotomy.

In discussing specific measures, Strupp et al. (1969), list the following: D, Pt, and Sc scales of the MMPI, California Personality Inventory, the Personal Orientation Inventory, and the "neuroticism" and "anxiety" scores of the Sixteen Personality Factors Questionnaire, as sensitive to change within psychotherapy. Instruments for behavioral assessment include the Psychiatric Status Schedule (Spitzer, Endicott, & Cohen, 1967), Fear Survey Schedule (Lang & Lazovik, 1963), Finney Therapy Scale (Finney, 1954), and various ratings of work proficiency, interpersonal behavior, and achievement (Massino & Shore, 1963). Beyond these measures, still the most widely used criteria for measuring outcome are patient and therapist ratings of change. Most of these measures are simple, quick to administer, and consistently provide positive change indices.

Although measuring outcomes is still a very real problem in psychotherapy research, solution of the problem can be approached by using multiple measures and by using measures for which there is evidence of sensitivity to therapeutic change.
In summary, psychotherapy research has failed to make a deep impact on practice and technique of psychotherapy because of the inability to generalize between studies and the extreme complexity of the phenomena under study. Reasons for this inability to generalize between studies are differences in methods, instruments and theoretical viewpoints. Studies involving time as a variable are scant, with the exception of time limited psychotherapy research, which has consistently proven its value as a therapeutic technique. In recent years studies have centered on specific therapist and client variables, along with therapeutic techniques with specific clients which has begun to close the gap between research and practice in psychotherapy.
**Purpose and Objectives**

The purpose of this study was to investigate whether different time arrangements for individual psychotherapy vary in effectiveness for the therapeutic process. Normally, therapy sessions run approximately 50 minutes once per week. Is this time arrangement most beneficial for therapeutic progress? Would shorter sessions more often or longer sessions further apart have different therapeutic effects? Past psychotherapy research has not addressed itself to these questions. The objective of this study was to determine if there was any difference in the therapeutic outcome of psychotherapy when different time arrangements for the sessions are used. Time arrangements to be studied were: Treatment I, 1/2 hour sessions twice per week; Treatment II, 1 hour sessions once per week; Treatment III, 2 hour sessions every other week.

To obtain this objective, the following null hypothesis was tested for each of the instruments used.

1. There is no difference among the mean posttest scores of Ss in Treatment I, Treatment II, and Treatment III.

As the study was designed, it was planned that if null hypothesis #1 was rejected, the following null hypotheses would be tested:

2. There is no difference between the mean posttest scores of Ss in Treatment I and Treatment II.
3. There is no difference between the mean posttest scores of Ss in Treatment I and Treatment III.

4. There is no difference between the mean posttest scores of Ss in Treatment II and Treatment III.
Methods and Procedures

Population and Sample

The population for the study was persons who underwent individual psychotherapy within a mental health setting. Random sampling this population was not feasible. The accessible population from which the researcher obtained subjects were individuals who sought help from the Utah State University Counseling Center, the Mental Health Clinic of Northern Utah, Southern Utah Mental Health Clinic, Murray-Jordan-Tooele Mental Health Centro, Idaho Falls Mental Health Clinic, and a psychiatrist in private practice in Logan, Utah. A total of 21 Ss were used; seven males and 14 females. Ages ranged from 13 to 46 years old; mean age of Ss was 27 years. A total of seven therapists were used; each was assigned three Ss. All subjects from these centers were randomly assigned to one of the three experimental treatments.

The population of therapists from which to draw posed several problems in itself. This population was chosen first, on their willingness to participate in a research project and second, on the basis of the length of their experience as psychotherapists. Cartwright and Vogel (1960) found that the more experienced a therapist, the more positive would be the results. In order to achieve optimum counselor effectiveness for all groups involved, the most experienced counselors available were used. Four therapists involved in this project hold a Ph. D. degree, two an M. S. degree, and one an M. D. All therapists had at least 2 years experience as psychotherapists. There are several
therapist variables which could effect the results of the project, such as age, sex, and therapeutic technique. In order to control for these variables, each therapist was assigned equal numbers of Ss with which each of the three experimental treatments were used.

Design

Three therapy treatments were used; each a different time arrangement. The Ss were pretested before going into therapy and posttested upon completion of 8 weeks of therapy. The pretesting of Ss was done within 1 week prior to beginning therapy. Posttesting of Ss was administered within 1 week after the completion of 8 weeks of psychotherapy. All Ss met with their therapist for a total of 8 hours before posttesting was administered. Therapy did not necessarily end upon completion of these 8 hours, therefore, this could not be considered time limited therapy. Ss in Treatment I met for 2 1/2 hour sessions each week for a total of 8 weeks. Ss in Treatment II met for 1 hour sessions once per week for a total of 8 weeks (this treatment group was the typical psychotherapy time arrangement). Ss in Treatment III met for a 2-hour session once every other week for a total of 8 weeks. These three experimental treatments were compared with each other to determine any differences which may have occurred among them. Therapists were given a leeway of 10 minutes per session for Treatments II and III, and a 5 minute leeway for Treatment I in order for their daily schedules to be maintained.

Each therapist received three clients; one was assigned to Treatment I, one to Treatment II, and one to Treatment III. This yielded a total N of 21,
and individual differences in technique were spread equally throughout the 
three groups. In this way the independent variable, i.e., time arrangements, 
was isolated as much as possible, while holding other variables constant, i.e., 
individual therapist and client differences.

Data and Instrumentation

Measuring effectiveness of psychotherapy accurately is a difficult 
procedure. Several researchers (Truax, 1963; Truax & Wargo, 1966; Truax 
& Carkhuff, 1967) have attacked this problem by using multiple measures by 
which to establish change. Others (Fransworth, 1966; Strupp & Bergin, 1969) 
have suggested the same approach, multiple measures, for evaluating outcomes.

Following the suggestions of Strupp and Bergin, two different mea-
sures were used to assess change in this study. First, a measure of internal 
states of experience, was the D, Pt, and Sc scales of the Minnesota Multiphasic 
Personality Inventory (MMPI). Reliabilities of the MMPI as reported by 
Anastasi (1968) are satisfactory, with split-half reliability in the .70's, and 
test-retest coefficients ranging from .46 to .93 with a median of .76. The 
validity of the MMPI (Hathaway & McKinley, 1967) has been established through 
prediction of clinical cases against psychiatric staff diagnosis with 60% suc-
cess. Even in cases where a high score is not followed by a corresponding 
diagnosis, the presence of the trait to an abnormal degree will nearly always 
be noted. According to many researchers (Garfield, Prager, & Bergin, 1971; 
Strupp & Bergin, 1969) the D, Pt, and Sc scales are sensitive indexes of 
change in levels of subjective disturbance.
The next instrument used for evaluation was a Therapeutic Progress Questionnaire which attempted to measure the achievement of goals in therapy which were set by the client and counselor. A sample questionnaire is shown in the Appendix. This measure consisted of 18 questions which were rated on a 5-point scale, except for one question which was answered as yes or no. This yielded a maximum score of 87. A score of 43 would have indicated "no change," as all questions were rated as 1—became worse to 5—much improved, with 3 always as "no change." This questionnaire attempted to tap general therapeutic progress and attainment of therapeutic goals as well as Ss reactions to the time arrangement they were assigned. All Ss in the project were asked to fill out the questionnaire at the end of the 8 weeks of therapy. This Therapeutic Progress Questionnaire was developed for the use of this particular study only, and has no validity or reliability data collected on it. Therefore, the results obtained on this measure must be interpreted with caution.

Analysis

In analysing the data from this study, three analyses of covariance were used to compare the mean scores of the D, Pt, and Sc scales of the MMPI for Treatments I, II, and III. The covariate for each problem was the pretest scores of Ss, thus it was possible to compare outcomes while adjusting for differences in pretest scores. The analysis of variance was used to compare mean scores obtained on the Therapeutic Progress Questionnaire for Treatments I, II, and III.
In addition to the analyses between different treatments, three analyses of variance for repeated measures were used to compare pre- and posttest mean scores for all Ss in the project for the three scales of the MMPI in order to analyze overall improvement of Ss in this study. Analysis of variance for repeated measures was used for this analysis because dependent samples were being compared against each other. This analysis eliminated the variance within subjects which resulted in a more sensitive F test for illustrating the effects of psychotherapy on this population.
Results

The results obtained from the analyses of covariance of mean posttest scores on the D, Pt, and Sc scales of the MMPI are summarized in Tables 1 to 3.

Table 1

Analysis of Covariance Comparing Mean Posttest Scores of the Depression Scale of the MMPI for Treatment Groups

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
<th>F test Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>32.28</td>
<td>27.14</td>
<td>26.89</td>
<td>.82</td>
</tr>
<tr>
<td>II</td>
<td>33.00</td>
<td>30.00</td>
<td>29.22</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>30.57</td>
<td>23.28</td>
<td>24.30</td>
<td></td>
</tr>
</tbody>
</table>

Note: Degrees of Freedom = 2/17.
F at .05 level = 3.59.
F at .01 level = 6.11.
Table 2

Analysis of Covariance Comparing Mean Posttest Scores of the Psychasthenia Scale of the MMPI for Treatment Groups

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
<th>F test Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>39.42</td>
<td>32.71</td>
<td>31.48</td>
<td>.78</td>
</tr>
<tr>
<td>II</td>
<td>39.85</td>
<td>37.71</td>
<td>36.05</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>35.28</td>
<td>32.00</td>
<td>34.89</td>
<td></td>
</tr>
</tbody>
</table>

Note: Degrees of Freedom = 2/17.
F at .05 level = 3.59.
F at .01 level = 6.11.

Table 3

Analysis of Covariance Comparing Mean Posttest Scores of the Schizophrenia Scale of the MMPI for Treatment Groups

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
<th>F test Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>38.00</td>
<td>34.14</td>
<td>33.61</td>
<td>.94</td>
</tr>
<tr>
<td>II</td>
<td>39.14</td>
<td>37.71</td>
<td>36.11</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>35.14</td>
<td>30.14</td>
<td>32.27</td>
<td></td>
</tr>
</tbody>
</table>

Note: Degrees of Freedom = 2/17.
F at .05 level = 3.59.
F at .01 level = 6.11.
A one way analysis of variance comparing mean scores for the three treatment groups was computed for the Therapeutic Progress Questionnaire and is summarized in Table 4.

Table 4

One Way Analysis of Variance Comparing Mean Scores of the Therapeutic Progress Questionnaire for the Three Treatment Groups

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Mean Squares</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>2</td>
<td>14.90</td>
<td>.52</td>
</tr>
<tr>
<td>Error</td>
<td>18</td>
<td>28.52</td>
<td></td>
</tr>
</tbody>
</table>

Note: Degrees of Freedom = 2/18.
F at .05 level = 3.55.
F at .01 level = 6.01.

Considering these results in terms of the hypothesis to which they pertain, the null hypothesis was accepted for all measures of change utilized in this study. Therefore, it was not necessary to test for hypotheses 2, 3, and 4.

For purposes of comparing overall change for all Ss in this study, analysis of variance for repeated measures comparing mean scores of pretesting and posttesting for all Ss was computed for each of the measures used
which had a pretest to compare against. These results are summarized in Tables 5 to 7.

Table 5

Analysis of Variance for Repeated Measures Comparing Mean Scores of Pretests and Posttest of Ss for the Depression Scale of the MMPI

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Mean Squares</th>
<th>F test Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatments</td>
<td>2</td>
<td>74.31</td>
<td>.57</td>
</tr>
<tr>
<td>Subjects within Treatments</td>
<td>18</td>
<td>129.59</td>
<td></td>
</tr>
<tr>
<td>Within Subjects</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre/Post</td>
<td>1</td>
<td>277.72</td>
<td>9.53</td>
</tr>
<tr>
<td>Interaction</td>
<td>2</td>
<td>16.07</td>
<td>.55</td>
</tr>
<tr>
<td>Error</td>
<td>18</td>
<td>29.15</td>
<td></td>
</tr>
</tbody>
</table>

Note: Degrees of Freedom = 1/18.
F at .05 level = 4.41.
F at .01 level = 8.28.
Table 6

Analysis of Variance for Repeated Measures Comparing
Mean Scores of Pretests and Postests of Ss
for the Psychasthenia Scale of the MMPI

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Mean Squares</th>
<th>F test Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatments</td>
<td>2</td>
<td>92.67</td>
<td>.38</td>
</tr>
<tr>
<td>Subjects within Treatments</td>
<td>18</td>
<td>245.61</td>
<td></td>
</tr>
<tr>
<td>Within Subjects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre/Post</td>
<td>1</td>
<td>172.02</td>
<td>7.20</td>
</tr>
<tr>
<td>Interaction</td>
<td>2</td>
<td>19.81</td>
<td>.83</td>
</tr>
<tr>
<td>Error</td>
<td>18</td>
<td>23.88</td>
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</tr>
</tbody>
</table>

Note: Degrees of Freedom = 1/18.
F at .05 level = 4.41,
F at .01 level = 8.28.
### Table 7

Analysis of Variance for Repeated Measures Comparing Mean Scores of Pretests and Posttests of Ss for the Schizophrenia Scale of the MMPI

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Mean Squares</th>
<th>F test Value</th>
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<tr>
<td>Between Subjects</td>
<td>20</td>
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</tr>
<tr>
<td>Treatments</td>
<td>2</td>
<td>118.50</td>
<td>.36</td>
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<tr>
<td>Subjects within</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Treatments</td>
<td>18</td>
<td>332.53</td>
<td></td>
</tr>
<tr>
<td>Within Subjects</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pre/Post</td>
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<td>123.43</td>
<td>9.06</td>
</tr>
<tr>
<td>Interaction</td>
<td>2</td>
<td>11.64</td>
<td>.85</td>
</tr>
<tr>
<td>Error</td>
<td>18</td>
<td>13.63</td>
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</table>

**Note:** Degrees of Freedom = 1/18.
F at .05 level = 4.41.
F at .01 level = 8.28.

These data show significant changes in subjects between pretesting and posttesting for 8 weeks of psychotherapy. The D and Sc scales of the MMPI were significant beyond the .01 level. The Pt scale of the MMPI was significant at the .05 level.
Discussion

Evaluation of Findings

The results of this study indicate that varying the length and frequency of therapy sessions does not have an effect upon outcome. No differences in adjusted posttest means were found between Treatments I, II, or III as measured by the D, Pt, and Sc scales of the MMPI. These data were supported by the Therapeutic Progress Questionnaire which also yielded no differences between treatments. When pre- and posttest scores were compared for all subjects involved, it was found that patients did improve significantly as measured by the D, Pt, and Sc scales of the MMPI. The D and Sc scales showed significance beyond the .01 level and the Pt scale was significant at the .05 level. In this study, patients improved regardless of whether they were seen for 30 minute sessions, 1 hour sessions, or 2 hour sessions when all subjects completed a total of 8 therapy hours before posttesting.

An outgrowth of this study was to verify that significant changes could be measured in clients with 8 weeks of psychotherapy. The results showed that experienced therapists could produce positive changes in clients in 8 weeks. Past literature presents evidence of psychotherapeutic efficacy for short-term psychotherapy in a minimum of five to six sessions and ranging up to about 14 sessions. Studies have also shown that patients with great disturbance will probably need longer therapy (at least 21 sessions) to deal effectively with the regression and transference effects which are present in long term therapy.
Few studies on short term therapy have reported significant change utilizing second order inference measures such as the MMPI. Therefore, the results of this study have shown that significant changes can be found in 8 weeks of psychotherapy utilizing change indices such as the MMPI. Had no improvement been found in patients in this study, it might have been argued that the design or the instruments used were insufficient to answer the question of whether time arrangements of individual psychotherapy sessions influence therapeutic outcome. However, since patients in all three treatments improved significantly in this study, it is legitimate to conclude that time arrangements, by themselves, do not affect therapeutic outcome.

While the results of this study indicate that length of therapy sessions, as a single factor, do not make a difference in outcome of psychotherapy, there are other considerations of length and frequency of therapy sessions which should not be overlooked. As with techniques and procedures employed by specific therapists in psychotherapy, time arrangements may be an important variable in relation to specific client disturbances and specific therapists' utilization of different time arrangements of sessions. The design of the present study did not address itself to this question.

A general concensus between participating therapists in this study was that initially severe symptoms call for a more intense time arrangement, such as in Treatment I or III. This idea was also expressed by many clients when asked about the usefulness of the time arrangements upon posttesting. The research conducted by the Menninger foundation (Kernberg, 1973) found that
patients with initial low ego strength are best facilitated in psychotherapy if
the modality of treatment is basically expressive with systematic exploration
of the transference in the "here and now." Also, they found that patients with
high initial ego functioning are best facilitated by psychoanalysis or intensive
expressive treatment. The research by Kernberg and the impressions of the
therapists and clients in the present study, suggest that intensive expressive
treatment could best be facilitated by longer sessions and that high ego strength
in the clients would infer that they could go longer between sessions. On the
other hand, low ego strength clients might warrant sessions which focused on
the transference in the "here and now" which could best be facilitated by
shorter sessions more frequently, in order to deal more effectively with the
transference and build greater ego strength in the client. Thus, empirical
interactive research on these ideas could prove a fruitful next step.

The design of the present study called for all Ss in all treatments to
meet for a total of 8 hours before posttesting. Thus, it leaves unanswered the
question of whether different outcome effects would occur if a time arrangement
which reduced the total number of treatment hours was employed. Possibly, a
patient with the right combination of ego traits could improve as much with a
1/2 hour session every week as compared with a 1 hour session every week.
Many clients in the present study under Treatment III expressed the preference
of 2 hour sessions biweekly over 1 hour sessions every week. Thus, another
possible arrangement which could provide as effective a treatment as 1 hour
sessions weekly, would be 1 1/2 hour sessions every other week. Both of
these possible arrangements would considerably reduce the total treatment hours. Further research into these possibilities could prove beneficial.

Another general observation of the therapists involved in this project was that psychotherapists, for the most part, are trained in therapeutic intervention techniques utilizing a 50 minute hour. This arrangement is the most comfortable for therapists. Most therapists commented on the difficulty of switching time arrangements with clients because of the unfamiliarity of the arrangement used. These therapists felt that once they became comfortable with the new arrangement, their therapeutic effectiveness increased because they were better able to structure the appropriate intervention at the appropriate times. This suggests that training therapists in using longer therapy hours and familiarizing them with difficult time arrangements might prove useful to the counseling and clinical graduate student. However, the fact that patients did improve suggests that these skilled therapists were able to adjust to a point that their effectiveness was not impaired over the total 8 hour therapy sequence.

**Sensitivity of the Outcome Measures**

Analysis of variance for repeated measures was computed to compare the pre- and posttesting of all Ss in the three treatments together to determine the overall change of subjects in this study. From these data, it was concluded that the D, Pt, and Sc scales of the MMPI are sensitive indices of change within psychotherapy. The D and Sc scales showed significance beyond the .01 level and the Pt showed significance at .05. These data are especially important to this study when looking at the fact that the duration of treatment was only 8 weeks.
long. In looking at specific F values for the three scales, the D scale showed the most difference in pre- and posttesting of Ss, the Sc next and the Pt showed the least amount of overall change of the three scales utilized.

Limitations

The present study was limited to the question of time arrangements as the sole independent variable. No attempt was made to consider interaction of the time arrangements and other factors such as, patient ego strength or type of problem. Although initial disturbances was statistically controlled for by the use of analysis of covariance, this procedure mitigated against comparing individual client and therapist reactions to the time arrangements studied.

A second limitation of the project was the small number of subjects involved in the study (N = 21). Greater generalizability could have been achieved if a larger subject population could have been used. However, in view of the very small F values obtained between treatments and in comparison with the significant overall therapeutic change found, this suggests that even with a larger N there would not have been significant differences between groups. The reasons for this small N are due to the practical difficulties in finding therapists willing to devote their time to participating in research of this kind and the attrition rate of Ss involved in a project of this length. In order to control for therapist characteristics, the design called for therapists to be spread out equally across treatments. Therefore, when an S from one treatment dropped out of therapy, this affected the Ss the therapist was seeing in the
other two treatments. If a therapist did not have one S for each of the three treatments, then therapist characteristics were not being controlled for.

This study was also limited by using only one reliable outcome measure, the MMPI. Two other measures were utilized in this study, the Psychiatric Status Schedule (Spitzer, Endicott, & Cohen, 1967) and the Therapeutic Progress Questionnaire. Due to improper administration of the Psychiatric Status Schedule, results obtained on this measure were not reported. Nevertheless, these results were consistent with the results of the MMPI for this study. If, in future studies, administrators of this schedule were strictly trained and it was insured that these raters did not have clinical responsibility for the subject and interrater reliability coefficients were tabulated, this instrument could prove useful to the psychotherapy researcher.

The Therapeutic Progress Questionnaire used in this study was originally designed to tap the attainment of therapeutic goals set by the therapist and client. However, because of the difficulty in getting all participating therapists to establish clear behavioral goals at the onset of therapy, this measure was limited to tapping only client ratings of improvement. Thus, the results from this instrument can only be considered as suggestive, but nevertheless, this general rating of improvement by clients did offer some support for the results obtained from the MMPI in regard to the finding of no difference between the three treatment groups under investigation.
Recommendations for Further Research

This writer sees four areas worthy of further scientific inquiry.

First, research investigating the possible outcome effects of psychotherapy utilizing different time arrangements which result in overall shorter time the client is seen in therapy. This would be compared against the 50 minute once per week arrangement in order to assess if therapeutic outcome is as beneficial when overall time with the therapist is shortened. Two possible arrangements for study would be 30 to 40 minute sessions once per week and 1 1/2 hour sessions biweekly. This should be done, however, on a more homogeneous population than the present study used, i.e., a specific psychopathological disorder.

Second, it is recommended that a study be conducted on the possibility that the initial level of ego strength, either high or low, interacts in a positive way with the assignment of either short or long sessions. It is hypothesized that high initial ego strength would benefit more from longer sessions spaced further apart, and that low initial ego strength clients would be better facilitated by shorter more frequent sessions.

The third line of inquiry would involve studying the effects different time arrangements would have on specific psychopathologies. Several studies (Dilling & Robin, 1967; Johnson & Petzel, 1971, 1972; & Dobson, 1954) have shown that schizophrenic patients have overall misperceptions of the time perspective. A comprehensive study on the treatment effects of different time
arrangements of psychotherapy with schizophrenic patients could prove beneficial in treating this disorder.

Fourth, a study of different time arrangements of sessions in various different approaches to counseling, such as marital and family counseling, could provide needed information for practitioners in these areas. Mace (1973) believes that 2 hour sessions every other week are much more beneficial than 50 minute sessions once per week in ameliorating normal marital discourse. Several therapists who participated in the present study also feel the same way as Mace, that marital and family counseling need longer sessions to be effective. However, at the present time, there is no empirical evidence to support these claims.
Summary and Conclusions

This study was conducted to investigate whether different time arrangements for individual psychotherapy vary in effectiveness for the therapeutic process. Three time arrangements were compared against each other:
(1) 1/2 hour sessions twice per week, (2) 1 hour sessions once per week, and
(3) 2 hour sessions biweekly. Instruments used for measuring change were the MMPI and the Therapeutic Progress Questionnaire.

Twenty-one subjects and seven therapists were used for this study, each therapist received one client for each of the three treatment groups. Thus, differences in therapists were spread equally across treatments. The null hypothesis of no difference among the mean posttest scores of Ss in Treatment I, II, and III was accepted for this study. When all Ss were compared together between pre- and posttesting, it was found that clients did improve regardless of which time arrangement was utilized. The D and Sc scales of the MMPI were significant beyond the .01 level in pre- and posttesting of Ss. The Pt scale of the MMPI was significant at the .05 level.

From the results of this study it was concluded that the time arrangement of sessions, as a sole independent variable, does not have an effect upon outcome in individual psychotherapy. Also, it was concluded that experienced therapists could produce significant changes in clients within 8 weeks of psychotherapy. Past literature on short term therapy has shown psychotherapeutic effectiveness in as short a period as five to six sessions. Few
studies have shown significant reductions in scores obtained from second
order inference measures such as the MMPI. Thus this study, utilizing the
D, Pt, and Sc scales of the MMPI as outcome criteria, has supported the
findings of past research efforts in the literature which have shown positive
changes in clients for short term psychotherapy.
References


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Goldstein, A. P. *Participant expectancies in psychotherapy*. *Psychiatry*, 1962, 25, 72-79. (b)

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**THERAPEUTIC PROGRESS QUESTIONNAIRE**

Please answer the following questions by circling the appropriate response from 1 through 5. On most questions, 1 will indicate that things have become worse, 3 will indicate no change, and 5 will indicate things have become much better.

1. Are you more or less anxious since you psychotherapeutic experience than you were before?
   - 1-most always anxious
   - 2-more anxious
   - 3-no change
   - 4-less anxious
   - 5-much less anxious

2. Do you feel better physically?
   - 1-very much worse
   - 2-sometimes worse
   - 3-no change
   - 4-less anxious
   - 5-much better

3. Have your feelings improved toward people in general?
   - 1-very much worse
   - 2-somewhat worse
   - 3-no change
   - 4-somewhat improved
   - 5-very much improved

4. Have your feelings improved toward the significant others in your life, i.e., friends, parents, boy or girl friend, spouse, etc.?
   - 1-very much worse
   - 2-somewhat worse
   - 3-no change
   - 4-somewhat improved
   - 5-very much improved

5. Do you feel more free or less free to choose your own decisions in life?
   - 1-much less free
   - 2-less free
   - 3-no change
   - 4-more free
   - 5-much more free

6. Does therapy work (are you satisfied with what has happened to you)?
   - 1-does not work
   - 2-works somewhat
   - 3-has no effect
   - 4-works well
   - 5-works very well

7. Would you recommend therapy for others?
   - 1-not recommend
   - 2-recommend with reservations
   - 3-recommend
   - 4-strongly recommend
   - 5-very strongly recommend
8. Would you recommend this therapist for others?

1-not recommend
2-recommend with reservations
3-recommend
4-strongly recommend
5-very strongly recommend

9. Did you like this therapist's approach?

1-much disliked
2-disliked
3-no comment
4-liked (seemed to work for me)
5-very much liked (worked exceptionally well for me)

10. Do you feel you've solved your problem(s)?

1-have become much worse
2-have become worse
3-no change
4-somewhat solved
5-completely solved

11. Could your problems have been solved sooner than they were?

1-very much sooner
2-sooner
3-just right
4-need more time
5-need much more time

12. I had adequate time for change to take place.

1-strongly disagree
2-disagree
3-undecided
4-agree
5-strongly agree

13. Do you take more risks in your life now?

1-fewer risks
2-somewhat fewer risks
3-no change
4-more risks
5-many more risks

14. Did you like the time arrangement you had?

1-much disliked
2-disliked
3-somewhat liked
4-liked
5-much liked

15. Have you made any permanent changes in your life, i.e., job change, divorce, marriage, quit school, started school, etc.?

1-no
2-yes
16. Have physical problems decreased, i.e., headache, pains, stomach problems, etc.?

1-increased  2-increased  3-no change  4-somewhat decreased  5-decreased very much, or completely stopped

very much

17. In general, is your thinking better (is your thinking clearer, are you forgetting things less, do solutions to problems come faster)?

1-much worse  2-worse  3-no change  4-better  5-very much better

18. Are you worrying less about yourself and your problems?

1-much more  2-more  3-no change  4-less  5-much less

If there has been anything significant about your psychotherapeutic experience that has not been covered in the preceding questions, please feel free to comment on them below.
Vita

Dan C. Yergensen

Candidate for the Degree of

Master of Science

Thesis: The Effects of Different Time Arrangements on a Segment of Individual Psychotherapy Sessions

Major Field: Psychology

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