CLIENT-COUNSELOR COMPATIBILITY AND THE EFFECTIVENESS OF COUNSELING. FINAL REPORT.

VOCATIONAL REHABILITATION ADMIN. (DHEW) REPORT NUMBER RD-1741-F PUB DATE APR 68

EDRS PRICE MF-$0.50 HC-$4.40 108P.


A SYSTEMATIC EXPLORATION WAS UNDERTAKEN OF THE CHARACTERISTICS OF CLIENTS AND COUNSELORS TO PROVIDE AN EMPIRICAL BASIS FOR EFFECTIVE MATCHING PROCEDURES. DATA WERE COLLECTED ON SIX SEPARATE SAMPLES, WITH MINIMAL INTERFERENCE OF THE NORMAL COUNSELING PROCESS. BEFORE THE FIRST INTERVIEW, A SERIES OF PERSONALITY TESTS AND A QUESTIONNAIRE ABOUT EXPECTATIONS WERE ADMINISTERED TO CLIENTS AND COUNSELORS. AFTER TERMINATION, BOTH CLIENTS AND COUNSELORS EVALUATED THE COUNSELING BY MEANS OF QUESTIONNAIRES. THE VARIABLES STUDIED WERE--(1) CLIENT-COUNSELOR SIMILARITY AND COMPATIBILITY IN PERSONALITY, (2) COMPLEMENTARITY OF CLIENT-COUNSELOR EXPECTATIONS ABOUT COUNSELING, (3) SEX-MATCHING, AND (4) THE ACCURACY OF THE COUNSELOR'S PERCEPTIONS OF HIS CLIENTS. ANALYSES INDICATE THAT BOTH CLIENTS AND COUNSELORS RESPOND PRIMARILY IN TERMS OF A GENERAL EVALUATIVE SET, BUT THAT THEY ALSO DISCRIMINATE AMONG DIFFERENT ASPECTS OF THE COUNSELING PROCESS. ALTHOUGH A MINIMALLY SATISFACTORY RELATIONSHIP WAS NECESSARY, THE ACHIEVEMENT OF COUNSELING OBJECTIVES DEPENDED MORE ON COGNITIVE, PROBLEM-ORIENTED, GOAL-DIRECTED ACTIVITIES. NOT ALL CLIENTS WERE EQUALLY SENSITIVE TO THE INTERPERSONAL SITUATION BETWEEN CLIENT AND COUNSELOR. THE INVESTIGATORS BELIEVE THAT THE PRECOUNSELING EXPECTATIONS OF CLIENTS ARE NOT AS IMPORTANT AS THEIR PERCEPTIONS OF WHETHER THEY WERE GETTING WHAT THEY WANTED. (CG)
Final Report

Client-Counselor Compatibility and the Effectiveness of Counseling

Vocational Rehabilitation Administration Grant No. RD-1741-P

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April 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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This investigation was supported, in part, by Research Grant No. RD-1741-P from the Vocational Rehabilitation Administration, Department of Health, Education, and Welfare, Washington, D. C., 20201.

CG 001 877
Significant Findings for the Rehabilitation Worker

The purpose of this research project was to examine the effects of the matching of client and counselor on the course and outcome of counseling. Clinical experience and previous research indicate that the effectiveness of counseling is influenced by how well the characteristics which the client and counselor bring to counseling fit together. At present, however, we know relatively little about what makes for a good fit and what makes for a poor one. Thus our aim was to explore systematically characteristics of clients and counselors which can be used to provide an empirical basis for effective matching procedures. The variables chosen for study were client-counselor similarity and compatibility in personality, complementarity of client-counselor expectations about counseling, sex matching and accuracy of the counselor's perceptions of his clients ("empathy").

The study was conducted at the Counseling Center of the University of California, Berkeley. Data were collected on six separate samples in a way which was designed to interfere minimally with the normal process of counseling. Before their first interview, clients were asked to participate in a research study which they were assured would have no effect on their own counseling. A series of personality tests and a questionnaire about expectations were administered to those clients who agreed to take part (about 85% of those asked). The counselors completed the same tests. After termination, the counselors and clients evaluated the counseling by means of questionnaires developed for this study.

Findings

1. Analyses of the outcome questionnaires indicate that both client and counselor respond primarily in terms of a general evaluative set, but that they also discriminate to some extent among different aspects of the counseling process. In many cases, it is reported that little was accomplished despite a good relationship or that counseling was effective even in the context of an uncomfortable relationship.

2. Marked dissimilarity between client and counselor in personality as measured by the Myers-Briggs Type Indicator almost always leads to counseling of short duration. Similarity leads as often to short as to long counseling but seems to be a necessary condition for relatively long duration. High similarity is also associated with the failure of clients to appear for scheduled interviews and with early unilateral termination by the client. It bears no consistent relationship to evaluations of counseling effectiveness however.

3. Neither client expectations alone, nor the similarity of client and counselor expectations has any discernible effect on outcome.

4. Sex matching per se has no consistent relationship to the
outcome of counseling, but personality matching variables have a considerably stronger effect on outcome within opposite than within same sex client-counselor groups.

5. There are no significant differences attributable to level of counselor experience itself, but clients with different kinds of problems respond differentially as a function of counselor experience. The relationships here are complex since they differ for male and female clients, but the significance of this finding lies in the fact that experience proved an important variable only when its interactions with sex and presenting problem of the client were considered.

6. The compatibility of the client and counselor as operationalized by FIRO-B is strongly related to outcome but for female clients only. Surprisingly, compatibility in the two need areas most concerned with the emotional aspects of relationships, Inclusion and Affection, are consistently associated with unfavorable outcomes. Compatibility in the Control need area is associated with favorable outcomes. These data represent the clearest, but not the only, indication of the importance of sex differences in counseling.

7. The accuracy with which a counselor predicts the pre-counseling expectations of his individual clients is positively related to duration and to favorable evaluations of counseling. However, the accuracy measure proved to be an artifact of two unrelated processes - the degree to which the client is stereotyped in his expectations and the degree to which the counselor predicts him to be stereotyped. Detailed analyses of the counselor predictions gives no evidence of an ability to perceive differences among clients. However, if a client is stereotyped in his response and, for some unknown reason, the counselor believes him to be, accuracy will be high and counseling will be viewed as successful by both client and counselor. These findings raise serious questions about the role of "empathy" in counseling and point instead to the important influence of stereotypes, real and perceived, on the counseling process.

Implications

The results support, in general, the basic assumption of the study that the matching of client and counselor exerts an important influence on outcome. It is also clear, however, that not every aspect of matching has an effect on outcome and that the methodological problems inherent in this kind of research make the suggestion of concrete matching procedures premature. The findings do provide several leads for future research, and in the body of the report, detailed suggestions about appropriate research strategy are included. At present, the greatest need is for replication studies and relevant data from a variety of counseling settings.

From a theoretical standpoint, the data raise questions about the
presumed role of the client-counselor relationship in counseling. Our findings indicate that factors like similarity and compatibility which in non-clinical relationships lead to increased interpersonal attraction and liking, are not related to positive outcomes of counseling. These and other data suggest that the task and relationship aspects of counseling need to be considered separately. While a minimally satisfactory relationship is necessary to maintain counseling contact, there is a danger that the goal of counseling can be lost in the pursuit of a "good" relationship. Achievement of counseling objectives depends more, we believe, on the cognitive, problem-oriented, goal-directed activities of the client and counselor.

A second major conclusion is that not all clients are equally sensitive to the relationship aspects of counseling. The data indicate that when a female is involved in counseling, whether as client or counselor, the interpersonal situation becomes a more salient factor. Male clients in general, though, seem more goal-directed and business-like than females. It seems most important for both counselors and researchers to become aware of the possibility that males and females have different needs, perceptions, approaches, and emphases in counseling.

Finally, the importance ascribed by some writers to client expectations about counseling seems exaggerated. It is our view that pre-counseling expectations are not strongly held and that events in counseling can easily make them irrelevant. However, whether or not the client perceives that he is getting what he wants (rather than what he expects) in counseling may be a matter of importance.

These data provide ample evidence of the potential importance and utility of systematic, empirically based, matching of client to counselor. Effective matching alone can hardly guarantee success, but the results of the project strongly suggest that it is a feasible and practicable way to facilitate favorable counseling outcomes.
Acknowledgments

This research, from its inception, has been in every sense of the term a co-operative effort. I am grateful to many people for their help, advice and support, but it is to the participants in these studies, the clients and counselors, that I stand most in debt. The clients gave freely of their time and effort without any tangible reward and the counselors not only took tests and filled out innumerable forms, but also gave solid advice about the conduct of the research and valuable suggestions about the meaning of many of the findings. In particular, I wish to express my thanks to Barbara A. Kirk, Manager of the Counseling Center of the University of California, Berkeley, who has been at all times an enthusiastic supporter of this research effort and an invaluable research collaborator.

In presenting this study, I often use the terms "we" or "our". This reflects the fact that several people have been active and essential participants in the research. Dr. Marvin H. Geller played a central role in the initial conceptualization of the research and was the indispensable man of the project for several years. The contribution, especially in the sphere of methodology, of Madeline Poynter and Neil Rankin were invaluable and permeate this entire report. Karlene Hahn Roberts, Gary Bron and Robert Ekblad all served as dedicated and resourceful workers. I hope that they benefited as much from their experience with the project, as the project did from their efforts. A special note of appreciation is due to Candace Won for her assistance in the preparation of this report and to Dr. Donald W. MacKinnon, Director of the Institute of Personality Assessment and Research, University of California, Berkeley, where much of this report was written. Finally, I wish to thank the Vocational Rehabilitation Administration not only for providing financial support, but also for the numerous ways in which it helped facilitate our research efforts.
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Introduction

(a) Franz Alexander, writing in 1965, argues that "The intensity of the emotional experience (in psychotherapy) can be strong if the two personalities...fit to create a corrective experience. That same patient with one kind of doctor will need only a few sessions; with others, five years could not be enough...There is a tremendous chance element in therapy...It is a great chance whether the two personalities will click." (p. 105) The argument is equally applicable to all forms of clinical, helping, relationships. Both clinical experience and the research literature make it evident that a given counselor is not equally effective with all the clients he sees. In recognition of this fact, some counseling facilities make an effort to assign clients to counselors on some sort of systematic basis. It is rarely the case, however, that decisions about which counselor should see which client proceed from a firm empirical base, for objective data on the effects of client-counselor matching are not plentiful. The object of the present project is to investigate characteristics of the client and the counselor which can be used to provide an empirical basis for effective matching procedures. In terms of Alexander's quote, our purpose is to try to increase the likelihood that the "two personalities will click" and thereby reduce, at least a bit, the "chance element" in counseling.

(b) It has become something of a commonplace in discussions of counseling and psychotherapy to assert that the nature of the relationship between client and counselor is the primary determinant of the success or failure of clinical efforts. Particularly since Fiedler's (1950) report of minimal differences in attitude and practice between experienced adherents of different schools of therapy, attention has turned away from questions of formal theory and increasingly toward questions of interaction. Similarly, research concerned with the effects on counseling of the personality of the counselor or of the client has not produced a consistent, replicated body of data which enables us to predict outcome with any confidence. It seems again that the interaction between the personalities and characteristics of the client and counselor is more important to outcome than the personality of either considered independently. For example, Whitehorn and Betz (1960) were able to identify, on the basis of Strong Vocational Interest Blank patterns, two groups of therapists, one of which (A) was clearly more effective with hospitalized schizophrenics than was the other (B). However, McNair, Callahan and Lorr (1962) found that A type therapists were less effective with out-patients than were B types. In a study of a treatment program for enlisted men in the Navy who were disciplinary problems, Grant and Grant (1959) found that a client variable, interpersonal maturity, was related to effectiveness of the treatment but that the primary determinant of outcome was the interaction of the client variable with the characteristics of the counselor. Relatively mature "clients" responded favorably to psychologically oriented treatment personnel, but this kind of counselor seemed to have a deleterious effect on immature "clients". A traditional military disciplinary
orientation on the part of the counselor worked much better for the latter. It seems, then, that while the effects of client and counselor personality cannot be ignored, our best chance for understanding and predicting the course and outcome of counseling may well be to consider which counselor is interacting with which client.

Given these considerations, the objectives of the present research project are both theoretical and applied. On the one hand, we are concerned with how such variables as client-counselor similarity in personality, complementarity of counseling expectations, sex matching, and accuracy of the counselor's perception of his client effect the course and outcome of counseling. The investigation of these relationships should provide important material for our basic understanding of the nature of the interaction which is the core of all counseling endeavors. But it should also help us to answer the question which arises continually in the daily operation of a clinic, "To which counselor should this client be assigned?" It is largely the latter objective which determined the basic methodological approach of the study. Our primary concern was with what the client and counselor bring to the counseling situation in the way of personality characteristics and expectations. This orientation allows for minimal interference with the counseling process itself and, since explicit matching of client and counselor would have to be based on precounseling assignments, is an approach dictated by the objectives of the project.

To summarize: there is ample evidence that the effectiveness of counseling is strongly influenced by the "fit" of the characteristics which the client and the counselor bring to counseling. At present, we know relatively little about what makes for a good fit and what makes for a poor one. The purpose of this study was to examine the effects of the matching of client and counselor on the course and outcome of vocational, educational and personal counseling. It was our hope that such information could begin to provide an empirical basis for using the assignment of clients to counselors as a major step in facilitating effective counseling. The predictor variables chosen for study were client-counselor similarity in personality, complementarity of client-counselor expectations about counseling, sex matching and accuracy of the counselor's perceptions of his clients.

(c) Research interest in the problem of client-counselor matching has been sporadic; there are only a few studies directly concerned with this problem and in some of the studies to be reviewed, matching is only a peripheral matter. Moreover, the variables investigated, the techniques of analysis; the characteristics of the samples, and the clinical processes studied have all varied sufficiently from study to study to make an integrated presentation of the literature most difficult. Consequently, this review will be organized in terms of several categories of investigation and at the end of the section an attempt will be made to draw some generalizations.

The counseling interview as a two-person system. In some respects,
the most powerful way to study the effects of matching is to assign the same client successively to several counselors and to have each counselor see several clients. This design allows for a detailed examination of how a single client is affected by different counselors, how a counselor alters his behavior from client to client, and the behavior shown by both client and counselor irrespective of the person with whom they are paired, i.e., the consistencies in their behavior. The major drawback of this design is that it is rarely feasible and more rarely considered desirable to have a single client seen by several counselors. However, there are two studies in the literature in which this was done. Because of their complexity, they will be described in some detail. Van Der Veen (1965) conducted a study on a ward where patients could (and did) see any of eight therapists they wished to. Three patients who had seen each of the same five therapists at least two times were selected and recorded interviews were scored for two patient and two therapist variables. The data were analyzed by an analysis of variance design in which patient and therapist were the main effects of relevance. For the patient variables, both main effects and the patient-therapist interaction were significant but for the therapist variables only the two main effects yielded significant F ratios. Moreover, the two therapist variables and the two patient variables were positively correlated. Although the dependent variables were not as reliably scored as one would wish and there was no control for order effects, the results indicate that the relationship between therapist and patient is best viewed as a system in which the two members are interdependent, the behavior of one having a direct effect on the other and vice versa. Moos and Cimes (1967) ran a similar, but better controlled, study using four patients in a brief contact, out-patient clinic where contact with different therapists was a standard procedure. Four patients each of whom had seen the same four therapists four times were selected. The interviews were recorded and transcribed and scored with high reliability on five variables. Therapists and patients were scored on the same five variables, e.g., number of words (activity), number of questions asked. Again an analysis of variance design was used to analyze the data. The results indicate that the therapists alter their behavior considerably from patient to patient, while the patients tend more toward consistency in their behavior. Significant patient-therapist interaction effects were found in six of the ten analyses. Thus, the authors conclude that their argument for a system approach is supported by these data in that the behavior of the participants is mutually interdependent. In particular, the behavior of the therapist seems not to be primarily determined by traits or techniques but rather by the patient with whom he is matched.

These two studies are valuable in that they demonstrate the interdependence of client and counselor in a relatively unmistakable fashion. Moreover, their design makes it possible to obtain a direct empirical answer to the question, "What would have happened if this client had seen a different counselor?" But, both are very limited studies since the samples are small, the nature of the data and of the data analysis prevent generalization to other clinical situations and there is no
indication of effects on outcome. Nevertheless, they provide confirmation of the fundamental assumption of the present research project that a consideration of which counselor is interacting with which client is basic to our understanding of the course and outcome of counseling.

Two other studies, by Rottschafer and Renzaglia (1962) and Gabbert, Ivey and Miller (1967) also demonstrate matching effects without providing information about the critical variables involved. The former attempted to examine the hypothesis that counselor style, leading or reflective, and client expectations about counselor style would interact to affect the frequency of dependency statements by the client. The counselors could not be reliably classified, however, since they changed their style from client to client. This result is in accord with the Moss and Clemes finding, in that counselor behavior is a function of the client with whom he is matched rather than of trait or technique variables. Gabbert, Ivey and Miller (1967) were concerned with the question of whether or not different counselors are more successful with some kinds of clients than with other kinds. They conclude that the "data clearly illustrate that some counselors work best with vocational-educational counseling, some with males, etc." The client variables for which differences appeared were sex and presenting problem.

These four studies all demonstrate matching effects but in each case no generalizations beyond the particular sample of counselors used are possible. Their contribution, then, is more in terms of demonstrating a phenomenon than in helping to clarify its nature.

**Similarity.** The most frequently studied matching variable is client-counselor personality similarity. This is a natural variable for matching research since it has been shown to be related with some consistency to interpersonal attraction and liking in non-clinical situations (Lott and Lott, 1965). The data can be organized in terms of the form of the relationship, positive linear, negative linear or curvilinear, obtained between similarity and outcome.

Mendelsohn and Geller (1963) found that the duration of counseling was positively related to similarity of client and counselor in terms of the Myers-Briggs Type Indicator (MBTI). This test is concerned, primarily, with preferences in the cognitive-perceptual style area. Axelrod (1952) found that similarity on certain Rorschach variables leads to therapeutic progress. The most important variables were those which reflected intellectual functioning. Tuma and Gustad (1957) likewise interpret their findings for several California Psychological Inventory scales as indicating that similarity is positively related to increased self-understanding. Their sample consists of only two counselors, however, and close inspection of their methodology raises questions about whether or not they have operationalized similarity correctly. Vogel (1961) finds some slight evidence in favor of the hypothesis that similarity in authoritarianism is related to positive
outcomes. The results, though, are at best of marginal significance and depend on some questionable methodological assumptions. Finally, Mendelsohn and Geller (1965) found that freshman clients, whose relationship needs are presumably quite high, feel most comfortable and understood by counselors who are similar to them in personality.

There are two reports of negative relationships between similarity and outcome. Snyder (1961) reported that he worked least well with clients who most resembled him on the Edwards' Personal Preference Scale. However, since only one counselor was included in the study, it is difficult to evaluate the meaning of the results. Lesser (1961) measured the similarity of client and counselor self-report Q sorts and found that the greater the similarity, the less the apparent client progress. Progress was measured by the then usual client-centered criterion of real self-ideal self discrepancy. Lesser makes one additional observation of the greatest interest - if the counselor is aware of the similarity between himself and the client, he can overcome the negative effects of similarity.

Curvilinear relationships between similarity and outcome have also been reported in the literature and in each case a middle level of similarity has been associated with favorable results (Carson and Heine, 1962; Cook, 1966; Gerler, 1958; and Mendelsohn and Geller, 1965). In the last named study, the effect of similarity (on the MMTI) was in part a function of another matching variable, sex of client-sex of counselor, and of the client's class standing. The curvilinear pattern was more pronounced in opposite sex than in same sex client-counselor pairs and for non-freshman clients. It was argued that class standing is important because of a difference between freshman and more advanced students in counseling objectives. The Carson and Heine study, which measured similarity in terms of the MMPI, is of particular interest because it is the only result for which there are replication efforts. Both Carson and Llewellyn (1966) and Lichtenstein (1966) failed to find any relationship between MMPI similarity and ratings of outcome by supervising psychiatrists even though the procedure, samples, and outcome criteria they used are very much like those in the original Carson and Heine study. Carson and Llewellyn did find, however, a non-significant relationship between similarity and duration of therapy which resembles that reported by Mendelsohn and Geller, i.e., high dissimilarity is associated with relatively short duration.

Despite the number of significant findings relating similarity to outcome, the literature remains quite inconclusive. The studies cited use a wide variety of personality measures, outcome criteria, and client populations and most significantly, the only reported attempted replications failed completely. Thus, previous research suggests the importance of similarity as a variable, but does not provide any stable, replicated findings on which matching procedures can be based. One reason for the inconclusiveness of the data, we believe, lies in the nature of the methodology employed in these studies. These problems of research design will be discussed in a later section.
Other matching variables. In this section we will be concerned with a variety of matching variables which cannot be subsumed under a single category like similarity.

Hiler (1958) was concerned with the "type of patient most apt to continue or discontinue treatment with various types of therapists." Patients were categorized on the basis of their productivity on the Rorschach as predicted stayers or predicted quitters. The question of whether the actual rates of early termination for predicted stayers and quitters varied as a function of therapist characteristics was then investigated. It was found that female therapists and "warm" therapists held unproductive patients longer than expected. For male therapists and "cold" therapists, patients acted as they were expected to on the basis of the Rorschach. McNair, Lorr and Callahan (1963), studying a similar population, failed to replicate the finding for female therapists, however. Indeed, therapist profession, experience, personal psychotherapy, competence, liking for patient, and "A-B" type (see below) also failed to relate differentially to holding predicted stayers or quitters. "They did not include the variable of therapist "warmth", though, and their criterion of early termination was different from Hiler's. Thus the two studies are not directly comparable. One interesting aspect of the McNair, Lorr and Callahan study is that while "stayers appeared to respond as predicted with most therapists in the sample...there was a distinct group of therapists who somehow retained potential quitters in therapy." (p. 15). They were not able, however, to discover the differentiating characteristics of this group although there is evidence that therapists could distinguish between quitters and stayers and showed a preference in selecting one or the other type as patients. This seems a potentially fruitful area for future research, but again, generalizations are not possible at this time.

Perhaps the most promising matching variable in the entire literature is the "A-B" classification of therapists proposed by Whitehorn and Betz (1954). They observed that there were two types of psychiatrists which could be differentiated in terms of success with schizophrenic in-patients. A therapists were successful with schizophrenics, B therapists were not and, significantly, both had equal success with neurotic and depressed in-patients. The researchers were then able to devise a system for identifying As and Bs a priori on the basis of Strong Vocational Interest Blank (SVIB) responses. This system was successfully used to predict the outcome of treatment for schizophrenics (Whitehorn and Betz, 1960, Betz, 1962). McNair, Callahan and Lorr (1962) then investigated the predictive value of the SVIB A-B classification in an out-patient population and found that the Bs were more successful with this group than the As. This combination of findings is most encouraging since it clearly points to a relatively simple matching procedure - assign in-patient schizophrenics to A type therapists and out-patients to B type therapists. Interest in the A-B classification system has been further increased by a series of studies in which
there has been an attempt to elucidate its psychological meaning (Carson, Harden and Shows, 1964; Kemp, 1966, Shows and Carson, 1965). These studies have not provided a really clear picture of the significance of the A-B distinction but they do provide varied evidence of its meaningfulness. The most intriguing possibility is that a cognitive-perceptual style variable is involved, for Shows and Carson found Bs to be extremely field-independent.

There is, however, one study which raises questions about the predictive importance of the A-B classification. Stephens and Astrup (1965) working at the same clinic in which Whitehorn and Betz gathered their original data, took the "process" - "non-process" variable as well as the A-B classification into account. They studied patients who had been in the clinic over a 10 year period and used 14 year follow-ups. They concluded that both short and long term outcome are "far more dependent on the total clinical status of the patient when he came for treatment than on the type of therapist who treated him." Despite this finding, the weight of evidence argues strongly for the potential utility of the A-B distinction and there is little doubt that it should be further investigated.

The final matching variable to be considered is client-counselor "compatibility" as measured by Schutz's (1958) FIRO-B. Sapolsky (1965) administered the test to a small sample of hospitalized female patients and their therapists. Compatibility as operationalized by this test was positively and significantly correlated with outcome as measured by supervisors' ratings of patient improvement. Patients in high compatibility pairs appeared to feel more similar to and better understood by their doctors. Thus Sapolsky suggests that the relationship between compatibility, and outcome is mediated by the effect of compatibility on the patient's perception of her doctor. There are a number of methodological flaws in this study which will be discussed later and the sample is limited in size, restricted to female patients and has only three doctors. Thus, as Sapolsky acknowledges, the generality of his findings is uncertain, but again we have a finding of potential significance.

Sex Matching. Studies of the interaction of client and counselor sex are rare even though it is the easiest form of matching to study. Cartwright and Lerner (1963) found same-sex and opposite-sex client-counselor pairs to differ in several process and outcome measures. Counselors were more empathic initially with opposite-sex than with same-sex clients, but this difference disappears by the end of counseling. This may be related to the fact that in same sex pairs the counselors thought they were more similar to the clients than they really were. Finally same-sex clients treated by experienced and opposite sex clients treated by inexperienced counselors showed the greatest improvement. Gonyea (1963) found greater improvement in one of three client self-rating variables to be associated with same sex matching. Like the Cartwright and Lerner result, same-sex clients did better with experi-
enced therapists but there was no difference in this regard for opposite sex clients. These data, in general, point to a rather complex set of inter-relationships among sex of client, sex of counselor, presenting problem and counselor experience. Fuller (1963) found that when either the client or counselor or both were female, there was greater expression of feelings in counseling. Finally Mendelsohn and Geller (1963, 1965) found no consistent relationship between sex matching and duration of counseling or client evaluations of outcome.

Again the results are far from consistent, but they do suggest the importance of considering the effects of sex differences, in terms both of client and counselor, on the data. This has rarely been done in any of the research reviewed and, as will be seen, this is a serious omission.

Matching of expectations. The extent to which client expectations are compatible with those of the counselor and with his behavior has been described as an important factor in counseling outcome (see, for example, Bordin, 1955). The findings of Heine and Trosman (1960) appear to give some support to this assertion. They found that patients expecting to be passive and to receive medicine terminated early while those who conceptualized therapy in a way congruent with therapists' expectations remained. The latter saw the therapy relationship and verbalization as major instruments of change and accepted some degree of responsibility for the outcome of therapy. Since therapists as a group tend to hold a similar view, the results imply that complementarity of expectations about roles is a necessary condition for the continuation of therapy. However, no direct assessment of the degree of mutuality between individual client and counselor expectations was attempted.

Clemes and D'Andrea (1965) classified clients as having guidance (therapist active, interview structured) or participation (therapist passive, interview unstructured) expectations. The counselors were then instructed to give structured interviews to half of each group and unstructured interviews to the other half. The results indicate that when the interview was incompatible with expectations the clients were more anxious and the counselors found the interview more difficult. These results are interesting, but in light of the Moos and Clemes (1967) finding that counselors change their behavior from client to client and the Rottschafer and Renzaglia (1962) finding that counselor style, leading or reflective, changes from client to client, one cannot help but wonder about the effect of constraining the counselor to function in a rigid and pre-determined role. Nevertheless, the study does suggest that it is disturbing for a client to receive an interview which is not in accord with his expectations. Similarly Severinsen (1966) found that clients are dissatisfied when a counselor is perceived as acting in a way the client does not expect. No measure of actual counselor behavior was included in this latter study.

We have already mentioned the failure of Rottschafer and Renzaglia...
to find stable counselor styles across clients. Despite this, they were able to study the effects of confirmation or disconfirmation of client expectations by examining how a counselor acted with a given client. Clients were given a set to expect a leading or reflective style of counselor behavior and, for each client, the counselors were categorized as having acted in a leading or reflective manner. No interaction between the client and counselor variables was found. The meaning of this result is difficult to assess since the counselor's could not be categorized a priori. Thus the two main effects, counselor style and client set, may not be independent. The findings as stated, though, do not show a significant influence of confirmation or disconfirmation of expectations on client behavior.

Danskin (1955) assessed client expectations and relevant counselor behavior from records of interviews. He concluded that "a counselor may establish a good working relationship even though the counselor does not play the role the client expects". In this study, unlike the others cited, client expectations were not assessed before counseling began.

A different kind of expectation, the expectation of change, was measured by Goldstein (1960). Clients and counselors completed two Q sorts; one for the client's present self and the other for the expected self after therapy. A measure of "closeness" of client and counselor expectations was derived from these Q sorts and related to the amount of change clients perceived in themselves after treatment. Neither client expectations, counselor expectations, nor "closeness" was related to perceived change but "closeness" was positively associated with duration. The sample here is very small, however, n=15, and the variables seem quite complex and inter-dependent. Thus, the meaning of the study is far from clear.

Once again, we find that an area of matching studies provides some hopeful results but fails to provide an unequivocal and consistent set of relationships. This is certainly the modal picture. Given the complexity of the phenomena under study and the relatively short history of matching research, it is, perhaps, not surprising that a stable body of findings has not yet been developed. However, each area reviewed includes some studies which indicate that matching does have an important effect on outcome. Clearly the present need is for a systematic attack on this problem and, above all, for attempted replications of the more promising results.

(d) The research to be reported was conducted in its entirety at the Counseling Center of the University of California, Berkeley. The Center offers free service to students of the University who almost always come on a voluntary basis. They seek help for a wide variety of educational, vocational and personal problems and range in adjustment from those who are essentially normal to a few who are quite seriously disturbed. By and large, counseling is of short duration, the modal
contact being two sessions, but when it is demanded by the nature of the case, more prolonged contact is provided.

The Counseling Center is staffed largely by full-time, professional psychologists of considerable clinical experience. In addition to this core group of counselors, the Center also accepts advanced graduate students in Counseling and Clinical Psychology as trainees. Consequently, the range of experience represented by the staff is a very wide one, though during the time of this project, none of the participating counselors was without at least one, half-time year of prior clinical experience. Further details about the characteristics of the staff and the clients will be reported in subsequent sections.

Although there are evident limitations involved in carrying out this kind of research in a single counseling facility, there are also important advantages. The most important of these is the accessibility of a wide range of data about the clients, the counselors, and the course of counseling. This availability of data makes it feasible to explore possibilities not originally envisioned, to collect additional measures if needed and to evaluate more fully hunches, inferences and interpretations which arise during data analysis. Further, the sine qua non of this research, counselor and agency cooperation, was assured; the staff of the Counseling Center not only participated fully in the research efforts, but also made valuable suggestions about procedures and contributions to the understanding of results. The potential gain in the meaningfulness of findings seemed to us to outweigh some possible restrictions of generalizability.

Methodology

(a) Population, sample and data collection procedure. We have already given a brief indication of the general nature of the setting in which the research took place, but a more detailed description of the client population and the counseling process is necessary here. Expectably, the large majority of the clients are between 18 and 22 years of age, but the population includes many older clients as well. Although a substantial number seek aid for personal and emotional problems, the majority want help in the making of choices and decisions. For younger clients, this typically focuses on the choice of a major, for the older ones, decisions about vocational choice are central.

The significance of these choices is often greater than one would initially suspect. For people of this age, the attempt to decide whether to stay in school or which major, profession or job seems most appropriate is also an attempt to understand and define the self (Super, 1951), to become aware of capabilities and limitations, to explore future rules, in Erikson's terms, to develop a sense of identity (cf. Galinsky and Fast, 1966). The problem for the women is, at times, even more intense, for they must consider not only which
career to pursue, but also whether the pursuit of a career is itself a reasonable goal. Such factors are not overtly present in every case, of course, but their presence leads to an orientation in which the client's problems are viewed within a developmental and personality framework as well as in terms of the current environment. Consequently, the client-counselor relationship is explicitly emphasized as a critical factor in the counseling.

One final point about the clients requires expansion: as noted before the clients come to the Counseling Center almost entirely on a voluntary basis. Neither the decision to come to the Center nor, it should be added, to participate in the research was the result of coercion or administrative decision. This freedom appears to allow for behavior on the part of both clients and counselors which is more likely to be related to interactions and events within counseling than to pressure exerted on the client by an external source.

We wrote previously about the limitations and advantages of conducting this research in a single counseling facility. Some of the same limitations apply to the nature of the client sample. It is obvious that students who come to a University counseling center differ in many respects from typical rehabilitation clients. However, they share one basic goal - the establishment of a vocational identity through the process of counseling: within this context, the problem of effective matching of client and counselor is one which arises in all counseling and therapeutic efforts. At present, the literature indicates that matching does seem to be an important factor in outcome, but it is impossible to make concrete statements about how, precisely, it should be done. We felt, then, that the best strategy was to investigate the effects of matching intensively within a single client population before trying to extend findings to other counseling situations. The need for caution in generalizing from our data to other counseling situations is clear, but, at the very least, we hope to generate matching procedures and hypothesis of heuristic value that can be tested in a variety of clinical settings.

All the counselors at the Counseling Center during the period of a given data collection, including the trainees, participated in the research. Thus a total of 25 counselors took part, 11 of whom were females and 14 males. Since data were collected on six samples, the specific characteristics of the counselors will be reported for each sample in a subsequent table (number 1).

The data collection procedure was quite straightforward and was designed to avoid interference with the counseling process insofar as possible. Each client coming to the Counseling Center for the first time during a given data collection period was asked to participate in a research study designed to improve counseling services. Clients were told that this would entail about an hour of psychological testing and that the results would not be available to their counselors but would
be reserved for research purposes only. If a client agreed, the testing was scheduled prior to his first counseling contact and carried out by the testing staff of the Counseling Center. Although it would have been desirable, in one sense, to include all appropriate clients in the sample, it was deemed unwise to compel participation. Despite the absence of coercion, 85 to 90% of the clients agreed to participate in all but the last of the data collections. For reasons which are still not clear, only about one-half of the appropriate clients took part in that sample. The usual reason for refusal was lack of time and it is possible that since the University had just changed to a quarter system when the last data collection was begun, the clients felt the time pressure more keenly than before.

There is good reason to believe that the client sample used in these studies is representative of the population of clients from which it was drawn. Given the very high rates of agreement to participate, in all but the last sample, it is unlikely that the samples of volunteers deviated greatly from the Counseling Center population as a whole and there were no apparent differences between those who agreed and those who refused. However, it should be noted that we asked only those clients who had come to the Counseling Center for the first time to participate. This was done in order to control for the variable and difficult to analyze effects of previous experience at the Counseling Center. Particularly since one of the factors of interest in this study was the effect of expectation, it was felt that we needed "naive" clients if we were to make reasonably accurate inferences about the effects of the matching we were observing. Thus, we conclude that our sample is a representative one with respect to the population of clients coming to the Counseling Center for the first time.

During the testing period preceding counseling, data concerning 1) the presenting problem, 2) client personality and 3) client expectations (and preferences) about counseling and the counselor were collected. Prior to the beginning of the data collection period counselors took a battery of personality tests comprised of the same tests administered to the clients. In one sample, an assessment of counselor expectations about counseling and of their perception of themselves as counselors was also undertaken. The independent client, counselor and matching variables, were thus assessed before the counseling proper began and could not be influenced by the counseling process itself. One measure was collected during counseling, however, again, in only one sample: after the first session, counselors were asked to respond to the client expectations questionnaire as they thought their clients had at the outset of counseling. This was intended to provide a measure of the accuracy of the counselor's perception of his client's expectations. No other measures were collected while counseling was in process. We will describe each measure in detail in the next section.

The outcome measures were (1) duration of counseling (2) pattern
of counseling appointments (3) client attitudes toward and evaluation of their counseling experience and (4) counselor attitudes toward and evaluation of their counseling. These data were assessed after the termination of each counseling series. A series was considered terminated when the client did not schedule another session for two months after his last recorded interview. At that time, number of sessions, cancelled and missed sessions, etc. were recorded, and a questionnaire was mailed to the client. It should be noted that the questionnaires were not sent to all the clients in a sample on the same day, but rather the date of mailing was determined by when the particular client in question had had his last interview. Thus the period between termination and the client's assessment of outcome was constant for all clients. If a client did not respond to the first mailing, a second, follow up, questionnaire was sent to him after two weeks. More than 2/3 of the clients returned usable questionnaires. Analyses of data contrasting the personality scores of respondents and non-respondents revealed no consistent significant differences between the two groups. However, those clients who terminated counseling after only one session were significantly less likely to return completed questionnaires than were those who stayed longer. It is the case, of course, that the clients who provided a complete set of data represent a smaller sample than those who initially agreed to participate in the study. Nevertheless, about 60% of the clients asked eventually took the tests and responded to the questionnaire.

We have previously noted that data were collected on six separate samples. During the grant period, data from all six were analyzed, although three of the data collections had been completed prior to the grant award. The sixth and last data collection took place toward the end of the grant period and was not completed until after the termination date. Thus, at the time of writing, only partial analyses of the data from this sample were possible. Listed below are the basic characteristics of the counselors in the first five samples and the number of clients who participated in each.
Table 1

Characteristics of the Counselors and Clients in the Six Samples

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of counselors</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>males</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>females</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Number of trainees</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Experience (full time)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 2 years</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
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<tr>
<td>2 - 5 years</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
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<tr>
<td>More than 5 years</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>5</td>
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<tr>
<td>Number of clients*</td>
<td>45</td>
<td>100</td>
<td>115</td>
<td>140</td>
<td>111</td>
</tr>
<tr>
<td>males</td>
<td>20</td>
<td>54</td>
<td>73</td>
<td>86</td>
<td>56</td>
</tr>
<tr>
<td>females</td>
<td>25</td>
<td>46</td>
<td>42</td>
<td>54</td>
<td>55</td>
</tr>
<tr>
<td>Freshmen</td>
<td>42</td>
<td>41</td>
<td>51</td>
<td>51</td>
<td>34</td>
</tr>
<tr>
<td>NonFreshmen</td>
<td>3</td>
<td>59</td>
<td>64</td>
<td>89</td>
<td>77</td>
</tr>
<tr>
<td>Same sex</td>
<td>32</td>
<td>76</td>
<td>88</td>
<td>84</td>
<td>58</td>
</tr>
<tr>
<td>Matching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opposite sex</td>
<td>32</td>
<td>76</td>
<td>88</td>
<td>84</td>
<td>58</td>
</tr>
</tbody>
</table>

#The numbers entered refer to those clients with a complete set of data

(b) The independent and dependent variables. The independent variables are of two kinds: 1) measures of personality and of inter-personal orientation and 2) measures of expectations about counseling. Since there are problems involved in developing indices of matching, e.g., of similarity, a full discussion of the methods we used will be included in a separate section. What follows is a description of the tests and inventories themselves.

Measures of personality and of interpersonal orientation. 1. The Myers-Briggs Type Indicator (MBTI). This instrument, based on Jungian
theory, is designed to assess characteristic preferences in cognitive and perceptual orientation. It consists of four scales, Judgment-Perception (J-P), Sensation-Intuition (S-N), Thinking-Feeling (T-F), and Extraversion-Introversion (E-I). On the basis of their item contents and correlations with independent measures, the scales seem to reflect the following characteristics: Judgment-Perception- a preference for order and planning as opposed to spontaneity and novelty; Sensation-Intuition- a practical, conventional, realistic attitude in contrast to one more theory and idea oriented, stressing originality, autonomy and complexity; Thinking-Feeling- a legalistic, rationalistic versus humanistic, sympathetic approach; Extraversion-Introversion- ease in and liking for interpersonal contact in the conventional way of understanding these terms. MBTI scores relate to a wide range of variables including personality, ability, interest and value measures, academic choice, aptitude and performance and behavior ratings. A detailed description and analysis of the test by the principal investigator can be found in Buros (1966).

2. Orientation Inventory (Ori). This instrument was developed by Bass to assess three orientations to group activity. Scores indicate the extent to which subjects are oriented toward maximizing personal motives (self orientation), personal interactions (interaction orientation) or group goals (task orientation) in interpersonal situations. It has been used in a variety of small group studies (see Bass, 1962, 1967) and by the present writer in an unpublished study of a simulated counseling situation. The dimensions of the test seem directly relevant to the process of counseling which, as we have noted before, is fundamentally an interpersonal situation. It also has the marked advantage of being short; clients could complete it in less than 15 minutes.

3. Fundamental Interpersonal Relations Orientation (FIRO-B). This instrument was designed by Schutz (1958) to operationalize his approach to interpersonal behavior. The test provides scores in three need areas, Inclusion (I), Control (C), and Affection (A) which Schutz argues constitute a sufficient set of dimensions to predict interpersonal behavior. The test attempts to measure both the extent to which the subject expresses behavior toward others in each area and the extent to which he wants others to express the behavior toward him. Thus each subject gives six scores: expressed inclusion (Ie), wanted inclusion (Iw), etc. Schutz then delineates three kinds of compatibility, reciprocal compatibility, originator compatibility and interchange compatibility. The meaning and measurement of each form of compatibility will be described in a subsequent section, but it should be noted here that these derived compatibility scores are affected by the methodological problems to which we alluded above.

It is surprising that FIRO-B has been so little used in clinical research, for it is virtually unique in providing a direct operational measure of interpersonal compatibility; the test is specifically
designed for use in studies of dyadic and group behavior. In addition to its theoretical relevance to the objectives of the present project, the results of the study of Sapolsky (1965) noted earlier provide evidence of its applicability to matching research. Thus its inclusion in our test battery seemed clearly indicated.

4. Strong Vocational Interest Blank (SVIB). Both the male and female forms of the SVIB were used. The test is so well-known that there is no need to describe it here, but it should be noted that it can be interpreted not only as a measure of vocational preference, but also, inferentially, as a measure of values. In addition, the SVIB includes a Masculinity-Femininity scale which figured in our study of sex matching. There was one final advantage in using the SVIB - it is routinely administered to clients as part of counseling. Consequently data were available for most clients in all samples without the necessity of the special collection procedure used for the other personality measures.

5. The Survey of Interpersonal Values (SIV). This instrument was developed by Gordon to assess values relevant to need structure. The scales of the test are Support, Conformity, Recognition, Independence, Benevolence and Leadership. This test was included on an experimental basis since, unlike the other tests, there was not an extensive literature on its validity.

A number of criteria were used in determining the tests to be employed. First, we wanted to include a variety of personality variables to provide a range in dimensions, for similarity in need structure, for example, may have quite a different effect on counseling than similarity in cognitive and perceptual orientation. Second, we did not want the testing to make an unreasonable demand on the client's time. Consequently, tests which can be taken relatively rapidly were sought, i.e., the Ori Inventory, FIRO-B and SIV. Third, we wanted tests which are appropriate to normal populations as well as to handicapped. Fourth, we wanted tests which can be scored objectively; the use of projective tests was considered but rejected because of the subjectivity and unreliability of scoring procedures. Finally, we wanted tests of acceptable reliability and empirical validity. The five tests described above came as close to fulfilling these criteria as any we could find.

Measures of expectation. One of the first tasks undertaken during the grant period was the development of an instrument to measure clients' expectations about counseling. As the initial step, an open-ended questionnaire was administered to 75 clients before they began their counseling. They were asked to describe their feelings about any previous counseling, what they expected of this Counseling Center, what they thought their counselor would be like and what they hoped to accomplish. Using this questionnaire as one source and previous research (e.g., Apfelbaum, 1958) as a second, a preliminary, 81 item expectation questionnaire was constructed. Each item was in the form
of a four point Likert-type scale. This questionnaire was administered to 100 randomly selected clients and their responses were cluster analyzed and item statistics were calculated. Those items which best represented the obtained clusters and for which there were adequate inter-individual differences in response were included in a second, 34 item, form of the questionnaire. It is this latter form which was used in the various studies to be reported. It is included in Appendix A. The cluster analyses performed on the 34 item version will be described in the discussion of results.

The expectation questionnaire was used for three purposes. First, before counseling was begun, each client in the sample was asked to indicate his expectations about what his counselor would be like and how he would act. Second, at the outset of the data collection period, the counselors were asked to describe their own behavior in counseling, i.e., his perceptions of himself in the role of counselor. Third, after the first interview of a given case, the counselor filled out the questionnaire as he thought the client had filled it out before counseling had begun. This latter is the typical response-prediction task used in studies of the accuracy of interpersonal perception (see Bronfenbrenner, Harding and Gallwey, 1958). The same 34 items form of the questionnaire was used in each of these tasks, the only variation being in the instructions to the respondent.

Outcome measures. There were three sets of outcome measures used in this study: The first was concerned with the duration and certain objective aspects of the course of counseling, the second with client evaluations of the counseling and the third with counselor evaluations of the counseling. The latter two involved questionnaires which were developed earlier but which were intensively analyzed during the grant period. We will discuss each set of measures in turn.

1. Duration and course of counseling. In previous research, including our own, duration of counseling has proved a fruitful measure (Mendelsohn and Geller, 1963; Brandt, 1965). Although the meaning is not without ambiguity, our results, as well as those of other investigators, suggest that it reflects commitment to counseling, a feeling on the client's part that counseling is potentially of usefulness to him. In this respect, it is important to note that in the present data, number of interviews is positively, but moderately correlated with favorable client and counselor evaluations of counseling. The other variables concerned with the course of counseling include number of sessions cancelled, postponed or missed and whether termination was agreed upon or was the product of the client's failure to appear for a scheduled session. We will report data on these latter measures which seem to indicate that cancellations, etc., are critical events in counseling and represent an
important point of decision making by the client.

2. Client attitude questionnaire. This questionnaire was developed at the Counseling Center to obtain the client's evaluations and impressions of his counseling experience. The first form of the instrument included 21 items, each of which consisted of a statement like, "I felt comfortable with my counselor." The respondent was asked to rate each item on a 5-point scale from "strongly agree" to "strongly disagree". The questionnaire was constructed rationally and was designed to sample a range of client attitudes thought to be of particular significance to the evaluation of counseling process and outcome. It was given to a first sample of 45 clients and responses were cluster analyzed. Two major clusters were obtained which proved surprisingly independent of each other: the first reflects the client's feelings of being understood and comfortable in the relationship and the second, his satisfaction with and evaluation of the counseling.

Consideration of this analysis and inspection of the item responses led to a revision of the questionnaire and it is this second form which was used in the project research (Appendix B). Items which defined obtained clusters in the first form were retained and, in addition, items relating to the evaluation of outcome and assessment of perceived counselor competence were added. Items which appeared to be redundant, difficult to interpret, or badly worded were omitted or rewritten. A 27-item scale resulted. Finally, a 7-point response scale, "strongly agree" to "strongly disagree" was employed.

Although client evaluations do not seem adequate as a sole criterion of success of counseling, they do represent a most important source of information about outcome (Gabbert, Ivey and Miller, 1967). Basically, little is known about counseling from the client's standpoint because of the unfortunate tendency in the literature to overlook or downgrade the significance of client judgements. Our objectives, then, were to develop a standardized, well-investigated client outcome questionnaire useful for our own research and that of other investigators and further, to explore the structure of client attitudes in as detailed a fashion as possible. These efforts will be reported in the results section.

3. Counselor attitude questionnaire. This questionnaire, also developed at the Counseling Center, was designed to obtain the counselor's evaluation and impressions of the counseling. The items were obtained in the following way: on the basis of suggestions of the Counseling Center and the research staff, a pool of items was developed. They were then given to the counselors who were asked to indicate those they judged to be most important to the evaluation of the outcome and process of counseling. The items about which there was highest agreement and some additional ones included for theoretical reasons were combined into a 23-item form. Again a 7-
point, Likert-type, scale was used for each item (Appendix C). The counselors filled out the questionnaire at the time of the termination of the case. We will report the results of the analyses of these responses in a subsequent section.

Even though counselor judgements have been used in much research as a sole criterion of outcome, they seem no more adequate as a single measure than do client judgements. Indeed, we know very little about the relationship of client and counselor evaluations. It was our belief, however, that the combination of the three sets of outcome variables should provide a basis for making meaningful statements about outcome. We have also collected data on the academic performance of the clients, but at the time of the preparation of this report, no analyses of these data had been possible.

A summary of the dependent and independent variables is given below.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Before Counseling</th>
<th>After 1st Session</th>
<th>At Close</th>
<th>2 mos. after Close</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client personality measures</td>
<td>Counselor perceptions of client expectations</td>
<td>Counselor attitude questionnaire</td>
<td>Client attitude questionnaire</td>
<td>Duration</td>
</tr>
<tr>
<td>Counselor personality measures</td>
<td>Accuracy scores derived from the above</td>
<td>Missed, postponed and cancelled interviews</td>
<td>Form of termination</td>
<td></td>
</tr>
<tr>
<td>Client expectations</td>
<td>Counselor role perceptions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counselor role perceptions</td>
<td>Matching scores derived from the above</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matching scores derived from the above</td>
<td>Client's presenting problem</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(c) Data analyses. In this section, we will be concerned with the problem of how matching can be operationally defined and related to outcome measures. It will be a relatively long and detailed section because it is our belief that one of the reasons for the inconclusiveness of the literature at this time is the failure of investigators (including ourselves) to be fully cognizant of the methodological problems in this area. At each stage of the research, problems of analysis have become increasingly evident and consequently, much effort has gone into an attempt to answer the question, "How should matching research be done?" We consider the present section, despite its non-substantive nature, one of the most important outcomes of the project. It is necessarily formulated in a technical manner, but most of the critical points are analysed conceptually as well as statistically.

The study of client-counselor matching can be considered as a specific approach to the more general problem of predicting the
course of counseling from the characteristics of the client and counselor. The distinguishing feature of this approach is that the form of the mathematical model used to make predictions must assume an interaction between the characteristics of the client and counselor which influences the course of counseling. This assumption is necessary if the results are to be useful in matching clients with counselors.

The methods that have traditionally been used in predicting outcome of therapy from the characteristics of the client or of the counselor preclude the possibility of discovering such a practical assignment procedure. The type of model generally used is: 1) \( Y_i = a + bX_i \) and 2) \( Y_i = c + dZ_i \), where \( Y_i \) is the predicted outcome score for the \( i \)-th patient; \( X_i \) is the \( i \)-th patient's score on a personality scale, \( Z_i \) is the score of the therapist who treated the \( i \)-th patient, and \( a, b, c, \) and \( d \) are constants calculated by the least squares method. These models have been used in research concerned with the relationship of client or counselor characteristics to outcome. Although in practice researchers have used one or the other of these equations to predict outcome, in principle, they could be combined.

The reason that this model does not allow for the possibility of finding a practical matching procedure is easily shown by considering the general case: \( Y_i = f(X_i) = g(Z_i) \). The mean of the predicted outcome scores over all clients treated is then

\[
\frac{1}{n} \sum_{i=1}^{n} Y_i = \frac{1}{n} \sum_{i=1}^{n} f(X_i) + \frac{1}{n} \sum_{i=1}^{n} g(Z_i)
\]

when \( n \) is the number of clients treated. The first term on the right side of the equation is a characteristic only of the patient population being treated and consequently, the mean outcome score can be changed only by selecting the clients to be admitted to the clinic. The second term depends upon the characteristics of the counselors and the number of clients each treats. In a parallel fashion, the mean outcome score can be changed only by selecting different counselors or by changing the number of clients seen by each counselor. Both terms are independent of which counselor is matched with which client. These statements hold true for any functions "\( f \)" and "\( g \)" linear or otherwise. While this model does permit discovering methods of increasing the effectiveness of the clinic by selecting promising clients and effective counselors or by assigning more clients to effective counselors, it cannot aid in the discovery of an effective matching procedure. Thus it allows only alternatives which would deny services to some potential clients or which would not permit the maximum use of available resources.

The class of prediction equations that could lead to an effective procedure must have the characteristic that at least one term be included that involves an interaction between counselor and client scores. That is, there must be at least one term in which the coefficient of the \( X \) variable is a function of the \( Z \) variable or vice
versa. The slope of the regression of $Y$ on $X$ (or $Y$ on $Z$) will then be dependent on the value of $Z$ (or $X$) and the mean predicted outcome will be a function of how the client and counselor are matched with respect to their $X$ and $Z$ scores.

The presence of the interaction term in the regression equation can be interpreted as meaning that different types of counselors achieve different results with different types of clients, which is the necessary case for effective matching. For example, consider the case where two types of counselors, A and B, each sees a number of clients who have taken a personality scale and for each client an outcome measure of counseling is available. It is then possible to calculate separate regression equations for each type of counselor, predicting outcome of counseling from the personality scores of the clients. Figures 1 and 2 show two possible results of this analysis.

**Figure 1**

```
Counselor Type B
→
Outcome Score

Counselor Type A
←
```

**Figure 2**

```
←Counselor Type A

←Counselor Type B
```

Figure 1 illustrates the case where clients with high scores on the personality scale have a better outcome than clients with low scores on this measure regardless of which type of counselor is seen. Furthermore, clients seen by counselors of type B have better outcome scores at all levels of the personality measure than do clients seen by counselors of type A. In this case there is no basis for matching clients with counselors other than assigning more clients to counselor type B. This is because the two regression lines are parallel to each other; there is no interaction between type of counselor and client personality.

Figure 2 shows an interaction between type of counselor and personality of the client. Clients with high scores on the personality scale have higher outcome scores if seen by type A than type B, but clients with low scores on the personality scale have higher outcome scores if seen by type B rather than type A. It is clear in this case that matching of client and counselor would be advantageous.
Since the feasibility of matching depends upon the presence of an interaction between the characteristics of the client and counselor, statistical procedures for the analysis of the effects of matching should incorporate a method of distinguishing between the variance in the outcome of counseling that is attributable to the interaction between client and counselor characteristics and the variance in outcome attributable to client and counselor characteristics considered independently of each other. In addition to a statistical test for the presence or absence of an interaction effect it is important to have a measure of the percent of the variance in the outcome measure which can be attributed to that interaction. This information on the strength of the interaction would be necessary to decide whether the matching procedure under investigation was sufficiently powerful to justify the expense involved in adopting it for use in a clinic.

Two statistical techniques satisfy these requirements of providing a statistical test for the presence of an interaction effect and a measure of the strength of this effect: multiple regression analysis and analysis of variance. The assumptions and computational procedures for these procedures are discussed in most introductory statistics texts and will not be reviewed here. Rather we will be concerned with how they can be applied to the specific problem of client-counselor matching.

Multiple Regression Analysis: The simplest regression equation containing a term involving an interaction between counselor and client characteristics is: \( Y_i = a + bZ_iX_i \). In this equation, the coefficient of the \( X \) variable is \( bZ_i \), a linear function of variable \( Z_i \), a measure of some characteristic of the counselors. The constants \( a \) and \( b \) can be calculated by the least squares method simply by treating the product of \( Z \) and \( X \) as a single variable. This model has been used by Canon (1964) to predict client attitudes toward counselors and by Tuma and Gustad (1957) to predict the outcome of counseling. However, the model has three serious disadvantages. First, the variance explained by the regression equation is not invariant with respect to a linear transformation of \( X \) or \( Z \). Second, the model neglects any contribution that \( X \) and \( Z \) by themselves could make to the prediction of the criterion. Third, the term \( ZX \) will in general be correlated to some extent with \( Z \) and \( X \); consequently effects attributed to the interaction term may, in fact, be the result of the \( X \) or \( Z \) scores alone. These faults can easily be corrected by expanding the model to \( Y_i = a + bX_i + cZ_i + dZ_iX_i \). This expanded equation allows for the possibility that \( X \) and \( Z \) contribute to the prediction of the criterion independently of their product, permits a statistical test of the presence of an interaction effect, and provides a measure of the strength of this effect. In addition, the variance explained by the model is unaffected by a linear transformation of \( X \) or \( Z \).

This model assumes that for each counselor the regression of his client's outcome scores on their personality scores is linear and
that the slope and intercept of this linear relationship varies between counselors as a linear function of the counselor's personality scores. For example, consider the hypothetical regression equation: \( Y_i = 0.7X_i + 1.0Z_i - 0.02X_iZ_i \). For counselors who have a score of 10 on \( Z_i \), the correlation between the outcome measure, \( Y \), and the client personality score, \( X \), is positive and the regression equation is \( Y_i = 10.0 + 0.5X_i \). In this example, a patient with a score of more than 50 has a higher predicted outcome if he is matched with a counselor who is low on \( Z \) than if he were matched with a counselor high on \( Z \). A feasible procedure for this case would be to assign clients with \( X_i > 50 \) to counselors with \( Z_i \leq 35 \), and match clients with \( X_i < 50 \) to therapists with \( Z_i > 35 \). Adoption of this procedure would result in a greater mean outcome score for the clinic than could be achieved through random assignment and in addition would utilize all counselors in the clinic.

The model as outlined describes the simplest form that client-counselor interaction can take. It assumes that the regression of client characteristic scores on outcome is linear within all counselors, and conversely that the regression of counselor characteristic scores on outcome is linear within all clients. Because of the simplicity of these assumptions, this model should be routinely investigated before it is rejected in favor of a more complicated model assuming curvilinear relationships between client and counselor characteristics and outcome measures.

As noted in the review, several studies have examined the hypothesis that similarity between client and counselor is related to aspects of the process and outcome of counseling. The method used in these studies was to construct a measure to index similarity directly. The most general of these indices, and the one used in much of the present research, is \( D^2 \), which for the case where there is only one client and one counselor variable is defined as \( (X_i - Z_i)^2 \), the squared difference between the two scores. The \( D^2 \) score is calculated for each client-counselor pair and then directly related to the criterion score, i.e., \( Y_i = a + b (D_i^2) \).

The \( D^2 \) approach has two serious disadvantages for investigating the matching hypothesis. The first problem is that \( D^2 \) is a composite of client and counselor scores and, in general, will not be independent of these scores. Consequently, the same problem that arose with the prediction from the cross-product of \( Z \) and \( X \) arises with the prediction from \( D^2 \) - effects attributed to the matching term may, in fact, be the result of the \( X \) or \( Z \) scores alone. The second problem is that despite its apparent simplicity, \( D^2 \) is a complex measure. This can be seen if the prediction equation for \( D^2 \) is expanded: since \( D^2 = (X_i - Z_i)^2 \), \( Y_i = a + b (X_i^2 + Z_i^2 - 2X_iZ_i) \). If a relationship between \( D^2 \) and the criterion is found, it may be the result of a linear or a curvilinear relationship between \( X \) and the criterion or of a linear relationship
between the cross-product XZ and the criterion. The use of the single term, \( D^2 \), does not allow us to differentiate among these possibilities, only one of which involves a matching term. It should also be noted that this matching term, the cross-product of X and Z, is the same as the one we have already discussed. Consequently, the \( D^2 \) model differs from the one presented earlier only by the inclusion of curvilinear counselor and client components.

Cronbach (1958) has pointed out that \( D^2 \) is a specific case of a more general multiple regression equation. If the terms \( dZ_i + dX_i \) are added to our earlier model thus, \( Y_i = a + bX_i + cZ_i + dZ_iX_i + dZ_iX_i^2 + dX_i \), the three terms which are the components of \( D^2 \) are included as predictors and both problems associated with the use of \( D^2 \) are avoided.

It can be seen from this discussion that the \( D^2 \) model is very specific and very restrictive. It assumes that the coefficients of \( X_i \) and \( Z_i \) are zero and that the terms \( 2X_iZ_i, X_i^2, \) and \( Z_i^2 \) all have the same coefficient. But it can also be seen that the situation described by \( D^2 \) can be subsumed under a general multiple regression approach. Multiple regression models of any degree of complexity may be investigated by including variables of the form \( X_i^2, Z_i^2 \), etc. in the prediction equation. Each additional term included in the equation can be tested to see if it significantly increases the accuracy of prediction. In exploratory studies designed to discover the relationship between client and counselor characteristics and aspects of counseling, it is advisable to use the more general approach of multiple regression rather than a specific case such as \( D^2 \). The general model while requiring more parameters to be estimated from the data also makes fewer assumptions about the form of the regression and permits the possibility of discovering relationships precluded by the more specific model.

One final point needs to be made about the \( D^2 \) and multiple regression models. Although we analyzed the \( D^2 \) model for the case in which there is only one matching variable, it has most often been used to provide a single index of similarity across a set of client and counselor variables, e.g., MMPI scales, by summing the \( D^2 \) scores on each scale. It should be apparent that this procedure simply makes an already complex, restrictive and difficult to interpret model even more complex, restrictive and difficult to interpret. Not only do all the problems previously discussed remain, but a new one also arises. The single index of similarity is an unweighted combination of the difference scores on the n variables. Any results may thus be as easily explained by one variable as by the combination of variables, a possibility which is obscured by the use of the composite measure. If a researcher wishes to examine the effects of matching on several variables, separate multiple regression equations could be generated for each variable and then combined into a composite if this were justified by greater
accuracy of prediction. This could be done, for example, by considering each equation a variable and combining these derived variables in a new multiple regression equation. It should be noted that the X and Z scores do not have to be from the same scale. Thus, the model could be extended to investigate such factors as complementarity of needs. This may seem a rather complicated procedure, but, in fact, it is more informative and flexible than any other. However, the need to cross-validate any such equation cannot be emphasized too strongly.

Analysis of Variance: Multiple regression assumes that the form of the within counselor regression (or conversely, the within client regression) is invariant with respect to the counselor (client) variable. Consequently, multiple regression does not permit the possibility that some counselors may be characterized by a linear and others by a curvilinear regression of client personality scores on the criterion. By contrast, analysis of variance is an experimental design which does permit discovering relationships of this type and is at the same time a more general model than multiple regression. An analysis of variance design well suited to this situation is one having three factors with the second factor nested under the first (Winer, 1962, p. 184). This design will be briefly described here since it has not appeared in the literature concerned with client-counselor matching and because it is simple but powerful way of analysing such data. The reader is referred to Winer for details.

The first factor in the design is the Type of Counselor, e.g., high, medium, low on a personality scale, variety of theoretical orientation, etc.; the second factor is the Specific Counselor, which is nested under the Type of Counselor factor; and the third factor is Type of Client, e.g., high, medium, low on a personality scale, nature of presenting problem, etc. In this design, each counselor must see several patients at each level. The total sum of squares is partitioned into the following effects: 1) Type of Counselor, 2) Type of Client, 3) Type of Counselor X Type of Client, 4) Specific Counselor within Type of Counselor, 5) Specific Counselor within Type of Counselor X Type of Client. Each of these may be tested for significance. If either or both of the two interaction effects, (3) and (5), are found to be significant, it would be possible to match client and counselor so that the expected mean outcome level would be increased over that expected from random assignment.

Previous studies using analysis of variance have employed designs that allow conclusions to be drawn only for the specific counselors that these studies sampled (Gabbert, Ivey and Miller, 1967, Moos and Clemes, 1967, Von Der Veen, 1965). The client-counselor interactions tested were of the form Specific Counselor X Type of Client, a form which provides useful information for demonstrating that some counselors achieve different results for
different types of clients and for assigning clients to these specific counselors. However, the results of the studies cannot be replicated by other investigators since they apply only to the specific counselors that were observed.

The analysis of variance design outlined above overcomes this lack of generality by incorporating a Type of Counselor effect and by having the specific counselors nested within levels of this classification. This results in two client-counselor interaction terms that may be tested for significance: the Type of Counselor X Type of Client interaction, which has generality across different samples of counselors and is, therefore, of interest to other investigators; and the Specific Counselor within Type of Counselor X Type of Client interaction, which is specific to the counselors used in the study. Thus, this design retains the features of the designs previously used and in addition increases the potential generality of the conclusions that may be reached from studies of client-counselor interactions.

This design, or one similar to it, is perhaps best suited to exploratory studies of client and counselor matching. The approach is very general and makes no assumptions about the form of the regression within counselors or how this regression changes between types of counselors; the form of the regression is limited only by the number of levels within each factor of the design. There is a statistical test for determining the significance not only of the two interaction effects, but also of the main effects. Further, there are methods for estimating the strength of these effects. The design provides an unambiguous method for deciding whether the data support a hypothesis about the effects of the matching of client and counselor which is, moreover, independent of any effects of client or counselor scores alone. Finally, the model is well suited to the usual clinical research situation where a small number of counselors sees a large number of clients.

This analysis of variance model could be generalized to any number of client and counselor factors. However, if two client and two counselor variables with three levels each were included, the number of cells in the design would be increased nine-fold over the three factor design presented above. This would demand a far larger number of clients and counselors than is generally feasible and greatly complicate the process of interpretation of the results. Thus, this approach to the analysis of matching has its greatest utility for studies of one client and one counselor variable.

The two procedures discussed here, multiple regression and analysis of variance, are both appropriate for investigating the nature of the interaction between client and counselor characteristics in influencing the process or outcome of counseling.
Both techniques provide a statistical test for the presence of an interaction effect and also provide a measure of the strength of this effect. In this respect both are superior to direct measures of similarity such as $D'$. In comparing the two techniques to each other, multiple regression, due to its explicitness is more appropriate when the experimenter is concerned with specifying the form of the relationship between client and counselor characteristics and the criterion measure. Analysis of variance, because of its greater generality, is more appropriate when the experimenter has no expectations about the form of the relationship and is mainly interested in determining whether an interaction is in fact present and in estimating the strength of this effect. From a practical standpoint, multiple regression is probably the more feasible approach for naturalistic research and for research concerned with several variables. The analysis of variance approach is best applied in situations in which assignment of clients to counselors can be controlled for experimental purposes.

As noted at the outset of this discussion, an understanding of the methodological problems involved in matching research developed slowly and as a result of doing the research itself. Consequently, some of the approaches to data analysis which have just been criticized were used during the early stages of the project. Where the findings can withstand the criticisms, they have been included in the discussion of results, but many analyses were discarded as methodologically unsound. It will be necessary, however, to make continued reference to problems of analysis throughout the next section of the report.

Results

The results of the project to date will be presented in a number of sections, each one of which deals with a different aspect of the overall problem of assessing the effects of client-counselor matching. The first step in presenting the data will be a consideration of the outcome variables. Following this, the effects of (1) client-counselor similarity and compatibility, (2) matching of expectations, (3) sex matching and (4) accuracy of interpersonal perception on outcome will be analyzed. As noted in the discussion of methodology, it is necessary to separate matching effects from client or counselor effects. Thus in each group of analyses, hypothesis about independent client and counselor effects will also be evaluated.

Analyses of the outcome questionnaires. Client questionnaire: The development of the questionnaire has been described earlier and a copy of it is included in Appendix B. It consists of 27 items, the first one of which has several parts. The analyses of this questionnaire had two objectives: first, to reduce this multi-item inventory to a smaller set of manageable dimensions and sec-
ond, to explore the structure of client attitudes toward their counseling experience. The use of Tyron's Key Cluster Analysis (Tyron 1958) served both purposes simultaneously. This technique, which is related to factor analysis, provides a method for discovering sub-sets of items which co-vary together in a meaningful and consistent way. The first step in the process was to run a cluster analysis on each of four samples (samples 2 to 5). It was obvious from inspection of the results of the four independent analyses that the structure of the questionnaire responses is essentially invariant across the samples. Although minor differences appeared from sample to sample, it was easy to derive a single cluster structure which is an excellent fit for all samples. The consistency with which these clusters were found and the similarity of their intercorrelations from sample to sample make it possible to speak with confidence of the dimensionality of the questionnaire and to make direct comparison of results between samples.

The first cluster is defined by the following items:
1. "To the extent possible, (my) objective in coming to the Counseling Center was accomplished." (N.B. The score for this item was the mean of the ratings for all sub-parts of the item to which a subject responded.)
7. "Of the problems we worked on, the counselor dealt insufficiently with those which were most important to me." (Reflected)
18. "I accomplished no more through counseling than I could have accomplished by myself." (Reflected)
25. "I am well satisfied with my counseling experience."

This cluster clearly represents the degree of the client's satisfaction with counseling and the extent of his feeling that he achieved what he came for. It is the most general cluster in both a statistical and a content sense and will be referred to as "Client satisfaction."

The second cluster is defined by the following items:
23. "The counselor was down to earth."
24. "The counselor was 'on the beam'."
26. "If things get rough, I would like to return to my counselor."
27. "If things get rough, I would like to return to the Counseling Center."

This cluster taps the client's evaluation of the counselor's skill and perceptiveness, his confidence in the counselor and the Counseling Center. It will be referred to as "Evaluation of the Counselor."

The third cluster is defined by the following items:
2. "The counselor gave me the feeling that I was more than 'just another student'."
4. "The counselor was a warm person."
8. "During my counseling sessions, I felt free to say whatever I wanted to."
20. "I felt comfortable with the counselor."
This cluster is concerned with the client's feeling of comfort and ease in the counseling situation and will be referred to as "Comfort-Rapport."

The fourth counselor cluster is determined by only two items:
13. "I received benefit from counseling through learning more about myself through interviews."
14. "I received benefit from counseling through getting things off my chest."
This cluster seems to be concerned with one specific way in which counseling was of benefit, i.e., through the therapeutic means of increased self-understanding and catharsis. It will be referred to as "Therapeutic Benefit."

The last cluster is defined by the following items:
11. "As a result of counseling, there has been a change in what I am doing or planning to do."
12. "I received benefit from counseling through information about occupations and/or courses of study."
16. "I received benefit from counseling through getting new perspectives."
17. "I received benefit from counseling through starting on a plan for my future."
This cluster, too, is concerned with a specific way in which counseling was of benefit, but here the emphasis is on acquiring useful information and reaching decisions about future actions. It will be referred to as "Benefit via Decision Making."

The remaining items tended to correlate equally with more than one of the obtained five clusters and thus are not included here. These items were, however, taken into account in the interpretation of clusters. The full matrix of correlations of each item with each cluster for the pooled data of the four samples is included in Appendix D.

In order to obtain outcome scores representative of each cluster, a client's scores on the items defining a cluster were summed and the resulting distributions of sums were converted to T scores (X=50, s.d.=10). Items were scored in such a way that the higher the T score, the more positive the client's evaluation. In table 2, the internal consistency (alpha) reliabilities of the cluster scores is shown for each sample and for the combined samples.
Table 2

Internal Consistency Reliabilities for the Cluster Scores

<table>
<thead>
<tr>
<th>Sample</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>.83</td>
<td>.86</td>
<td>.79</td>
<td>.66</td>
<td>.79</td>
</tr>
<tr>
<td>3</td>
<td>.85</td>
<td>.80</td>
<td>.77</td>
<td>.59</td>
<td>.78</td>
</tr>
<tr>
<td>4</td>
<td>.84</td>
<td>.85</td>
<td>.81</td>
<td>.61</td>
<td>.77</td>
</tr>
<tr>
<td>5</td>
<td>.82</td>
<td>.84</td>
<td>.77</td>
<td>.73</td>
<td>.73</td>
</tr>
<tr>
<td>Combined</td>
<td>.82</td>
<td>.82</td>
<td>.77</td>
<td>.63</td>
<td>.75</td>
</tr>
</tbody>
</table>

It can be seen that the reliability coefficients are quite similar across samples and that, with the exception of cluster IV, all are of a satisfactory magnitude. Cluster IV, it will be recalled, consists of only two items and its marginally adequate reliability is probably attributable to this fact.

The intercorrelations of the five clusters for the combined sample are shown in table 3.

Table 3

Intercorrelations of Cluster Scores: Combined Samples

<table>
<thead>
<tr>
<th>Cluster</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>.60</td>
<td>.49</td>
<td>.27</td>
<td>.62</td>
</tr>
<tr>
<td>II</td>
<td>.59</td>
<td>.30</td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>.31</td>
<td>.41</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>.34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The clusters are clearly not independent of each other; every coefficient in the table is significant beyond the .01 level. Though the clusters consist of different sets of items and refer to conceptually different aspects of the counseling, these correlations are sufficiently high to suggest that there is a single dimension of evaluation which underlies much of the variance of the questionnaire responses. In consequence of this finding, we felt that it would be useful to have a measure of the client's overall evaluation of counseling. This was done by extracting the first centroid (Thurstone, 1947) and then defining it by the the 11 items with the highest factor loadings in the four samples. This set of items has an alpha reliability of .94, a very high coefficient indeed.
The item with the highest loading was 25, "I am very well satisfied with my counseling experience," and this item quite nicely describes the meaning of the centroid. T scores for the centroid were obtained in the same manner as described above for the cluster scores. It will be referred to as "General Evaluation."

It should be noted that in the initial analyses of client evaluation, Mendelsohn and Geller (1965) found that the dimensions of client response were surprisingly independent. The present result contradicts this early finding. Since the former is based on a much larger sample and is more characteristic of those few relevant results reported in the literature (Linden, Stone and Shertzer, 1965), the conclusion that a general evaluative set is the most important determinant of client response seems indicated. The correlations are not sufficiently high, however, to conclude that this set is the only determinant of response. This latter point is important in light of the frequently heard contention that a good client-counselor relationship is a sufficient condition for the achievement of counseling objectives. If we examine the correlations between cluster III, Comfort-Rapport, and the three clusters which reflect achievement of counseling objectives, clusters I, Client Satisfaction, IV, Therapeutic Benefit and V, Benefit via Decision Making, we find that in no case is more than one-fourth of the variance of the latter three scores associated with the measure of relationship ($r^2 = .24, .10, \text{ and } .17$, respectively). In many cases, the client reports that despite a good relationship, counseling goals were not achieved, or that counseling was effective even in the context of an uncomfortable relationship. Thus, the results indicate that a good client-counselor relationship is not a sufficient, and not even a necessary, condition for the achievement of counseling objectives, although, by and large, these two factors do go together.

To summarize: a series of cluster analyses was performed on the clients' responses to the outcome questionnaire and a stable cluster structure was found in four samples. Five clusters were obtained which, with one exception, have adequate internal consistency and which are moderately to strongly intercorrelated. The evidence suggests that the clients respond to the questionnaire with a general evaluative set but that they also discriminate to some extent among different aspects of the counseling process. Consequently, six outcome scores were derived from the questionnaire - one measures general evaluation and the others evaluate achievement of objectives, the counselor, the relationship, and the specific aspects of counseling which were of benefit. The most important of these is the one based on the first centroid, the measure of general evaluation.

Despite the invariance of the cluster structure across samples, differences appear in some analyses of sub-group questionnaire responses. The most marked of these involves the differences between
the sexes. Both male and female clients show the same basic cluster structure, but the difference between them is in the relative magnitude of the correlations between clusters. These correlations and the significance of the differences between them are shown in Table 4.

Table 4
Correlations between Clusters for Male and Female Clients

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Males (n=269)</th>
<th>Females (n=197)</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - II</td>
<td>.53</td>
<td>.68</td>
<td>2.54</td>
<td>.01</td>
</tr>
<tr>
<td>I - III</td>
<td>.46</td>
<td>.52</td>
<td>.84</td>
<td>n.s.</td>
</tr>
<tr>
<td>I - IV</td>
<td>.18</td>
<td>.38</td>
<td>2.32</td>
<td>.02</td>
</tr>
<tr>
<td>V</td>
<td>.60</td>
<td>.65</td>
<td>.66</td>
<td>n.s.</td>
</tr>
<tr>
<td>II - III</td>
<td>.54</td>
<td>.65</td>
<td>1.82</td>
<td>.07</td>
</tr>
<tr>
<td>IV</td>
<td>.25</td>
<td>.37</td>
<td>1.41</td>
<td>n.s.</td>
</tr>
<tr>
<td>V</td>
<td>.46</td>
<td>.54</td>
<td>1.14</td>
<td>n.s.</td>
</tr>
<tr>
<td>III - IV</td>
<td>.29</td>
<td>.32</td>
<td>.35</td>
<td>n.s.</td>
</tr>
<tr>
<td>V</td>
<td>.41</td>
<td>.42</td>
<td>1.28</td>
<td>n.s.</td>
</tr>
<tr>
<td>IV - V</td>
<td>.26</td>
<td>.43</td>
<td>2.06</td>
<td>.04</td>
</tr>
</tbody>
</table>

It can be seen that in every case the correlation coefficient is higher for the females than for the males and for 3 of the 10 cases, the differences are significant beyond the .05 level. This pattern is a reflection of the generally higher item intercorrelation for the females. It appears, then, that females evaluate counseling in a more global way, i.e., relative to males, females tend to blur distinctions between relationship and task aspects of counseling. A similar point can be made about those clients whose objectives are primarily to acquire vocational information or to make vocational and academic decisions in contrast to those who come to the Counseling Center for help with personal problems. The former make relatively clear distinctions among the task, relationship and counselor effectiveness components of counseling, while for the latter, the nature of the relationship seems to be the basic dimension of evaluation.

Two other comparisons of this sort were made between subgroups of the total sample, but no discernible differences were found. The groups contrasted were freshmen vs. non-freshmen and clients who were matched with same sex counselors vs. those matched with opposite sex counselors. Finally, cluster analyses were per-
formed on the responses of clients seen by particular counselors, i.e., the responses of clients seen by counselor A were contrasted to those seen by counselor B, etc. Few consistent inter-counselor differences were found. This last analysis strengthens the conclusion that the structure of client attitudes is stable, since it remains invariant across counselors as well as across samples.

These analyses represent the most detailed investigation of the response of clients to counseling known to the writer. Perhaps the most important finding is the stability of the dimensionality of client evaluation. Expectably, a general evaluative set is the most important determinant of client response, but, within this context, it appears that different aspects of counseling assume greater or lesser independence and saliency as a function of certain client characteristics. Specifically, females and those who come to counseling seeking help for personal problems seem to be more affected than others by the quality of their relationship to the counselor. There will be some other indications of this trend in later analyses.

Counselor questionnaire: The general approach to the analysis of the counselor questionnaire was similar to that just described for the client questionnaire. However, since, at the time of writing, data were available for only two samples, it has been far less intensively explored. In this section we will report the cluster analyses of the counselor responses in the two samples and describe the outcome variables derived from the questionnaire. Separate analyses were performed on the data of the two samples and then compared. They had considerable similarity and so a single solution which seemed to fit both was derived.

The first cluster is defined by the following items:
3. "This counselee would probably have done better with some other counselor." (Reflected)
6. "This counselee was emotionally involved in the counseling."
7. "I was helpful to this counselee."
8. "Our rapport was excellent."
12. "I was well satisfied with my handling of the case."
13. "Counseling had an impact on this counselee."
20. "In terms of what was needed at this time we accomplished what was possible."

This cluster reflects the counselor's satisfaction with the progress and outcome of the counseling and his handling of the case. It will be referred to as "Evaluation of Effectiveness."

The second cluster is defined by the following items:
2. "I enjoyed working with this counselee." (Reflected)
16. "The hours seemed to drag with this counselee."
17. "If this counselee returns, I would prefer not to
This cluster taps the counselor's reaction to the client as a person and will be referred to as "Personal Feelings."

The third cluster has only two items:
21 b) "During counseling the counselee worked out (an appropriate plan)."
21 c) "During counseling the counselee worked out a plan (which was) a new departure."

This pair of items refers to one specific aspect of the outcome - whether or not a new and appropriate plan of action was developed. These two items, however, are part of a three item question which begins with 21a "During counseling the counselee worked out a plan." This item is not part of cluster III and, in fact, correlates more strongly with cluster I than with cluster III. It appears that some counselors interpreted the (b) and (c) parts as contingent upon the (a) part and consequently did not respond to the other two items unless they responded affirmatively to (a). Consequently, it is difficult to assess the meaning of cluster III in either a statistical or a substantive sense. For this reason, it was decided to exclude cluster III from further consideration.

The fourth and last cluster is defined by the following items:
9. "I understood this counselee's feelings."
11. "I understood this counselee's dynamics."
14. "We talked about matters which I assume the counselee would usually keep confidential."
18. "I understood this counselee's problems."

This cluster refers to the counselor's feelings of having understood various aspects of the case. The inclusion of item 14 suggests that this understanding is construed as resulting from or resulting in the client's openness and lack of resistance, but the cluster seems best labelled "Understanding of Client."

Scores were developed for each cluster by the same procedure used for the client outcome questionnaire. However, because of an oversight, the higher the T score, the less positively the counselor evaluated the outcome. This has no effect on the meaning of the reliabilities or the intercorrelations of the clusters, but it is important to keep the direction of scoring in mind when examining relationships of these scores to non-questionnaire variables.

The alpha reliabilities of the three cluster scores in each of the samples are shown in table 5.
Table 5
Internal Consistency Reliabilities for the Cluster Scores

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Sample 4 (N=229)</th>
<th>Sample 5 (N=166)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>I</td>
<td>.92</td>
<td>.90</td>
</tr>
<tr>
<td>II</td>
<td>.91</td>
<td>.86</td>
</tr>
</tbody>
</table>

The reliabilities of clusters I, II and IV are quite satisfactory in magnitude and the pattern of reliabilities in the two samples is quite similar.

The intercorrelations of the cluster scores in the two samples are shown in Table 6.

Table 6
Intercorrelations of Cluster Scores

<table>
<thead>
<tr>
<th></th>
<th>Sample 4 (N=229)</th>
<th>Sample 5 (N=166)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>II</td>
<td>IV</td>
</tr>
<tr>
<td>I</td>
<td>.64</td>
<td>.52</td>
</tr>
<tr>
<td>II</td>
<td>.36</td>
<td>II</td>
</tr>
</tbody>
</table>

There is some inconsistency in the pattern of intercorrelations in the two samples. Expectably, evaluation of effectiveness is strongly associated with the extent to which the counselor felt he understood the client (in both samples). In sample 4 Evaluation is even more strongly associated with the counselor's personal feelings toward the client. Although this correlation, i.e., between I and II, is significant in sample 5, it is considerably lower than in sample 4. Counselors in both samples report that their personal reactions toward their clients are largely independent of their ability to understand them. The primary difference in the two patterns of intercorrelations, then, involves the role of the counselor's feelings in their evaluation of counseling effectiveness. At this time, the source of the difference is obscure, but it is hoped that further analyses of the questionnaire, e.g., by contrasting responses of the more and less experienced counselors, will provide some answers to the question raised by these data.

To summarize: cluster analyses of the counselor's responses to the outcome questionnaire were performed on the data of samples 4 and 5. Three very reliable clusters were found which, depending on the sample, have moderate to high intercorrelations. Despite some inconsistency in results across the two samples, this set of outcome measures seems adequately descriptive of the structure of counselor attitudes toward the counseling in both samples. The three outcome measures are Evaluation of Effectiveness (I), Personal Feelings (II), and Understanding of the Client (IV).
Relationships among the outcome variables. There are two samples, 4 and 5, for which all three sets of outcome variables, client evaluation, counselor evaluation and duration, are available. The sample sizes are 96 and 108 for samples 4 and 5 respectively. Product-moment correlation coefficients between client and counselor variables and between number of sessions and the other variables were obtained. In sample 4, client and counselor evaluations of outcome are in substantial agreement. Of the 18 coefficients (6 client X 3 counselor clusters), 8 are significant at the .05 level or beyond and for each pair of variables favorable client evaluations are associated with favorable counselor evaluations. The picture is quite different in sample 5, however, for none of the correlations reaches significance and there is not even any consistency in the direction of relationships. The results are encouraging again for the duration variable. In both samples, number of sessions is positively related to favorable evaluations by the client and by the counselor. In particular, duration is most strongly related to the degree to which the counselor feels he understood the client (r = .41, p < .01, in sample 4 and r = .39, p < .01, in sample 5) and the degree to which the client felt he received "therapeutic" benefit (r = .24, p < .05, in both samples).

These results are, unfortunately, not as clear-cut as one would like. The findings in sample 4 and for number of sessions in both samples provide some support for the empirical validity of the outcome measures. Why the results for the questionnaire measures differ in samples 4 and 5 is unknown, but the overall pattern of relationships in the two samples is such as to argue against the use of a single "success" or "failure" criterion. Consequently, in evaluating findings, it is necessary to keep in mind the source of the relevant outcome measures and to treat each one in a limited sense as an indicator of the client's view or of the counselor's view, not as a global outcome measure.

Effects of client-counselor personality similarity on outcome. One of the sources of this project was research undertaken at the Counseling Center to investigate the relationship of client-counselor similarity on the Myers-Briggs Type Indicator (MBTI) to the outcome of counseling. This research is reported in Mendelsohn and Geller (1963 and 1965). The results will be summarized in order to provide a necessary background to the studies completed during the time of the project.

In the first study similarity on the MBTI was assessed by the D^2 method previously described, i.e. the sum of the squared differences between client and counselor scores on each of the four MBTI variables was used as the operational definition of similarity. It should be kept in mind that this is a difference score. Consequently, the lower D^2, the greater the similarity. The duration
of counseling was then related to the similarity scores and it was found that similarity was positively related to number of sessions. In particular, those clients who who were most different from their counselors terminated counseling after only one or two sessions. In the second study, similarity on the MBTI was related to client evaluations of outcome in two samples. In both, similarity was related in a curvilinear way to the client's evaluation of the counseling. Middle similarity was associated with the most favorable outcome, though significant results were obtained only for non-freshmen clients. Further, the sex matching of the client and counselor had an effect on the outcome such that the curvilinear pattern was far more pronounced in opposite-sex than in same-sex pairs. Indeed for the non-freshmen clients matched with a counselor of the opposite sex, there was no overlap in the score distributions in the high similarity and middle similarity cells. This latter is an extremely powerful result for data of this kind. The results for the client's evaluation of the relationship are less consistent. For freshmen, high similarity is associated with higher comfort and rapport, but the result is significant in only one sample. For non-freshmen, a curvilinear relationship is found again, middle similarity, particularly in opposite sex pairs, producing the greatest comfort and rapport. No relationships between client or counselor scores alone and either outcome measure were found.

These results form a rather complex set, for the effects of MBTI similarity on outcome vary with the criterion used and the sample. Similarity was found to be linear with duration, curvilinear with evaluation of outcome, most markedly for non-freshman clients matched with a counselor of the opposite sex, linear with the comfort-rapport measure for freshmen, but curvilinear with this measure for non-freshmen. The results are certainly encouraging for the investigation of matching since it does appear that similarity, at least on the cognitive style variables assessed by the MBTI, has an impact on counseling. Those results need to be clarified and replicated though. This was attempted during the time of the grant and we will now turn to these studies.

The first study relevant here was concerned with the relationship of MBTI similarity to duration. In our early study, we found a positive correlation between the two but possible alternative explanations of that result were not thoroughly examined. Similarity was again measured by the D method and the following predictions were made: 1) similarity of client-counselor scores on the MBTI will be related positively to duration of counseling; 2) no significant differences in duration of counseling will be associated with client personality or 3) counselor personality.

An analysis of variance was used to test the first two predictions. Two main effects were investigated - similarity (high and low) and client personality type. The latter effect needs some
explanation. The MBTI has four dimensions, each of which has two poles, i.e., E-I, S-N, etc. (see the discussion of the MBTI on p. 14-15). There are, thus, $16 (4^2)$ possible combinations of the four MBTI dimensions and it is these combinations which are referred to as client personality types. Only those types in which there were both high similarity and low similarity pairings were used in the analysis. Fourteen of the 16 possible types could be included. Since the cell sizes were not equal, the least squares solution for the analysis of variance suggested by Winer (1962) was used. The results are shown in Table 7.

Table 7

Analysis of Variance for Number of Sessions Data

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Type</td>
<td>13</td>
<td>.89</td>
<td>&lt;1</td>
<td>n.s.</td>
</tr>
<tr>
<td>Similarity</td>
<td>1</td>
<td>5.13</td>
<td>5.44</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Interaction</td>
<td>13</td>
<td>1.01</td>
<td>1.07</td>
<td>n.s.</td>
</tr>
<tr>
<td>Error</td>
<td>141</td>
<td>.94</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The prediction is confirmed by the data in that high similarity is associated with a greater mean number of sessions than low similarity. Moreover, neither client type nor the interaction of client type and similarity produces a significant F ratio. Further examination of the results indicates, however, that there is significantly greater variance of scores for low similarity than for high similarity Ss ($F = 1.905, df = 91, 78$). Thus a t ratio for the mean difference between high and low similarity groups was calculated and evaluated by the procedure suggested by Cochran and Cox (1950) for the situation in which there are heterogeneous variances. A t of 1.99 is necessary for significance at the .05 level; the obtained t of 2.11 is thus significant and the previous finding (Mendelsohn and Geller, 1963) that similarity is associated with greater duration of counseling is replicated.

This analysis provides little information about the linearity of the relationship between similarity and duration. Table 8 represents a summary of the scatter plot for the two variables.
Table 8

The Relationship of Difference Score to Number of Sessions for All Subjects

<table>
<thead>
<tr>
<th>Difference Score</th>
<th>Number of Sessions</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 15</td>
<td>3 7 2 1 2</td>
<td>2.47</td>
</tr>
<tr>
<td>15 - 24.9</td>
<td>5 27 10 3 3 1</td>
<td>2.49</td>
</tr>
<tr>
<td>25 - 34.9</td>
<td>8 31 15 6 2 1</td>
<td>2.46</td>
</tr>
<tr>
<td>35 - 44.9</td>
<td>9 20 11 3 1</td>
<td>2.27</td>
</tr>
<tr>
<td>45 - 54.9</td>
<td>19 5</td>
<td>2.21</td>
</tr>
<tr>
<td>55 - 64.9</td>
<td>4 2</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Inspection of the plot indicates a triangular distribution - high similarity (low difference scores) is associated with a wide range of number of sessions but low similarity is associated with short duration of counseling. This distribution is quite like that obtained in the previous study of similarity and duration of counseling. The relationship is thus best described as mildly curvilinear although it is by no means U-shaped.

Additional analyses were then undertaken to evaluate alternate explanations of the basic finding. The first possibility to be examined is that differences among the counselors account for the obtained finding. This possibility was rejected on the grounds that the counselors do not differ significantly in the mean number of sessions of their clients ($F = 1.20$, $df = 10, 190$). This result likewise reduced the likelihood of bias due to the unequal representation of counselors in the sample. The next possibility examined was that the results are attributable to similarity, counselor personality, or client personality on particular dimensions of the MBTI. Again, analyses of variance were used, but here the main effects examined were client dimensional classification, e.g., E or I, and counselor dimensional classification. The client-counselor interaction provides information about the effects of similarity in that an E type client is more similar to an E type counselor than to an I type counselor, etc. Four such analyses were run, one for each dimension of the test. Not one produces a significant main or interaction effect.

To summarize these analyses: (1) client-counselor similarity on the MBTI is positively associated with greater duration of counseling; (2) there is greater variability in duration when the client and counselor are similar than when they are dissimilar; (3) the
basic finding seems best accounted for by over-all test similarity, rather than similarity on particular test dimensions; (4) alternative explanations in terms of client or counselor personality were rejected.

The next step in the analysis was the examination of potential influence of class standing and sex matching on the findings. For both freshmen and non-freshmen, high similarity is associated with a greater mean number of sessions, although the effect is more pronounced for the former group. Sex matching in conjunction with similarity, however, has no discernible effect on duration of counseling.

MBTI data were collected on half of a third sample (sample 4) and there was, consequently, an opportunity to attempt a second replication of these results. The procedures followed were basically the same, but one further refinement was added. Before calculating the \( D^2 \) scores, the distributions of client scores on each test dimension were first normalized \((X = 50.00, SD = 10.00)\). Clients and counselors were then assigned T scores on each dimension and the \( D^2 \) was based on the squared differences between the client and counselor T scores. The advantage of this procedure is that each of the four MBTI scores is equally weighted in the calculation of \( D^2 \), whereas when raw scores are used, some dimension may make a greater contribution than others to the similarity measure. Seventy-one clients were available in this sample, a number too small to allow the detailed analysis undertaken in the previous study.

A summary of the scatter plot for similarity and number of sessions is shown in table 9.

Table 9
The Relationship of Difference Score to Number of Sessions

<table>
<thead>
<tr>
<th>Difference Score</th>
<th>1  2  3  4  5  6  7...11</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 and below</td>
<td>5 5 4 6 1 1 1</td>
<td>3.22</td>
</tr>
<tr>
<td>21 - 30</td>
<td>4 12 4 3 1</td>
<td>2.42</td>
</tr>
<tr>
<td>31 - 40</td>
<td>4 5 3 1 1</td>
<td>2.63</td>
</tr>
<tr>
<td>Above 40</td>
<td>2 4 2</td>
<td>2.00</td>
</tr>
</tbody>
</table>

This scatter plot is quite similar in form to those found in samples 1 and 2. High similarity is associated with the widest possible range of number sessions and low similarity with short duration of counseling. The difference score distribution was next divided at the median, and the variances of the high similarity and low similarity groups were compared. The variance for the high similarity group is \( 4.20 \) and for the low similarity group it is \( 1.40 \).
yields an F ratio of 3.00 which, with 34 and 35 degrees of freedom, is significant at well beyond the .01 level. The mean number of sessions for the high similarity group is 2.91 and for the low similarity group 2.44, a mean difference which is larger than that found in sample 2, but is not significant.

It appears, then, that similarity on the Myers-Briggs, as measured by the D² method, is reliably associated with the duration of counseling, but the association between the two variables is a complex one. In all three samples, similarity leads to high variability of outcome, while extreme dissimilarity leads to counseling of relatively short duration. After the initial finding of a positive correlation between similarity and duration, we offered the interpretation that similarity on the MBTI dimensions facilitates communication between the client and counselor and thus increases his willingness to become involved in and to continue counseling. This interpretation seems to hold reasonably well for those pairs in which the client and counselor are very dissimilar, since in such cases counseling is almost invariably short. However, when there is high similarity, counseling is just as often of short as of long duration. Our first interpretation obviously has little to say about this variability which, statistically speaking, is our most powerful finding.

Undoubtedly, the variability stems from a number of sources. The most obvious is that if the client and counselor understand each other better when they are similar, they may well be able to work with greater efficiency and directness. There is no need for lengthy counseling to achieve objectives. If, on the other hand, a greater number of sessions seems indicated, the similarity of the client and counselor encourages continuation. Similarity, then, is something of a necessity condition for continuation but it is certainly not a sufficient condition as well. This discussion has so far emphasized positive, facilitative effects of similarity, but it is likely that similarity can also have less positive aspects. As noted earlier, similarity has been found to be curvilinearly related to improvement or positive evaluations in a number of studies. Too much similarity may interfere with the development of an effective balance of empathy and objectivity. It may also lead the counselor to start exploring more personal and conflictual material early in the counseling, too early for the client’s comfort. Similarly, the client may feel that he is too well understood, that the counselor has seen through him. In either case the client may be frightened away. The next study on MBTI similarity to be reported offers some support for this speculation.

In the process of trying to understand the variability effect, we noticed that a number of clients who were similar to their counselors, but nevertheless had only one or two sessions, ended their counseling by failing to appear for a scheduled session,
that is, their termination was a unilateral act rather than a joint decision. Although the failure of a client to appear for a scheduled interview is hardly an infrequent event in counseling, there is very little literature concerned with the significance of such failures. Thus, a study relating similarity to missed interviews was undertaken in an attempt to understand better the meaning of early termination and, more generally, missed interviews.

The 201 clients of sample 2 who had completed the MBTI were available for this study. Client-counselor similarity was again assessed by the D method. (In this study, D was based on the normalized MBTI scores.) A client was considered to have failed a session if, for any reason, he did not appear for a scheduled interview. In some cases (cancellations and postponements), the Counseling Center was notified beforehand that the appointment would not be kept, but in the majority of cases the client simply failed to appear at the specified time. Although this difference would seem important, these two groups proved so similar in all other aspects studied that, for purposes of data presentation, they will be combined. The word, "failure", then, will be applied to cancellations and postponements as well as to failures without prior notification. A total of 39 of the 201 clients failed at least one appointment. Of these, 20 subsequently returned and continued their counseling, while the remainder, in effect, terminated the counseling by unilateral decision. They will be referred to as "continuers" and "terminators", respectively. There is a third possible group, those few clients who fail their initial interview, but since this event occurs before any contact with a counselor, it is not germane to the present interest in client-counselor similarity.

The distributions of client-counselor similarity scores were divided into thirds and the number of continuers, terminators, and nonfailers falling into each third was tabulated. The results for the D measure are shown in Table 10.
Table 10

Frequency of Failures and Nonfailers at Each Level of Similarity

<table>
<thead>
<tr>
<th>Client</th>
<th>Similarity</th>
<th>High</th>
<th>Middle</th>
<th>Low</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminator</td>
<td></td>
<td>10</td>
<td>5</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Continuer</td>
<td></td>
<td>13</td>
<td>4</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Nonfailure</td>
<td></td>
<td>44</td>
<td>58</td>
<td>60</td>
<td>162</td>
</tr>
</tbody>
</table>

Note: \( x^2 = 15.17; p < .01 \)

It is clear from these data that those clients who fail a session are, as a group, quite similar to their counselors; the chi-square contrasting all failers to all nonfailers is 14.51, which with \( df=2 \), is significant at beyond the .001 level. Inspection of the table indicates, too, that this result holds for both the continuers and the terminators.

Because of the problems noted in the section on methodology, a number of additional analyses were run to evaluate the potential effects of counselor and client variables. We reasoned, first, that if the obtained relationship between similarity and the occurrence of failures is not an artifact of counselor characteristics, then the same result, i.e., lower difference scores for failers than for non-failers, should hold for each counselor. The data indicate that this is basically the case: for eight of the ten counselors who had clients who failed a session, the mean difference score for failers was lower than that for non-failers. The two exceptions had only one and two cases of failers respectively. Even more striking is the finding that those counselors who, on the average, were least similar to their clients had the lowest proportion of failers. The rank-order correlation between the mean difference score between a counselor and all his clients and the proportion of a counselor's clients who failed is -.83, \( p < .01 \). These analyses provide strong evidence that similarity predicts failures irrespective of the characteristics of individual counselors.

There is likewise no evidence that client characteristics alone predict failures. None of the MBTI dimensions is associated with frequency of failures nor is any particular combination of MBTI scores related to the criterion. Finally, it appears that the similarity effect summates across the four scales, making the measure of global similarity the best predictor of failures.

In all the analyses reported above there are only minor differences between the terminators and the continuers; similarity appears as much a determinant of failures for the one group as for the other. They resemble each other, too, in another important respect - the timing of the missed interview. Of the 39 cases in which a failure
occurs, 24 follow the first interview and 12 follow the second interview. Necessarily, then, the duration of counseling is quite short for the terminators. In contrast, the continuers have more extended counseling than those clients who never failed a session at all. The means for number of sessions are terminators 1.68, continuers 2.95 and nonfailers 2.36. An analysis of variance for these data yielded an F ratio of 8.07, which, with df = 2,198, is significant at beyond the .001 level. A comparison of the continuers and nonfailers is also highly significant (t = 2.49, p < .02). (The same result for duration and timing of failures was found in sample 3, but MBTI data were not collected for that sample.) There is no direct evidence from the follow-up questionnaires that the groups differ in their evaluation of the effectiveness of counseling, the competence of their counselors, or the quality of the relationship. However, only 5 of the 19 terminators returned questionnaires, a response rate considerably lower than that for the continuers (75%) or the nonfailers (67%). This low response rate, coupled with early termination, may well reflect dissatisfaction with counseling on the part of the terminators.

The last question to be considered is whether there is anything in the data to suggest why one client returned after a failed session and another does not. It was noted previously that the continuers and terminators are no different in MBTI patterns and are equally similar in personality to their counselors. Likewise no differences between the groups were found in sex, age, academic major, or presenting problem, and follow-up letters were as often sent to those who continued as to those who did not. The only comparison which appears at all promising involves another aspect of client-counselor similarity, sex matching, but that holds for nonfreshmen clients only. A higher proportion of the continuers (91%) than of the terminators (46%) was paired with a counselor of the same sex, a result significant at the .05 level. (Of all nonfreshmen, 80% were paired with a counselor of the same sex.) In a subsequent sample, the same difference was found but to a considerably lesser degree (76% versus 55%). Given these marginal results, the question of why one client returns and another does not must be further pursued before an answer can be obtained.

To summarize the findings: (a) Failure to appear at a scheduled interview is strongly associated with global client-counselor similarity on the MBTI; (b) this finding is not an artifact of client or counselor characteristics; (c) failures occur quite early in counseling; (d) duration of counseling is longer for clients who return after a failed session than for clients who never failed at all; and (e) continuation of counseling after a failed session is marginally related to sex matching for nonfreshmen clients.

It seems clear, then, that in a surprisingly high proportion of cases the failure of a client to appear at a scheduled interview is related to events which take place in the counseling rather than to
events which are external to the counseling. If such chance factors as illness and the like are excluded, then the act of scheduling an interview but not keeping it would appear to reflect an ambivalence on the part of the client - he can decide neither to terminate immediately nor to continue. The failed session it seems, represents a compromise, perhaps a breathing space during which a decision about counseling can be made. The findings that failed sessions occur early in counseling (after the first session in most cases) and are associated with client-counselor similarity point to the initial clinical interaction as the source of failures. Although we lack direct evidence on which aspects of the interaction are involved, we suggest the following interpretation. The initial stage of counseling is apt to be a testing period during which the client evaluates the counselor and the process itself. Until some confidence in the counselor and a sense of the potential utility of counseling develop, the client may try to be cautious in what he reveals of himself and tentative in his commitment to counseling. We need next to consider the role of similarity. While similarity may facilitate communication between client and counselor, it may also encourage the exploration of personal or conflictual material before the client feels prepared to do so. Likewise, similarity may increase the attraction between client and counselor, but at the same time lead to an excessive involvement in the personal interaction and a resulting neglect of the client's concrete objectives. If these observations are correct, MBTI similarity is a condition which can easily lead to ambivalence on the part of the client. Because the early counseling experience has both attractive and disquieting features, a decision about continuation may be difficult to reach. If the attractive features seem to predominate, a stronger commitment to counseling and ease in communication may lead to greater duration. However, if the client is more affected by the disquieting elements, the potentiality of an excessively personal atmosphere, it is understandable that counseling will be short and that in many cases the client would prefer not to discuss his reasons for discontinuation with the counselor.

This is, of course, a highly speculative interpretation of the findings, but it is clear that both duration and missed sessions are much influenced by the similarity of the counselor and client on the MBTI. Perhaps the safest conclusion is that similarity is a volatile condition - it may be necessary for long duration but it can also lead to short counseling and unilateral termination by the client. Dissimilarity, in a sense, is a better predictor of duration than similarity, for high difference scores, in all three studies, are very consistently related to short counseling. Dissimilarity thus seems to be a limiting condition with respect to duration.

The replications of the initial findings about the relationship between MBTI similarity and duration of counseling proved quite successful. Unfortunately this was not the case for the attempted replication of findings relating similarity to client evaluations of counseling. Our
previous findings of a curvilinear relationship between similarity and client satisfaction with counseling was not replicated in sample 4. In fact the middle similarity group which had the highest mean evaluation score in samples 1 and 2 has the lowest mean in sample 4. It was noted in the presentation of the original findings that the results were most pronounced for non-freshmen and particularly for those non-freshmen matched with a counselor of the opposite sex. The data of sample 4 were further examined with this in mind, but still no significant findings were obtained. Indeed the most striking failure of replication arises from this analysis. In sample 2 there was no overlap in the evaluation score distributions of high and middle similarity pairs for the non-freshman clients matched with a counselor of the opposite sex. In the present analysis, there is not only considerable overlap but there is also a reversal of the relative order of the means. Instead of the middle similarity group evaluating counseling much more favorably than the high similarity group, as in sample 2, we now find that the high similarity group obtains a mean of 53.9 on the General Evaluation cluster compared to a mean of 46.8 for the middle similarity group. It is evident that the relationship between MMPI similarity and client evaluations of counseling is neither reliable nor consistent.

It is difficult to interpret this failure of replication. The size of the sample in the replication study (N = 71) is smaller than that in the original study (N = 129), but it is, nevertheless, large enough for trends to appear. Moreover, the results are more nearly different than similar in the two studies. It is possible that the complexity of the D² measure used to measure similarity is at fault. In the discussion of methodology, it was pointed out that drawing inferences from this measure is most difficult and it may be that the results in the second sample were the product of some unknown and unexplored aspect of the data. The present failure of replication parallels the failure of other researchers to replicate the Carson and Heine (1962) finding of a curvilinear relationship between MMPI profile similarity and the outcome of therapy (Carson and Llewellyn 1966, Lichtenstein 1966). Carson and Llewellyn conclude that "we are no longer convinced at this stage that global personality similarity is either very fruitful or very workable as a concept" and go on to recommend the use of more precise, analytical procedures. It should be clear from our previous discussion that this is a conclusion with which we agree, yet the results for duration of counseling are quite stable and consistent. At this point, we are left with an unanswered puzzle.

If it is nevertheless assumed that, with all its difficulties, the D² measure is a reflection of the overall similarity between client and counselor, what has been learned about the relationship of MMPI similarity to the course and outcome of counseling? For a substantial number of clients, a high degree of similarity is associated with failed appointments, cancellations and postponements early in counseling. If a client returns after such a missed session or never misses any sessions
at all, similarity is associated with counseling of relatively long duration. When the client and counselor are quite unlike each other, missed sessions rarely occur and the duration of counseling is almost always short. Despite effects of similarity on the course and duration of counseling, however, it does not bear a consistent, significant relationship to client evaluations of their experience. There is good reason to believe that, in general, personality similarity leads to interpersonal attraction in brief contacts (see for example Izard, 1960a, 1960b; Newcomb 1956, 1959). The results of this study become puzzling in this light; for, to the extent that this relationship holds true in clinical settings, one would expect similarity to be associated with effective counseling. We have previously argued that similarity is a volatile condition which may lead as easily to ambivalence about counseling as to a firm commitment to counseling. It appears, moreover, that the impact of similarity is greatest at the outset of counseling. We would argue, then, that if the early stages of counseling are successfully negotiated, similarity is a relationship maintaining factor. However, it appears that special care must be exercised in the handling of the case when the client and counselor are very much alike (cf, Lesser, 1961). These considerations raise some important questions about the nature of the interpersonal relationship in counseling, but since there are additional data relevant to this point to be reported later, we will defer further discussion until those data have been presented.

Effects of the similarity of client expectations and counselor role perceptions on outcome. A number of researchers and theoreticians have argued that the expectations which clients hold about counseling are an important determinant of outcome (see, for example, Bordin 1955, Apfelbaum 1958, Sarason 1954). It is thought that they have importance not only in their own right but particularly as they interact with the conception of counseling held by the counselor (Heine and Trosman, 1960). Indeed, the tendency of lower class patients to drop out of therapy early (Schaffer and Myers, 1954) is often attributed to the lack of mutuality in the expectations of therapist and patient about therapy. Although it seems quite reasonable to assume that (1) client expectations and (2) the mutuality of the client-counselor expectations are related to outcome, the research literature on this point has been neither consistent nor encouraging, e.g., Frank et al, 1959, Goldstein and Shipman 1961, Danskin 1955, Pohlman 1961. As usual, different methods, samples and definitions of expectations have been used in past studies, but, more important, the expectations of counselors have often been measured in a modal way or merely inferred rather than assessed on an individual basis. We decided, in consequence, to undertake a study of expectations and matching of expectations as part of the project.

The procedures for collecting data on expectations of counselors and clients were described on page 17 and the expectation questionnaire is included in Appendix A. Before examining the effects of expectations on outcome, a description of the results of the cluster
analysis of the questionnaire is in order.

Data were available in two samples, 5 and 6. The first analysis (sample 5) yielded a meaningful cluster structure but the results of the second analysis are not very similar to those of the first. Considerable effort was spent in trying to obtain a single solution which would fit the data of both samples, but none could be found. There is, in short, no evidence that the expectation questionnaire has a cluster structure invariable across samples. Nevertheless, several of the data analyses in sample 5 were done in terms of variables derived from the cluster analysis and so a brief description of the results is given below.

Three clusters of items emerged for both males and females:

1) the expectation that the counselor will be sincere, empathic, sensitive and responsible, i.e., concerned and conscientious
2) the expectation that the counselor will demand that the client take responsibility for his own decisions and
3) the expectation that the counselor will offer practical help in meeting immediate educational problems.

Two clusters appear for males which do not appear for females:

4M) the expectation that the counselor will be kindly, encouraging and nurturant and
5M) the expectation that the counselor will be an expert advice-giver.

Likewise, two clusters appear for females which do not appear for males:

4F) the expectation that the counselor will be tolerant, patient and supportive and
5F) the expectation that the counselor will be active in making decisions more or less for the client.

These seven expectation clusters are not to be understood as mutually exclusive, for a given client can hold several of them simultaneously. However, two basic dimensions do seem to run through them - first, the extent to which the client expects the counselor to take responsibility for him, to be a concerned, active, and directive helper, as opposed to the extent the client expects to take responsibility for himself and second, the extent to which the client expects counseling to be an interpersonally oriented as opposed to a task-oriented process. Even though the analysis of sample 6 did not produce a comparable cluster structure, this two dimensional scheme is suggestive and should be pursued in the future, perhaps with a revision of the questionnaire.

The study of the effects of similarity of client expectations and counselor role perceptions was done on sample 5. Each client was given a score on the five expectation clusters obtained for his or her own sex and each counselor was given a score on all seven of the clusters. Since there were only ten counselors in the sample, a cluster analysis of the counselor's responses was not feasible. Consequently the counselors were scored on the clusters derived from the analysis of the clients' responses. The D^2 measure was then calculated for each client-counselor pair, using the five scores appropriate to the client, and the resulting distribution was divided into three groups, high, middle and low similarity. One-way analyses of variance were then performed using the client questionnaire variables, the counselor
questionnaire variables and number of sessions as the dependent measures. Not one analysis of variance yielded a significant result. Subsequent analyses on separate sex, sex-matching and class-groups (freshman and non-freshman) yielded a few significant F ratios, but given the number of statistical tests conducted, these are expectable on the basis of chance alone. Since we discovered subsequently that the cluster analysis of the expectation questionnaire was unstable, the analyses were repeated in terms of items rather than clusters. The similarity score was based on the sum of the squared differences between the client's expectations and the counselor's role perceptions on the 34 items. This analysis was no more successful - once again no consistent relationships between mutuality of expectations and any of the outcome variables were found even when the possible influences of sex, sex-matching and class standing were examined. There is, in short, no evidence in these data that the matching of client and counselor in terms of expectations has any discernible effect on outcome.

The failure to find any effects of mutuality does not mean, of course, that client expectations or counselor role-perceptions are by themselves unrelated to outcome. Thus the next step was to examine the effects of client expectations on outcome. Once again, in sample 5, the expectation cluster scores were used as predictors. The product-moment correlations between the cluster scores and the client, counselor and duration outcome measures were obtained for the four sex by class groups, i.e., male freshmen, female non-freshmen, etc. About 7% of the correlations attain significance at the .05 level, a proportion which, given the interdependence of both the independent and dependent variables, could easily be the result of chance. Further, there is no consistency in the data; significant correlations in one group are in no case significant in another, the coefficients are as often opposite as the same in direction across groups and even within a group the pattern of results is too scattered to allow meaningful generalizations. Finally, the majority of the significant correlations are between client expectations and client evaluations; they may merely reflect a set on the part of the client rather than the influence of counseling itself. Thus on the basis of this analysis it is difficult to conclude that client expectations bear any important relationship to outcome. But here, too, the problem of the unsatisfactory nature of the cluster analysis arises. Perhaps there are clear results for some items which are obscured by the use of cluster scores. This possibility was investigated by examining the correlations of each expectation item with the outcome scores. Fortunately enough of the data of sample 6 has been processed to allow for a replication study, i.e., identical analyses were performed in samples 5 and 6.

The results of the analysis of item relationships to outcome are no more encouraging than those reported above. The amount of data involved in those analyses is huge, so we will give one illustrative example of the pattern of results. This example involves the cor-
relations of the 34 expectation questionnaire items with the client General Evaluation score for 57 males of sample 5 and 29 males of sample 6. Five coefficients are significant at the .10 level or beyond in sample 5 and eight coefficients reach this level in sample 6. However, with one exception, the significant items are different in the two samples. It remains the case though that in each sample a substantial number of significant correlations was found; 15% of the items in sample 5 and 24% of the items in sample 6 were significant at beyond the .10 level. It is possible, then, that, within each sample, expectations are related to outcome but because of unknown differences between the samples different items have predictive power. To evaluate this possibility, it is necessary to obtain an estimate of the number of significant findings which can be expected by chance. This is a tricky problem when, as in the present case, the independent variables are intercorrelated. Fortunately, a method for obtaining this estimate exists, the Monte Carlo method. This technique provides information about the frequency of significant relationships in a given data set if the scores were randomly distributed. The obtained results can then be compared to the results of the random analyses. In the present case, application of the Monte Carlo method clearly leads to the conclusion that the frequency of significant correlations in both samples is expectable by chance. We chose this example because it was the one for which the strongest results were found. Thus it must be concluded that client expectations at the outset of counseling have little or no effect on its outcome in these samples.

The final step in this analysis was concerned with the effect of the counselor’s role perceptions on the outcome of counseling. Separate analyses were performed for the male and female clients. The findings for client evaluations will be reported first. Of the 25 analyses done for males (five expectation clusters by five client evaluation clusters), only three were significant at beyond the .05 level of significance, but two of these were very highly significant, p. < .001. In general, male clients evaluated most favorably those counselors who expect clients to take responsibility for their own decisions and who expect to offer practical help in meeting immediate educational problems. Interestingly, the degree to which a counselor sees himself as kindly, encouraging and nurturant is quite unrelated to the client’s evaluations of outcome. For the females, only one of the 25 analyses is significant, a result which could well have occurred by chance. One implication of these findings is that the male clients evaluate more favorably those counselors who are oriented toward the task aspects of counseling. It was noted in the analysis of the client evaluation questionnaire that males tend to evaluate counseling in a somewhat less global manner than females, that the goal and relationship aspects of counseling are somewhat less interdependent for them. These results seem to offer some additional support for this suggestion and moreover they point toward a more businesslike attitude on the part of the male clients. The paucity of significant findings, though,
militates against accepting these conclusions as anything but quite tentative.

The pattern of results is quite different for the relationship of counselor role perceptions to their own evaluations of the counseling. Just about half the correlations for each sex reach significance. This is, on the surface, an impressive result which, for once, cannot be attributed to chance. However, it must be remembered that the same person, i.e., the counselor, is providing the data for both measures. It is not unlikely under these circumstances that the many significant findings obtained are the result of a response consistency on the part of the counselors which is independent of the events in counseling. Considered in this light, it is not surprising that, by and large, those counselors who describe themselves as nurturant and interpersonally oriented also say that they understood the clients well and had few negative feelings toward them. It would be easier to accept those results at face value, if they were reinforced by the client’s evaluations, but, as noted above, they are not. We are arguing, in short, that in evaluating the effects of counselor role perceptions, the judgement of the client is most important and conversely that in evaluating the effects of client expectations, the judgement of the counselor is most important. By this logic, neither set of independent variables seems to have a very potent effect on outcome, though there is evidence to suggest that the way in which counselors view themselves affects the way in which they evaluate their own efforts.

It is clear that this series of analyses provides little support for the asserted importance of expectations in counseling. Neither client or counselor expectations alone, nor the mutuality of their expectations have any clear impact on the course or outcome of counseling. Why is this the case? One possibility that cannot be ignored is that the instrument devised to measure expectations is a poor one. The failure to obtain a cluster structure which is invariate across samples strengthens this possibility. Moreover, the expectations sampled were concerned almost entirely with the behavior and approach of the counselor. Perhaps these are relatively unimportant or unstable aspects of expectation on the part of the client. Investigators like Frank (1959), Friedman (1963), and Goldstein (1960) have focussed with some success on the client’s expectations of change or improvement in treatment. There is reason to argue that this latter variety of expectation is more concrete and salient and thus more influential than the variety of expectation with which we were concerned. The client, almost of necessity, must have established some expectations about change and the direction of change before coming to counseling. His ideas about the counselor and his activity, on the other hand, may be vague and easily changed. Thus, more dramatic results might have been obtained in the present study if a different range of expectations had been sampled. Nevertheless, it remains the case that much of the previous writing about expectations has been precisely in
terms of those factors which our questionnaire attempted to assess.

The other major possibility is that the role of initial client expectations and their similarity to those of the counselor has been exaggerated in the theoretical literature. We have already suggested that clients may have rather diffuse and indefinite expectations about the nature of the counselor's activity. If this is so, the degree to which they are confirmed or disconfirmed may be unimportant, i.e., if the expectations are weak and non-specific, it is difficult to see why they should have much impact on counseling. Further, following the suggestion of Lennard and Bernstein (1960), it seems likely that the counselor teaches new expectations and new roles to his client. Unless the client has a well-formulated set of expectations at the outset of counseling, this in-counseling experience may be the more powerful force in the situation.

The data do not allow a clear choice between these alternatives. However, present results are consistent with the findings of other researchers in that little support has been found by anyone for the hypothesis that initial client expectations about the counselor and the match of those expectations to the counselor's conception of counseling exert a major influence on outcome. Consequently we incline toward the view that when clients come to counseling they have thought very little about the process by which they will be treated. Asking them to respond to a questionnaire about their expectations, then, gives an illusion of a definiteness of conception which, in fact, does not exist. If this is correct, those statements of expectation are not particularly important and the behavior of the counselor will not be experienced in any significant way as a confirmation or disconfirmation of previously held views. Only in those situations where special effort has been directed toward establishing a specific set of expectations on the part of the client, e.g., Rottschafer and Renzaglia (1962), will an effect on outcome be found, but such situations entail an experimental manipulation and are not really comparable to what happens in the natural counseling setting.

In summary, the analyses of client expectation and the similarity of client and counselor expectations failed to show a reliable effect on outcome. We view this failure as a meaningful negative result, rather than one which can be attributed to methodological shortcomings or artifacts and thus conclude that the importance of client expectations about the process of counseling has been exaggerated. The one suggestive, though weak, finding is that male clients respond more favorably to counselors who see themselves as acting in a task-oriented fashion in counseling.

Before turning to the next part of the results, one final ob-
servation must be made. Most writers on expectations in counseling fail to differentiate between expectations and preferences. It is quite possible that a client may expect something in counseling which he would prefer not to encounter or conversely prefer something which he expects will not occur (cf Pohlman 1961). It can also be argued that preferences for counselor behavior are stronger than expectations about counselor behavior and thus exert a more important influence on outcome. The negative results of therapy with lower-class patients seem more easily interpreted as a failure of the therapist to provide what the patient wants rather than what he expects. Because of these considerations, we have done some analyses of the effects of preferences on outcome but these have not yet been completed. Client preferences, by themselves, are not significantly related to outcome but we have not yet been able to analyze the potential effects of the matching of preferences with counselor characteristics. This is, though, a necessary next step.

Effects of client-counselor compatibility (FIRO-B) on outcome. In the discussion of the independent variables, it was noted that Schutz's Fundamental Interpersonal Relations Orientation Behavior (FIRO-B) inventory provides direct operational measures of interpersonal "compatibility" and is thus uniquely appropriate for use in studies of dyadic relationships. Nevertheless, there is, to date, only one published study in which FIRO-B has been used in a clinical setting (Sapolsky, 1965). The results of this study are quite encouraging, for Sapolsky found that "the degree of interpersonal compatibility existing between patient and doctor was a significant variable affecting the outcome of hospital treatment" (p. 75). Although he notes the small size of his sample and the need for more data, he concludes that compatibility may be an important variable underlying the establishment of "good" therapeutic relationships.

As suggestive as his results are, there are a number of limitations of the study which raise serious questions about the generality and meaning of his findings. Not only is the sample small in size, but it also consists entirely of females treated in a hospital by three first and second year residents. Further, there are several methodological questions involved in the use of compatibility scores which are overlooked in the study. Consequently we decided as part of the project to examine the effects of compatibility but by quite a different approach to analysis. If compatibility in terms of FIRO-B is really an "important underlying personality variable contributing to the establishment of 'good' therapeutic relationships" (p. 75), we would expect comparable (although not identical) results to those of Sapolsky irrespective of the setting and the approach to analysis. It should be noted that this study is not a replication of Sapolsky's work but rather is complementary to it. Indeed, the study was planned at the outset of the project, a time before Sapolsky's study was published.

The clients of sample 3, 73 males and 42 females, participated in
this study. Before reporting the findings, a consideration of the
means by which Schutz operationalizes the concept compatibility
is necessary. The test consists of six scales (see p. 15), Wanted
Inclusion (Iw), Expressed Inclusion (Ie), Wanted Control (Cw),
Expressed Control (Ce), Wanted Affection (Aw) and Expressed Affection
(Ae) on which both members of the dyad are scored. Their scores
are then combined in specific ways to yield three kinds of compat-
ibility measures, reciprocal compatibility (rKij) originator com-
patibility (oKij) and interchange compatibility (xKij); the subscript
i refers to one member of the dyad, here the client, and the sub-
script j to the other member, the counselor. The meaning and formula
for each is as follows.

Reciprocal compatibility (rK) "reflects the degree to which
members of a dyad reciprocally satisfy each others behavior pref-
erences." (Schutz, 1958, p. 108). The formula is: rKij = \[ e_i - w_j \]
+ \[ e_j - w_i \]. A zero score reflects maximum compatibility and the
larger the score, the less the compatibility. An illustration will
perhaps make the procedure clearer. If the client has a score of 5
on Iw and 2 on Ie and his counselor has scores of 4 on Iw and 6 on
Ie, the reciprocal compatibility score for the Inclusion dimen-
sion is \[ 12 - 4 \] + \[ 6 - 5 \] = 2 + 1 = 3. This score is designated rK

Originator compatibility is concerned with the balance of in-
itiating and receiving behavior in the dyad. Compatibility is present
when the two members have complementary patterns. "Conflict arises
when there is disagreement regarding preference of who shall orig-
inate relations and who shall receive them. For each need area (I,C,A)
there are two types of conflict: between two originators, competitive
originator incompatibility and between two receivers, apathetic
originator incompatibility" (p. 109). The formula is: oKij = \[ e_i - w_j \]
+ \[ e_j - w_i \]. Positive scores reflect competitive incompatibility
and negative scores apathetic incompatibility. Again a score of zero
indicates maximum compatibility.

Interchange compatibility "refers to the mutual expression
of the 'commodity' of a given need area" (p.110). It can be seen
from the formula that it is, in effect, a measure of the simil-
arity or dissimilarity in behavior preferences between dyad mem-
ers: xKij = \[ e_i + w_j \] - \[ e_j + w_i \]. As with reciprocal compat-
ibility, the larger the sum the less the compatibility. It is true
in all cases that zero indicates maximum compatibility.

Since there are three test dimensions and three forms of com-
patibility, there is a total of nine compatibility scores. In ad-
dition, Schutz suggests a number of composite scores, of which only
one is of present concern: the sum of all nine scores, designated K.
It is this measure which was used by Sapolsky.

Several of the problems we considered in the section on data
analysis apply to these compatibility scores. The most important is that they are a function of the separate scores from which they are derived and may thus be correlated with them. Consequently, what one attempts to explain by compatibility may be the result of client or counselor scores alone. If one examines the formula for originator compatibility, for example, it is apparent that it is nothing more than an unweighted arithmetic combination of two client and two counselor scores; any results attributed to originator compatibility can equally well be attributed to the client and counselor scores. This relationship between the component scores and the compatibility scores does not hold for the measures of reciprocal or interchange compatibility, however, because both those measures involve absolute difference scores. While they may be related to client and counselor scores, unlike the measure of originator compatibility, they include an independent matching component. Since Sapolsky does not examine the separate effects of the client and counselor scores, it is difficult to reach any conclusions about the independent effects of compatibility in his study.

Two additional problems arise in the use of the unweighted sum of the nine compatibility scores, i.e., \( K \), as a measure of global compatibility. Both reciprocal and interchange compatibility are absolute scores, but originator compatibility can have both positive and negative values. Thus when the nine scores are summed, \( K \) will be larger if there is "competitive originator incompatibility" and smaller if there is "apathetic originator incompatibility." This leads to a situation in which as one form of incompatibility increases, over-all compatibility, as operationally defined, also increases. The problem could be handled if originator compatibility scores were treated as absolute values, but neither Schutz nor Sapolsky makes any such suggestion. Again this leads to difficulty in interpreting Sapolsky's findings in terms of compatibility. The second problem in the use of a global measure like \( K \) is that its components may contribute differentially to the prediction of a criterion. A single component or a sub-set of components may predict as well or better than \( K \) and it is even possible that two components may predict the criterion in opposite directions. In the latter case, a simple sum in which all components are weighted equally can lead to a cancellation of effects. Under any circumstances, a global measure is more difficult to interpret than its individual components and a differentially weighted composite is likely to predict better than a composite formed of equally weighted components.

We have gone into some detail in the discussion of FIRO-B and the measures of compatibility derived from it both to point out certain questions about Sapolsky's findings and to indicate the methodological problems involved in the use of these matching scores. We will necessarily return to these problems in the data analyses below.
The correlations between the ten compatibility scores and the measure of General Evaluation are shown for males and females in Table 11.

### Table 11

**Product-Moment Correlations between Compatibility Scores and General Evaluation**

<table>
<thead>
<tr>
<th>Need Area</th>
<th>Type of Compatibility</th>
<th>Males (n=73)</th>
<th>Females (n=42)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reciprocal (rKI)</td>
<td>.09</td>
<td>.35*</td>
</tr>
<tr>
<td>Inclusion</td>
<td>Originator (oKI)</td>
<td>.10</td>
<td>-.17</td>
</tr>
<tr>
<td></td>
<td>Interchange (xKI)</td>
<td>.05</td>
<td>.30*</td>
</tr>
<tr>
<td></td>
<td>Reciprocal (rKC)</td>
<td>-.12</td>
<td>.09</td>
</tr>
<tr>
<td>Control</td>
<td>Originator (oKC)</td>
<td>-.02</td>
<td>-.35*</td>
</tr>
<tr>
<td></td>
<td>Interchange (xKC)</td>
<td>-.11</td>
<td>-.32*</td>
</tr>
<tr>
<td></td>
<td>Reciprocal (rKA)</td>
<td>-.12</td>
<td>.34*</td>
</tr>
<tr>
<td>Affection</td>
<td>Originator (oKA)</td>
<td>.01</td>
<td>-.06</td>
</tr>
<tr>
<td></td>
<td>Interchange (xKA)</td>
<td>-.11</td>
<td>.25</td>
</tr>
<tr>
<td>Global</td>
<td>Compatibility (K)a</td>
<td>-.05</td>
<td>.13</td>
</tr>
</tbody>
</table>

*Global Compatibility is the sum of the nine component compatibility scores listed above it.

*p < .05

Perhaps the most striking aspect of these results is the difference between the correlations for males and females. For the latter, five of the compatibility scores correlate significantly (p < .05) with General Evaluation, but for the former none of the correlations even approaches significance. This basic finding holds for the correlations between the compatibility scores and the five other clusters' scores as well. There is at least one significant predictor for each cluster score for the females. In contrast, only two significant (p < .05) correlations were obtained for males and both
are relatively low \( (r = .25) \). Since 60 correlation coefficients were computed for each sex, the conclusion that the results for males are due to chance cannot be rejected. Thus evidence of a relationship between FIRO-B compatibility and outcome was obtained for females only.

Before reaching any conclusions about the relationship of compatibility scores to the criteria in this female sample, the possibility that client or counselor scores alone can predict as well as or even better than the compatibility scores must be examined. The findings for the General Evaluation score are typical and will serve to illustrate the pattern of results. Two client scores, Wanted Control \( (C_w) \) and Expressed Control \( (C_e) \) have moderate correlations with the criterion \( (r = .28 \) and \( -.27 \) respectively), but neither is significant at the .05 level and neither is as high a correlation as any of the five significant ones between compatibility scores and General Evaluation (see Table 11). Compatibility, then, does seem to have an important predictive function, independent of client or counselor scores, for the females.

The findings for the General Evaluation score are typical and will serve to illustrate the pattern of results. Two client scores, Wanted Control \( (C_w) \) and Expressed Control \( (C_e) \) have moderate correlations with the criterion \( (r = .28 \) and \( -.27 \) respectively), but neither is significant at the .05 level and neither is as high a correlation as any of the five significant ones between compatibility scores and General Evaluation (see Table 11). Compatibility, then, does seem to have an important predictive function, independent of client or counselor scores, for the females.

The second finding of note in these data is the failure of the global compatibility measure \( (K) \), used by Sapolsky, to predict any of the outcome measures for either sex significantly. For females, this failure occurs despite the presence of a substantial number of significant correlations between the outcome measures and the individual compatibility scores which are the components of \( K \). Inspection of Table 11 reveals the reason for this failure quite clearly. As noted before, the global compatibility measure is the simple sum of the individual compatibility scores, but these nine scores do not all correlate with the criterion in the same direction. In fact, for each sex, just about half the correlation coefficients are positive and half are negative. Consequently, the effects of the individual compatibility scores cancel each other out when these scores are combined into the global compatibility measure. However, these variations in direction are not random - every significant correlation between a compatibility score in the Inclusion and Affection need areas and an outcome measure is positive in sign and all the significant correlations involving the Control need area are negative in sign. Since maximum compatibility is defined as a score of zero and the higher the outcome score, the more favorable the client's evaluation, these results indicate that compatibility in Inclusion and Affection need areas is associated with less client satisfaction, lower evaluation of the counselor and less comfort and rapport on the part of the client. The expected relationship between compatibility and outcome was found only in the Control need area.

Although \( K \), the global compatibility measure suggested by Schutz, proved of no value as a predictor in this study, it remains possible that some other composite of the nine individual compatibility scores would produce higher correlations with the criteria
than does any single compatibility term. We have noted two difficulties with the K measure, one methodological and the other empirical, which should be avoided in the formation of such a composite. The methodological problem concerns the measure of originator compatibility. Unlike the other compatibility measures, it can take on both negative and positive values and is not really a compatibility measure at all. Thus Originator Compatibility terms should be excluded in the formation of a composite. The second difficulty is that in the formation of K all terms are weighted equally, i.e., they are all given a weight of +1. However, we have found that some compatibility scores correlate positively and some negatively with the criteria and thus tend to cancel each other when combined. In order to avoid this problem, the terms entering the composite should be weighted in the direction of their correlation with the criteria. If a measure of overall compatibility has any utility at all, a composite formed in this way should yield appreciably higher correlations than those based on the individual compatibility terms. The prediction of General Evaluation scores in the female sample was selected as a test case.

The composite score was obtained in the following manner. First all individual compatibility scores were standardized. Then each compatibility score which was significantly \((p < .05)\) correlated with the criterion was given a weight of +1 when the correlation was positive and -1 when the correlation was negative. Thus, the composite consisted of \(rK^1 + rK^2 + xK^3 - xK^4\) and a single composite score was derived for each client by summing his weighted standard scores. If, for example, a client's standard scores on the four measures were 45, 55, 40 and 35 respectively, her composite score would be 105. For purposes of comparison, a composite based on the significant \((p < .10)\) client and counselor score predictors was formed in an identical fashion. These two composites were then correlated with the General Evaluation score and in addition, a multiple regression coefficient using both composites as predictors was obtained. The results are shown in table 12.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatibility Composite</td>
<td>.50***</td>
</tr>
<tr>
<td>Client-counselor Composite</td>
<td>.39*</td>
</tr>
<tr>
<td>Multiple Regression</td>
<td>.54**</td>
</tr>
</tbody>
</table>

* \(p < .05\) ** \(p < .01\) *** \(p < .001\)
Perhaps the clearest way to evaluate the utility of the compatibility composite is to compare the proportion of variance explained by the composite to the proportion of variance explained by the best individual compatibility score predictor, i.e., by a comparison of $r^2$. The best single predictor is reciprocal compatibility in the Inclusion need area - it accounts for 12% of the variance of the criterion. In comparison, the compatibility score composite accounts for 25% of the variance. Clearly the use of the composite does result in an appreciable improvement in prediction, doubling the amount of explained variance. This stands in sharp contrast to the results obtained for the K composite, but this finding should be interpreted cautiously for the following reasons. This composite was formed a posteriori in an attempt to maximize prediction. Thus, while the data show that a composite can improve prediction, cross-validation is necessary to evaluate the stability of this particular composite. Further, some terms enter the composite with positive and some with negative weights; consequently, despite its practical value, it is difficult to ascribe a meaning, particularly in terms of compatibility, to the composite.

We noted before that there is a problem in making the inference that results are attributable to client-counselor matching (compatibility) rather than to the characteristics of the client or counselor alone. The data of Table 12 also provide information on this point. If compatibility does have a predictive function independent of the client and counselor scores, the multiple regression prediction based on both composites should be significantly better than the prediction based on the counselor-client composite alone. A comparison of the two coefficients (.39 versus .54) indicates that this is the case. In contrast, there is little difference between multiple regression correlation and the correlation based on the compatibility score composite alone (.50 v. .54). Furthermore, the compatibility score composite remains a significant predictor of outcome after the effect of the client-counselor score composite is partialled out ($r_{12.3} = .41, p = .01$). Thus, the evidence indicates that FIRO-B compatibility scores are important independent predictors of outcome for the female client.

This study was undertaken to examine the hypothesis that client-counselor compatibility, as measured by FIRO-B, would be related to the outcome of counseling. Such a finding would, of course, add strength to Sapolsky's suggestion that compatibility may contribute to the establishment of a "good" therapeutic relationship and, moreover, would provide a basis for client-counselor matching. Although our results, like those of Sapolsky, indicate that some scores derived from FIRO-B are effective predictors of outcome, the difference between the results of the two studies are considerable. Perhaps the most clear-cut difference is that the global compatibility measure, K, which works quite well in Sapolsky's study, is a failure in the present study. The effects of compatibility in different need areas, it seems,
can be directly opposite, a possibility obscured by the use of the K score. While it should be kept in mind that the two studies differ radically in the samples and processes studied, the evidence casts serious doubts on the generality of the positive relationship between "compatibility" and favorable outcomes found by Sapolsky.

Further doubt on the generality of this relationship arises from the differences in results for males and females. Since Sapolsky studied only females, no comparisons are possible, but it is clear that for the present sample, compatibility, as operationalized by Schutz, is a variable of consequence only for females. We have suggested before that males are more task oriented in counseling than females who, in contrast, are more generally affected by the nature of the interpersonal relationship. These results strengthen that suggestion and are consistent with the well substantiated finding that, compared to males, females are more sensitive and responsive to interpersonal behavior and are more dependent on others (Tyler, 1966).

To the extent that this is true in clinical settings, it is not surprising that compatibility affects the females' response to counseling more than it does the response of the males. But whether or not this interpretation of the obtained sex difference is correct, it is clear that generalizing about the clinical relationship or the clinical process on the basis of results for one sex is a dangerous procedure. Yet the number of studies in this area which make any attempt to explore potential sex differences is quite small. Given the consistency with which differences in social behavior between males and females have been found, this seems an unfortunate omission which may as easily lead to the rejection of valid but limited hypotheses as to the overgeneralization of findings.

The significant correlations between compatibility scores and outcome variables follow a consistent, but surprising, pattern: compatibility in the Inclusion and Affection need areas is related to unfavorable outcomes and compatibility on the Control dimension is related to favorable outcomes. If the FIRO-B compatibility indices really measure what they are supposed to measure, the results for Control are expectable and support the notion that the direction of the counseling process should be shared by the two participants. The results for the Inclusion and Affection need areas, the two dimensions most concerned with the affective aspects of relationships, on the other hand, appear paradoxical. However, findings of other studies of the effects of client-counselor matching, particularly those concerning similarity reported earlier, suggest that conditions which encourage closeness can have a deleterious effect on the clinical process. Carson and Heine (1962), for example, argue that high similarity of personality can lead on the part of the therapist to an overidentification with the patient and his problems and earlier in this report, we suggested that strong interpersonal attraction early in counseling may result in excessively rapid movement and an over-personalization of the relationship.

In light of the findings for MITI similarity and FIRO-B compatibility, it seems a tenable hypothesis that factors which foster strong
emotional attachments in typical social relations can, unless carefully handled, lead to undesired effects in the special relationship which characterizes counseling. These data do not lead us to conclude that a good clinical relationship is one example of good interpersonal relationships in general.

We have not yet been able to attempt a replication of these findings nor to examine the effects of compatibility on counselor evaluations, but the data of sample 6 will shortly allow us to do so. It is also impossible to know whether the specific results found in this study would be found in other settings. Moreover, there are other, simpler compatibility scores possible which could be as effective, or more effective, than those suggested by Schutz. Despite these reservations and despite the differences between the present study and that of Sapolsky, one central point emerges - FIO-B scores can generate some remarkably good predictions of outcome, at least for females. Considering that (1) the tests are administered before the beginning of counseling and neither participant knows his own or his partner's test results, (2) the results attributed to compatibility scores cannot be explained in terms of client or counselor scores alone, (3) there are differences among counselors in background and style and among clients in objectives and maturity, (4) there is a myriad of important events which take place in the counseling itself, and (5) there is a considerable time lapse between the testing and the evaluation of outcomes, a correlation of the magnitude of .54 can be described without exaggeration as remarkable. The result is perhaps the strongest evidence we obtained in favor of our basic assumption about the importance of considering which counselor is interacting with which client. It also suggests that systematic, empirically based matching of client to counselor is both feasible and practicable.

The effects of sex matching on the outcome of counseling. Sex-matching is the most readily observable and easily investigated aspect of matching, but there are very few reported investigations of its effect on outcome. This is surprising since decisions about whether a client should be assigned to a counselor of the same sex or of opposite sex are often made quite explicitly in clinics. Further, from the research standpoint, the determination of sex matching does not involve the problems of measurement that similarity does, nor does it require any special testing procedures. It is, in short, a very easy form of matching research to conduct in a natural setting. The studies that are available are too few in number to allow any generalizations, but there are some data (Cartwright and Lerner, 1963; Fuller, 1963; Gonyea, 1963) to suggest that sex matching does affect the course and outcome of counseling. The Gonyea is particularly interesting because a relatively large sample of clients was used and sex matching was considered in relation to the client's problem and the counselor's experience. His data point to the importance of including these latter variables in studies of sex matching.
Early in the present project, Mendelsohn and Geller (1963) found that sex matching did not affect the duration of counseling, but that result was obtained for a small sample (sample 1). By combining the data of all our samples, it was possible to do a thorough study of this variable which also included the factors which proved important in Gonyea's study. A total of 448 clients, 262 males and 186 females, and 18 counselors, 10 males and 8 females, was used. A series of four-way analyses of variance, one for each of the client evaluation clusters and duration, was run. The main effects were client sex, counselor sex, presenting problem and counselor experience. Presenting problem was ascertained by examining the client's face sheet filled out at the time he applied for counseling assistance and thus, before his first interview. Three groups of problems were identified: Choice, Information Seeking and Personal. A client was considered to have a Choice problem if his stated objective was to make a decision about professional or career plans, or about his academic major. A client was considered to have an Information Seeking problem if his stated objective was only to receive information about his interests or abilities, or about jobs. Those clients who had Choice problems often indicated a desire for information, but the distinguishing characteristic of the second group was their failure to mention any purpose for which the information was desired. The third group, Personal, consisted of clients with emotional and social problems, and those clients who were having academic difficulty. Three levels of counselor experience, 0-24, 25-60, and 61 or more full time months were established. Thus a 2x2x3x3 analysis of variance design was employed.

It should be noted that the independent variables used in these analyses are the same as those used by Gonyea. However, in his study, there were only two kinds of problems, Personal and non-Personal and two levels of experience, post-Ph.D. and intern. The dependent variables are quite different since he examined changes in client-self-description while we were concerned with client evaluation of the counseling process and duration. Consequently, differences in results cannot be considered a failure of replication of Gonyea's findings.

Significant F ratios were found in six of the seven analyses, but in no case did the Sex of Client X Sex of Counselor interaction approach significance. The results for the first cluster score, Client Satisfaction, are typical: the mean outcome scores are male clients-male counselors 49.88, male clients-female counselors 49.72, female clients-male counselors 50.30 and female clients-female counselors 49.57. The same finding holds for duration of counseling and thus our earlier result, or non-result, is replicated. Moreover, sex matching does not interact significantly with either problem or experience. Thus we obtain no support for the finding of Cartwright and Lerner, 1963, of an interaction between sex-matching and counselor experience. Further analyses also indicated that matching in terms
of sex role identification, as measured by the M-F scale of the Strong Vocational Interest Blank, is not significantly related to client evaluation or duration. This is true whether sex-role matching is considered alone or in conjunction with biological sex matching. Thus, it is clear that for these data, sex matching in terms of both biological sex and sex-role identification has no important bearing on outcome.

The variable which is most consistently related to outcome is presenting problem which yields significant F ratios on cluster I (p < .025), cluster II, Evaluation of the Counselor (p < .01), cluster IV, Therapeutic Benefit (p < .01), the centroid, General Evaluation (p < .025), and number of sessions (p < .001). For all clusters, except IV, the pattern is the same: those clients who came with Choice problems evaluate counseling somewhat more favorably than those who came with Personal problems and both these groups are considerably more satisfied than the Information Seeking group. Expectably, for cluster IV, Therapeutic Benefit, the relationship of the means for the Personal and Choice problem groups are reversed. For number of sessions, the relevant means are Choice 2.48, Information 2.28 and Personal 2.86. The meaning of these results is two-fold. First the system of categorizing problems appears valid in that differences in outcome are associated with the nature of the presenting problem as here defined. Second, on all measures the Information Seeking clients appear least happy with their counseling experience. On the surface, this is paradoxical for one would expect that their needs are minimal and could easily be satisfied by testing or reference to appropriate informational materials. That this is not the case suggests that their statement of problem is defensive and designed to avoid the admission of a problem. If this inference is correct, it is not surprising that they are on the whole difficult and dissatisfied cases. The counselor who takes their statement of problem at face value, runs the risk of ignoring their covert problem while the counselor who seeks to work with the covert problem runs the risk of intensifying the defense. These considerations potentially have considerable bearing on problems of matching, but the results so far discussed simply point to the importance of taking presenting problem into account.

The one consistent result in these analyses which does have import for matching is the three-way interaction between client sex, presenting problems and experience. This interaction is significant at the .05 level or beyond for clusters I and II and the centroid. Inspection of the pattern of means indicates that 1) ratings of outcome for both male and female clients with Choice problems are little affected by level of counselor experience; 2) males with Information Seeking problems are least satisfied with inexperienced counselors, and most satisfied with counselors of middle experience; females with this problem show the opposite pattern - ratings are highest for inexperienced counselors and remarkably low for counselors of middle experience; 3) there is a
positive, linear relationship between rated outcome and counselor experience for clients with Personal Problems which holds, with only small differences, for both male and female clients; 

4) the effects of problem and experience are somewhat more pronounced for the female than for the male clients; and 

5) experience has its greatest effect in the case of Information Seeking problems. These results are not easy to interpret and to do so would require considerable speculation. It should be noted, however, that Gonyea also found an interaction between client sex, presenting problem and experience for one of his variables and in his data, as in ours, a more differentiated pattern of results was obtained for female than for male clients. Another similar finding is that experience of the counselor is not, by itself, a significant predictor of outcome, largely because the effect of experience is a function of the client's problem. In the present data (but not in Gonyea's), counselor experience does operate in the expected fashion for clients with personal problems, i.e., the most experienced counselors do best, but this does not hold true for Information Seeking clients. The situation is obviously too complex to allow specific conclusions other than the general one that both Gonyea's study and our own reaffirm the importance of matching and indicate the importance of taking presenting problem and counselor experience into account in studies of matching.

The significant findings for duration of counseling do not include any matching effects, but it is clear that female counselors retain their clients longer than do male counselors (p < .001). Closer inspection of these results, however, reveals that this trend is most pronounced for those clients with personal problems as can be seen in table 13.

Table 13
Mean Number of Sessions as a Function of Counselor Sex and Presenting Problem

<table>
<thead>
<tr>
<th>Sex of Counselor</th>
<th>Choice</th>
<th>Problem Information</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>2.40</td>
<td>2.25</td>
<td>2.58</td>
</tr>
<tr>
<td>F</td>
<td>2.63</td>
<td>2.34</td>
<td>3.34</td>
</tr>
</tbody>
</table>

Interestingly, Personal problem clients of female counselors not only remain in counseling longer but also evaluate counseling more favorably. The means for the centroid are male counselors 43.94 and female counselors 53.75. Perhaps the imagined or real maternal characteristics, i.e., warmth and nurturance, of the female counselor are important to clients of this age who have problems which are emotional and interpersonal in nature. Of the two relevant studies using similar populations, Campbell (1962) and Gonyea (1963), only the former finds a similar result. Thus, the finding may be specific to the particular counselors who participated in this study, but the
result is of sufficient strength and potential importance to justify further research.

We undertook this series of analyses primarily to investigate the effects of sex matching on the outcome of counseling. A number of matching effects were found but none of them involved the interaction between the sex of the client and the sex of the counselor. Does this mean that sex matching is of no importance whatever? Our preliminary analyses of the data from sample 3 involving the Ori and SIV suggest that while sex matching itself has no effects on outcome it may act as a moderator variable. For both tests, measures of similarity or complementarity between the client and counselor exert a much more powerful influence on outcome measures in opposite sex than in same sex pairings. The point is illustrated in table 14. For each of the two tests, multiple regression predictions of the client evaluation scores were made separately for same sex and opposite sex pairings. The multiple regression predictions were based on client scores and similarity scores and in each case all variables included in the regression equation made significant ($p < .05$) independent contributions to the regression.

Table 14

<table>
<thead>
<tr>
<th>Cluster</th>
<th>SIV Same Sex</th>
<th>Opposite</th>
<th>Ori Same Sex</th>
<th>Opposite</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>.21</td>
<td>.44*</td>
<td>.16</td>
<td>.38*</td>
</tr>
<tr>
<td>II</td>
<td>.42**</td>
<td>.71**</td>
<td>.11</td>
<td>.43*</td>
</tr>
<tr>
<td>III</td>
<td>.33**</td>
<td>.43*</td>
<td>.15</td>
<td>.32</td>
</tr>
<tr>
<td>IV</td>
<td>.19</td>
<td>.59**</td>
<td>.13</td>
<td>.54**</td>
</tr>
<tr>
<td>V</td>
<td>.25*</td>
<td>.69**</td>
<td>.16</td>
<td>.66**</td>
</tr>
</tbody>
</table>

* $p < .05$    ** $p < .01$

Inspection of the table indicates that in every case, coefficients are higher for opposite than for same sex matchings, although, because of the difference in sample size (opposite = 28, same = 90), differences in significance levels are less extreme. It will be recalled that a similar result obtained, in sample 2, though not in sample 4, for the MBTI similarity scores. Thus, the generalization that matching exerts a more powerful influence on outcome in opposite sex than in same sex pairs holds in two samples and for three different personality tests.

Since we have not yet had a chance to replicate findings for sample 3 with the data of sample 6, it is premature to discuss the substantive meaning of these correlations. However, the differential effect of matching variables in same sex and opposite sex pairings is a point of the greatest potential significance. If
we add to the results just reported, the findings for the FIRO-B compatibility scores, i.e., strong effects were found for female but not for male clients, the conclusion seems justified that client-counselor matching exerts a more powerful influence on outcome when at least one member of the counseling pair is a female (cf. Fuller 1963). We noted in connection with the FIRO-B results that females have consistently been found to be more interpersonally oriented and responsive than males and in the cluster analysis of the outcome questionnaire, the results suggested that females differentiate less clearly than males between the relationship and task aspects of evaluation. Taken as a set, then, our data provide a basis for arguing that when a male client is assigned to a male counselor the "business" of counseling will be emphasized, but that when a female is involved interpersonal elements, the relationship as traditionally conceived, will be salient. Whether or not the specific argument is supported by subsequent data, the failure of most research on counseling and psychotherapy even to consider sex differences and sex matching must be considered a most serious omission.

Effects of the accuracy of the counselor's perceptions of the client on outcome. It is widely believed that the ability of the counselor to perceive his client accurately is a critical determinant of counseling effectiveness. This ability is often referred to as empathy, "the imaginative transposing of one's self into the thinking, feeling and acting of another and so structuring the world as he does" (Dymond 1949). The technique which has most often been used to operationalize the concept empathy is known as response prediction. In essence, this technique requires the judge to observe some other person (the object) and then to predict that person's responses, usually to a psychological test or rating scale. The procedure has high face validity, for one would suppose that if the judge is able to perceive the object accurately, he would be able to predict the object's responses accurately. What seems a very reasonable operationalization has, however, upon close examination proved an extremely complex procedure which yields artifact-laden measures (Bronfenbrenner, Harding and Gallwey, 1958, Cronbach, 1958, Gage and Cronbach, 1955). It is beyond the scope of this report to review the relevant literature, but the major point is that such factors as response sets, projection, stereotypes and response styles seriously affect response prediction measures of accuracy and need to be analyzed or controlled before valid influences can be drawn.

Considering the emphasis placed on empathy in the clinical literature, it is surprising that there have been very few response prediction studies conducted in clinical settings. Virtually the only one of note is that of Cartwright and Lerner (1963). Briefly, they found that the accuracy of the therapist's predictions of the patient's self description at the end of therapy is significantly related to patient improvement as judged by the therapist. This finding, of course, confirms expectations about the role of empathy in treatment, but unfortunately Cartwright and Lerner did not adequately
consider potential artifacts. Nevertheless, the study is suggestive and demands replication.

The data of sample 5 allowed us to undertake a study of empathy. It will be recalled that in this sample, after the first session, the counselors were asked to predict their client's responses to the expectation questionnaire; specifically, they filled out the questionnaire as they thought the client had filled it out before counseling was begun. We reasoned that after the first interview (in which the client presented himself, his problems and objectives), the counselors should have acquired enough information to make reasonably accurate predictions of dimensions of direct relevance to the counseling. We further predicted on the basis of both theory and the Cartwright and Iener study that accuracy would be positively associated with favorable outcomes.

Accuracy was measured as follows: first, each client expectation response was scored in a dichotomous fashion. Although the rating scale has four points, there is no point of indeterminacy in the scale, i.e., either the client expects or does not expect some aspect of counselor behavior or approach. The decision to ignore the intensity with which the client holds the expectation was determined by the finding of Hastorf, Bender and Weintraub (1955) that there are consistent individual differences among subjects in the extent to which they use extreme categories as opposed to middle categories and that this response style affects accuracy scores. In order to control for this artifact, then, the scoring was reduced to the categories expect or not expect. The counselor's predictions were scored in the same dichotomous fashion and then the total number of correct predictions, "hits," was counted. This was used as the accuracy score. It should be noted that this score is still subject to some artifactual influences, most notably the effects of stereotype, but we will consider that problem later.

The effects of accuracy on outcome were analyzed by a series of two-way analyses of variance. The first main effect was high accuracy - low accuracy and the second was counselor, each counselor in the sample constituting a level of this effect. Only those counselors who had ten or more cases were used in these analyses and the high accuracy-low accuracy division was made within each counselor's distribution of "hit" scores. Thus a sample of six counselors and 83 clients was used. There were, in all, 10 analyses of variance, one for each of the six client and three counselor questionnaire cluster scores and one for number of sessions.

Five of the analyses yield an F ratio significant at the .10 level or beyond for the High-Low Accuracy main effect. In every case, the evaluation of counseling is more favorable for the high accuracy than for the low accuracy condition. The relevant F ratios (df = 1, 76) are: Client Cluster I, "Client Satisfaction", F = 9.43, p <0.005,
Client Cluster IV, "Therapeutic Benefit" F = 2.92 p < .10, Client First Centroid, "General Evaluation" F = 6.53, p < .025, Counselor Cluster I, "Evaluation of Effectiveness" F = 5.02, p < .05, and Number of sessions, F = 3.29, p < .10. The results for Client Cluster I and Counselor Cluster I are shown in table 15.

Table 15
Mean Outcome Score as a Function of Accuracy: Client Cluster I and Counselor Cluster I

<table>
<thead>
<tr>
<th>Client Cluster I</th>
<th>Counselor Cluster I*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>A</td>
<td>55.4</td>
</tr>
<tr>
<td>B</td>
<td>53.3</td>
</tr>
<tr>
<td>C</td>
<td>54.0</td>
</tr>
<tr>
<td>D</td>
<td>55.2</td>
</tr>
<tr>
<td>E</td>
<td>50.2</td>
</tr>
<tr>
<td>F</td>
<td>57.3</td>
</tr>
</tbody>
</table>

*For the Counselor clusters the more favorable the rated outcome, the lower the cluster score.

These results are quite impressive in two senses. First, in no case is the interaction between Accuracy and Counselor significant, i.e., the effect of accuracy is consistent across counselors. Second, the effect of accuracy is consistent across outcome measures even though they are drawn from different sources. Neither the client nor the counselor can have any idea of each other's ratings and indeed, in this sample, the cluster scores on Client Cluster I and Counselor Cluster I are not significantly correlated. Moreover, the results for number of sessions, while only of marginal significance, indicate that high accuracy is associated with longer duration of counseling. Thus, the findings for all three varieties of outcome measure lead to the same conclusion: the accuracy with which the counselor perceives his client is positively related to the effectiveness of counseling.

Despite this confirmation of theory and of the findings of the Cartwright and Lerner study, it has not yet been demonstrated that the counselors are truly accurate in their predictions of client expectations. It remains possible that the accuracy score is influenced by one or more of the artifacts previously noted. Thus, the next step in the study consisted of an attempt to evaluate the extent to which the counselors can really predict the responses of individual clients. The first analysis in this series consisted of examining the relationship between client responses and counselor predictions on each of the 34 items of the questionnaire. The results for item 1, which are typical, are shown in table 16.
Table 16

Relationship between Client Responses and Counselor Predictions on Item 1*

<table>
<thead>
<tr>
<th>Counselor Prediction</th>
<th>Expect</th>
<th>Not Expect</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expect</td>
<td>107</td>
<td>31</td>
<td>138</td>
</tr>
<tr>
<td>Not Expect</td>
<td>22</td>
<td>42</td>
<td>64</td>
</tr>
</tbody>
</table>

\[X^2 = .61, \text{ n.s.}\]

*Since this analysis is concerned only with counselor predictions and client responses, not with outcome scores, all clients who completed the expectations questionnaire could be included. Thus the sample size here is 167.

It can be seen from the table and from the insignificant chi square that the predictions of the counselors are quite independent of the responses of the clients. The counselors predict "Expect" in 78% of the cases in which the true client response was "Expect" but they also predict "Expect" in 76% of the cases in which the true client response is "Not Expect." The proportion of counselor predictions of "Expect" is simply not contingent upon the clients' responses. This result holds true for every one of the 34 items, for in no case does a chi square even approach significance. Thus it must be concluded that the counselors, as a group, cannot accurately predict the responses of individual clients.

Despite the negative results of the chi square analyses, it remains possible that some counselors can predict accurately or that counselors are accurate for some clients and inaccurate for others. In order to evaluate these possibilities we investigated the internal consistency reliabilities of the accuracy score. If some counselors predict accurately while others do not, i.e., if accuracy is a trait which exists to varying degrees in different counselors, then the relative ordering of counselors in terms of the mean accuracy score for the first half of their clients should be about the same as their ordering for the second half of their clients. This is, in effect, a split-half reliability in which each half of a counselor's clients represents an item. The rank-order correlation coefficient for the two halves is .34 which does not approach significance. The evidence clearly indicates, then, that there are no stable differences in accuracy of prediction among the counselors; accuracy cannot be considered a stable trait.

The second possibility that counselors are accurate for some clients but not for others was likewise evaluated by a reliability analysis. This time, however, a more conventional form of reliability coefficient was obtained, the split half reliability of the total
accuracy score. The Spearman-Brown coefficient is .36 which is far from an acceptable level of reliability for a psychological scale. This means that a client who is accurately predicted on one-half of the items may or may not be accurately predicted on the other half. Consequently, there is no evidence that the counselors are predicting consistently, either badly or well, for individual clients.

These analyses lead to a paradoxical situation: there is no evidence that counselors can accurately predict the responses of their individual clients, yet the accuracy score is a significant predictor of outcome. One aspect of the data which has not yet been commented upon, provided a clue as to what might be happening: although the counselors do not make accurate predictions for individuals, their predictions are in accord with the expectations of the clients as a group. The product-moment correlation between the mean counselor predictions and the mean client responses over the 34 items is .87. The situation is well illustrated in Table 16. The counselors predict that 77% of the clients expect that the counselor is quick to give encouragement and reassurance and, in fact, 83% of them do hold that expectation. Although the counselor cannot accurately perceive which clients deviate from this expectation, they do perceive the stereotype quite accurately. Because of this they are correct in considerably more than half their predictions (63%), but they would have been more accurate if they had predicted the stereotype every time. A distinction must be made, in short, between stereotype accuracy and individual difference accuracy (Bronfenbrenner, Harding and Gallwey, 1958). The counselors are notably good at the former and poor at the latter, but it should be added that there is very little evidence of consistent individual difference accuracy in the entire person perception literature.

Given these findings, we reasoned that the results for the accuracy score might be explained as follows. The accuracy scores for clients who are more stereotyped in their expectations will tend to be higher than those for clients who deviate from the stereotype. If the stereotyped client also does better in counseling, then the obtained result for accuracy and outcome could be explained by their joint relationship to differences in the degree of stereotype of individual client's responses. A similar argument can be made about the counselors' tendency to predict the stereotype. It was noted in the example above (table 16) that if the counselors had predicted the stereotype every time, their accuracy scores would have been higher. Thus, it should be the case that accuracy scores will tend to be elevated for those clients who were perceived as stereotyped by the counselors.

In order to investigate these possibilities two new scores were derived, a client stereotype and a counselor predicted stereotype score. This was done by giving a score of 1 to each client
response that was in the direction of the modal response for the entire sample and summing across the 34 items. A parallel operation was performed on the counselor predictions by assigning a score of 1 to each prediction that was in the direction of the modal client response and then summing these scores on the 34 items. Thus, for each client-counselor pair there is a client stereotype score (Clst) and a counselor predicted stereotype score (Cost). These two scores and a third, Clst X Cost, were then used to obtain a multiple correlation prediction of the accuracy score. The third term was included to take account of the matching of the two scores following the logic discussed in the section on methodology. All these terms are significantly correlated with the accuracy score: for Clst, r = .25, p = .01, for Cost, r = .49, p < .001 and for the cross-product r = .66, p < .001. The resulting multiple R is .71, p < .001. It is clear, then, that the accuracy score for a given client is largely a function of the degree to which the client is stereotyped in his expectations, the counselor predicts stereotype for that client and the joint magnitude of the two sets of responses.

This analysis leads to the conclusion that the accuracy score is artifactual in nature, that it is not dependent upon the accuracy of the counselor's perception of a given individual client, but rather results from response tendencies operating separately within the client and counselor. Before accepting this conclusion, one final possibility must be examined. Perhaps the counselors can accurately perceive, in a global sense, whether or not a client is stereotyped and then regulate their predictions in line with this perception. If this were the case, they might be wrong about specific items but correct in their overall pattern of response and thus, the accuracy score would not be artifactual. The correlation between Clst and Cost negates this interpretation, however, for it is negative in direction and moderate in magnitude, r = -.28, p = .01. The counselors are no more accurate in predicting the degree to which a client is stereotyped in his expectations than they are in predicting individual item responses. In light of these findings, the accuracy score cannot be considered other than a result of essentially unrelated processes occurring in the client and counselor.

The next question is whether the stereotype scores can also predict outcome. To answer this question Clst and Cost scores were correlated with the five outcome scores which were significantly related to accuracy. In addition the scores based on the multiple regression equation combining Clst, Cost and Clst X Cost were correlated with these outcome measures. The results are shown in table 17.
Table 17

Correlations between Stereotype Scores and Outcome Measures

<table>
<thead>
<tr>
<th>Client Clusters</th>
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*p = .10  **p = .05  ***p = .01

It can be seen that one or more of the stereotype scores is a significant predictor of all but one of the outcome scores, and that the combined score is the best predictor of the three. One can also ask whether the results obtained in the analysis of the relationship of accuracy scores to outcome would remain significant if the effects of client stereotype and counselor predicted stereotype were controlled. This question was answered by a series of analyses of co-variance which paralleled the analyses of variance reported at the beginning of the section. The main effects are the same but the combined stereotype score was added as a co-variate. None of these analyses of co-variance yields a significant F ratio.

The conclusions to be drawn from this long series of analyses are these: in this study, the accuracy with which a counselor predicts his client's responses is a function of how stereotyped the client is and how stereotyped the counselor predicts him to be. These two factors are, however, basically independent and, indeed, there is no evidence that the counselors are capable of individual difference accuracy at all. The finding that accuracy is related positively to favorable outcomes seems best explained, then, in terms of the operation of unrelated client and counselor processes. If the client is stereotyped in his expectations and if his counselor so perceives him, the client's rating of outcome and the counselor's rating of outcome will both be favorable and the duration of counseling will be relatively long. However, this coming together of client response and counselor perception cannot be attributed to anything but chance.

The present results raise serious questions about the meaning of the Cartwright and Lerner findings and more generally about the role of accuracy of perception in counseling. It was noted that Cartwright and Lerner failed to consider the operation of artifactual elements in their study and it can now be seen that this is a serious oversight. Although our basic finding with respect to the effect of accuracy on outcome is similar to theirs, it is clear that the accuracy score is not a valid indicator of "empathy" on the part of
the counselor. Whether or not the same influence of stereotype is at work in their study is, of course, unknown, but no conclusions can be reached in this kind of research unless one establishes unequivocally that individual difference accuracy is present. This may prove most difficult, for there is little evidence of the existence of individual difference accuracy in any of the research on person perception. We have found, however, that (1) the degree to which a client is stereotyped in his expectations is associated with his evaluation of outcome (2) the degree to which a counselor believes a client to be stereotyped is related to the counselor's evaluation of outcome and to the duration of counseling and (3) to a slight extent, if a counselor perceives a client to be stereotyped and, in fact, he is, the outcome of counseling will tend to be judged favorably by all concerned. This, unfortunately, leaves little room for the operation of "empathy," but it does point to the very important role of stereotype, both real and perceived, in the process of counseling. It may well be that excessive emphasis has been placed upon the importance of the counselor's ability to perceive individual differences and too little on the operation of stereotype and its perception.

Discussion of Results and Summary

This section will be relatively short since we have discussed the significance of the findings at considerable length in connection with the presentation of particular results. Our concern, here, in consequence, will be with the conclusions to be drawn from the data considered as a set.

The first and most important question to be answered is whether the basic assumption of the project, that the matching of client and counselor exerts an important influence on outcome, is substantiated by the data. In a general sense, our findings, like those of other investigators, do give support to this assumption. It is also clear, however, that not every aspect of matching has an effect on outcome. Similarity on the MHT, Ori and SIV, compatibility in terms of FIRO-B, and interactions between presenting problem and counselor experience all affect the course or judged value of counseling. Sex-matching and mutuality of client and counselor expectations about counseling, on the other hand, have no discernible effect. It is evident that the phenomena under study are very complex, particularly when it is noted that matching effects are dependent upon other variables, most notably sex of client and counselor. Thus our hope that the data of this project could provide an empirical basis for assigning clients to counselors was largely unfulfilled. What has been accomplished, rather, lies more in the theoretical than in the practical realm and this is true for both the negative and positive findings.

The most difficult problems to be faced in matching research are methodological in nature. We have already provided a detailed
discussion of these problems and suggested some feasible approaches to their solution, but it must be emphasized again that the present inconclusiveness of the matching literature is in large part attributable to the failure of investigators to be fully aware of the implications of their research techniques. The study of the effects of similarity on outcome is a case in point. The manner in which similarity has been operationally defined, i.e., in terms of the $D^2$ measure, assumes a highly specific and restrictive statistical model which appears simple but is, in fact, quite complex. When results are obtained, they may really be due to "similarity" or they may be due to some other factor or group of factors which the $D^2$ measure obscures. In light of this, it is not surprising that attempts to replicate results for similarity measures have been largely unsuccessful, e.g., the failure of our attempt to replicate the finding of a curvilinear relationship between MBTI similarity and client evaluation, and the similar failure of Carson and Ilewellyn (1966) and Lichtenstein (1966) to replicate the finding of a curvilinear relationship between MMPI similarity and outcome (Carson and Heine 1962). These failures make the necessity of replication all the more evident, but the number of findings in the matching literature which have been successfully replicated is very small. Our experience in the present project leads us to conclude that research on client-counselor matching should 1) make minimal a priori assumptions about the form of relationships, and 2) should deal initially with interactions between single client and counselor variables rather than with such variables as global personality similarity or compatibility. Such an approach should yield results which are both more understandable and more likely to be replicated.

Another set of methodological problems is unavoidable since it has to do with the inherent nature of clinical research conducted in natural settings. The advantages of naturalistic research are evident but along with them come problems of control. There is a multitude of influences which bear on the outcome of counseling, the great majority of which remain unknown to the investigator. Thus when significant findings are obtained, one cannot be certain that the variables which the researcher believes to be central are really critical ones. There is a further possibility that hidden biases exist in the data, i.e., that the natural assignment procedure in the clinic is not random. Such biases can lead to incorrect inferences in that effects which are viewed as general in actuality may be attributable to particular counselors and the specific clients who were assigned to them. If, for example, the counselors who saw the greatest number of cases in a given sample were consistently matched with clients of their own sex, the likelihood of finding personality matching effects would probably be small. It might then be concluded that matching has no effect on outcome, a conclusion which would in a general sense be correct for this sample, but which would likely be incorrect for a sample in which opposite sex matchings predominated. The problem here lies in the difficulty of knowing whether or not findings are specific to a sample, the particular counselors in the sample and the given patterns of client-counselor matching which obtain in the sample.
There are several ways to mitigate the effects of these problems. First, client assignments to counselors can be specifically manipulated for experimental purposes. This would allow control at least of those variables which were considered of interest \textit{a priori}. However, the procedure has the disadvantage of altering the normal routine of the clinic and many of the variables which affect outcome would remain uncontrolled. Nevertheless, this procedure would make for greater precision of inference. Second, the use of large samples would make it possible to investigate several variables simultaneously. This was done in the present project for the study of sex matching in which, because we combined the data of all the samples, four variables could be taken into account in a single analysis. It should be noted that in this design, there were 36 unique combinations of the four variables. If the sample size had not been in excess of 400, many of those combinations would have had too few cases to be meaningfully considered. The advantages inherent in the use of large samples in counseling research cannot be exaggerated although, of course, they entail a correspondingly large expense. Third, we return again to the absolute need for replication of findings. If the same relationships are investigated in several samples of differing composition, particularly with regard to counselors, biasing factors are apt to be randomized. It would be more desirable to control and analyze such factors, but given the difficulties of doing so, attempting to achieve randomization through the use of independent samples seems the best approach.

It is primarily because of these considerations that specific suggestions for client assignment cannot be made on the basis of present data. Neither our own findings nor those of other investigators in this area have been consistently replicated, nor, indeed, has replication often been attempted. This seems all the more regrettable in light of the encouraging results of many matching studies. Although the applied goals of the project have not yet been achieved, and despite the methodological problems encountered, findings do suggest some important generalizations about the counseling process and provide a basis for future research.

Before discussing the generalizations which can be derived from the data, a brief review of the major findings is necessary:

1. Analyses of the outcome questionnaires. The cluster analyses of the outcome questionnaires indicate that both the client and the counselor respond primarily in terms of a general evaluative set, but that they also discriminate to some extent among different aspects of the counseling process. Although favorable evaluations of the interpersonal relationship are usually associated with the judgment that the objective of counseling was achieved, in many cases both client and counselor report that little was accomplished despite a good relationship or that counseling was effective even in the context of an uncomfortable relationship. These findings suggest that a "good" client-counselor relationship is not a sufficient and perhaps not even necessary condition for successful counseling.
2. Effects of client-counselor personality similarity. The similarity of client and counselor in terms of the Myers-Briggs Type Indicator (MBTI), is positively associated with the duration of counseling. However, the relationship is a complex one, for high dissimilarity almost always leads to short counseling while high similarity leads as often to short as to long counseling, i.e., there is greater variability of duration for high similarity than for low similarity pairs. This is a very consistent finding. High similarity is also associated with the failure of clients to appear for scheduled interviews. Such failures usually occur quite early in counseling, but if the client returns he is likely to remain for a relatively large number of sessions. In one sample, MBTI similarity was related in a curvilinear fashion to client evaluations of outcome, middle similarity being the most favorable condition. However, this result was not replicated in a second sample. In neither case, though, did high similarity produce notably favorable results.

3. Effects of the similarity of client expectations and counselor role perceptions on outcome. We were unable to obtain any support for the argument that the mutuality of client and counselor expectations about counselor approach and behavior is a necessary condition for counseling success. Neither client expectations alone nor in combination with counselor variables had any discernible effect on outcome. These data lead to the conclusion that the importance of the role of client expectations in counseling has been exaggerated in the theoretical literature. The one result of any significance for this set of variables is that male clients (but not female clients) evaluated most favorably those counselors who expect clients to take responsibility for their own decisions and who expect to offer immediate, practical help.

4. Effects of client-counselor compatibility (FIRO-B) on outcome. The compatibility of the client and counselor as operationalized by FIRO-B was related to outcome only for female clients. Compatibility in the two need areas most concerned with the affective aspects of relationships, Inclusion and Affection, is consistently associated with unfavorable outcomes. The results for the females are quite strong and provide perhaps the clearest example of the potentiality of effective matching. These results also point very clearly to the necessity of considering sex differences in counseling research.

5. Effects of sex matching on the outcome of counseling. There is no evidence that sex matching per se has any effect on the outcome of counseling; overall, same sex
client-counselor pairs produce no more and no fewer favorable outcomes than opposite sex client-counselor pairs. Sex matching does appear to operate as a moderating condition, however, since personality matching variables have a considerably stronger effect within opposite sex than within same sex groups. There is also evidence that female counselors hold clients longer in counseling and tend to be somewhat more successful with clients who are seeking help for personal problems.

6. Effects of experience and presenting problem. There are no significant differences attributable to level of counselor experience itself. However, clients with different kinds of problems respond differentially as a function of counselor experience. Those clients who have personal problems evaluate counseling most favorably when they are matched with an experienced (more than five years) counselor. Males whose primary stated objective is to acquire information are least satisfied with inexperienced counselors, while females with this objective are most satisfied with inexperienced counselors. Experience of the counselor makes no difference to clients seeking to make vocational or academic decisions. The significance of this finding lies in the fact that experience proved an important variable only when its interactions with the sex and presenting problem of the client were considered.

7. Effects of accuracy of the counselor's perceptions of the client on outcome. The accuracy with which a counselor predicts the pre-counseling expectations of his individual clients is positively related to relatively long duration and to favorable evaluations of counseling. However, on closer examination, the accuracy measure was found to be an artifact of the degree to which the client is stereotyped in his expectations and the degree to which the counselor predicts him to be stereotyped. These two factors are basically independent however, and the results of a series of analyses indicate quite clearly that the counselors are not capable of individual difference accuracy at all. Thus the finding that "accuracy" leads to favorable outcomes seems best understood as the result of the chance coming together of two unrelated processes operating in the client and counselor. If a client is stereotyped in his response and, for some unknown reason, the counselor believes him to be stereotyped, accuracy will be high and counseling will be viewed as successful by both client and counselor. This is not, strictly speaking, a matching study but it does raise questions about the role of "empathy" in counseling and point to the important influence of stereotypes, both real and perceived, on the process of counseling.
The potential importance and utility of systematic, empirically based, matching of client to counselor are clearly indicated by, at least, some of these results. It does make a difference which counselor interacts with which client and it is possible to analyze such interactions in an objective, empirical fashion. However, the nature of these relationships is expectably complex, complex enough to preclude specific suggestions for matching at this time. We have already suggested the methodological approach which seems necessary and several of the findings reported above provide important leads for future research. Ideally, what is needed now is a systematic effort to establish replicated findings in samples of sufficient size and variety to allow generalizations which are relatively free of the biases of particular settings. More modest efforts are quite feasible, though; all that is required is some systematic record keeping about client assignments and a standardized assessment of outcome. There is a good chance that such efforts would have a considerable pay-off for individual clinics and counseling facilities.

From the theoretical standpoint, perhaps the most interesting and important findings of the project have to do with the function of the client-counselor relationship in counseling. It is, on the surface, surprising that factors which in non-clinical relationships lead to increased interpersonal attraction and liking, i.e., similarity and compatibility, are not necessarily related to positive outcomes of counseling. Similarity in personality seems to be a rather volatile condition which can lead to early termination and missed sessions as well as to counseling of relatively long duration. It does not lead, in these data, to notably favorable evaluations of counseling. Compatibility in need areas related to the more affective components of relationships, Inclusion and Affection, is not associated with outcome measures at all for males and is associated with unfavorable evaluations of counseling by females. These findings are consistent with some of the data derived from small group studies in which it has been found that emphasis on good interpersonal relationships may interfere with accomplishment of the group task (Lott and Lott, 1965). Stogdill (cited in Lott and Lott, 1965), for example, suggests that "the effort that is devoted to the development of integration might be conceived as a subtraction from the efforts that are devoted to productivity." A similar situation could apply in counseling - the relationship may become an end in itself to the detriment of achieving the goals for which the client initially sought counseling assistance. Factors which promote liking and interpersonal attraction could thus also foster excessive concentration on the relationship. There is, in addition, the possibility that the client-counselor relationship may become too close and lead the client to withdraw from an involvement whose intensity is threatening. The present data suggest that this is a particularly important factor early in counseling, a time at which the client is still evaluating the appropriateness of counseling for him.
Whether or not these suggestions are correct, the present data argue against the position that a "good" counseling relationship is a variant of "good" interpersonal relationships in general. Further they raise questions about the central importance which has been ascribed by some writers to the relationship. We are not arguing that comfort, rapport, etc., are irrelevant but rather that the task and relationship aspects of counseling need to be considered separately. As was noted before, in many cases both client and counselor report that little was accomplished despite a good relationship and vice versa. The study of "empathy" likewise raises questions about how deeply the counselor can or needs to understand his clients as individuals. We would argue, in short, that at least a minimally satisfactory relationship is necessary to maintain counseling contact, but that achievement of counseling goals depends more on the cognitive, problem-oriented, goal-directed activities of the client and counselor.

Although we have been discussing relationship in a general sense, it is apparent that not all clients are equally sensitive to the interpersonal aspects of counseling. There is some evidence that clients with personal problems are strongly influenced by relationship factors and, indeed, it is conceivable that for some the establishment of a satisfactory and sympathetic relationship is precisely their counseling goal. But it is in the area of sex differences that the strongest indications of differential sensitivity to the personal interaction in counseling appear. Male clients seem, in general, to be more goal-directed than the females - apparently what the counselor does to help solve his problems is more salient than what the counselor is like in an interpersonal sense. The picture is very different for female clients and it also changes to some extent for the males when they are paired with a female counselor. The data point to the conclusion that when a female is involved in counseling, whether as a client or counselor, the relationship, as traditionally conceived, becomes a central matter of concern. Matching effects, for example, are most pronounced in opposite sex client-counselor pairs and for female clients. The differences between males and females in sensitivity and responsiveness to the interpersonal setting seems a matter of considerable practical importance to the counselor and it is certainly a variable that should be included in all counseling research. Given the consistency with which sex differences in social behavior have been found, the usual failure of researchers and theorists to consider the possibility that males and females may not have the same needs and perceptions in counseling is a serious oversight. This is an area which demands much more investigation.

The one major group of analyses which failed to produce clearly significant findings was that concerned with client expectations about counselor behavior. There is no evidence that either client expectations alone, nor the mutuality of client and counselor expectations, affect counseling to an appreciable degree. The possibility cannot be
dismissed that some other set of expectations than that we studied would be important, but the literature is not terribly encouraging in this regard. It is our view that pre-counseling expectations are not strongly held and so events in counseling play a predominant role. It may, however, be important whether or not the client perceives that he is getting what he wants (rather than what he expects) in counseling. This is another area which is in need of systematic investigation.

The results of this project tend, as a whole, more to raise questions than to provide answers and this has been true of the previous literature on matching as well. Consequently there is not yet a stable body of findings which can serve as a basis for action. There is, however, ample evidence that the likelihood that the personalities of client and counselor will "click" can be increased by systematic assignment based on the study of the effects of matching. Effective matching alone can hardly guarantee success, but the results of this project strongly suggest that it is a feasible and practicable way to facilitate favorable counseling outcomes.
References


Axelrod, J. An evaluation of the effect on progress in therapy of similarities and differences between the personalities of patients and their therapists. Publication #3604, New York University, 1952.


Appendix A
Expectations Questionnaire

The instructions and items of the expectation questionnaire are given below. The four point rating scale was printed to the right of each item.

"This is a request for your cooperation in a research survey, from which we hope we will learn how to be of more help to students. Your statements, however, will not be involved in your counseling, nor will your counselor see this questionnaire.

We are interested in knowing more about what students expect when they come to a counseling center such as this one. Therefore, as your part in the research we would like you to indicate what kind of person you think your counselor will be.

Below is a list of short descriptive phrases whose relevance to your expectations should be indicated by checking the appropriate line next to each phrase.

1. MOST CHARACTERISTIC
2. FAIRLY CHARACTERISTIC
3. FAIRLY UNCHARACTERISTIC
4. LEAST CHARACTERISTIC

I EXPECT THAT THE COUNSELOR:

1) is quick to give encouragement and reassurance.
2) is an optimist, looks at the bright side of things.
3) is hard to get to know.
4) is prepared to point out a student's weak points as well as his strengths.
5) often makes people feel uncomfortable.
6) will discuss the effective use of my time.
7) is a structured, organized thinker.
8) thinks people should be able to help themselves.
9) is gentle, tender.
10) is likely to give advice and guidance.
11) finds it easy to interest himself in the problems of others.
12) expects the individual to shoulder his own responsibilities.
13) is hard to deceive, does not accept things at face value.
14) is on the student's side rather than on the university's side.
15) is interested in the student's welfare.
16) is conscientious about duties and responsibilities.
17) will make me feel free to express any idea or discuss any topic.
18) is not willing to go out on a limb for a student.
19) is able to sense other peoples' feelings.
20) looks for the good points in people.
21) reacts to most people in about the same way.
22) becomes annoyed with people who can't make up their minds.
23) is able to give inspiration and motivation.
24) will discuss what type of job would be best suited for me.
25) is realistic.
26) will express confidence in me.
27) acts like an expert, rather than like another person.
28) will tell me if my decisions and choices are right or wrong.
29) is businesslike.
30) will discuss better study habits for me.
31) will not tell me what he thinks I should do.
32) does not know more than most people.
33) will not discuss my personality or personal problems.
34) is able to analyze and solve complicated practical problems.
Appendix B
Client Evaluation Questionnaire

The items of the client evaluation questionnaire are given below. The seven point rating scale, Strongly Agree, Agree, Some-what Agree, Neither Agree nor Disagree, Somewhat Disagree, Disagree, Strongly Disagree, was printed next to each item.

1. A) Below is a list of possible objectives in coming to the Counseling Center. From this list, check in the first column, those objectives which apply to you; then in the second column, rank them in order of importance to you.

   a) Making a vocational choice
   b) Finding out about my interests
   c) Learning how to improve my studying
   d) Making a choice of major
   e) Deciding on a change of major
   f) Improving my grades
   g) Getting help for personal problems
   h) Finding out about my abilities
   i) An opportunity to check out my decisions
   j) Planning immediate next steps after leaving the campus
   k) Other. (Specify)

   B) For each objective you ranked, indicate next to it how strongly you agree or disagree with the following statement: "To the extent possible, this objective in coming to the Counseling Center was accomplished."

Below is a list of statements about your counseling experience. Please indicate how much you agree or disagree with each statement by placing an "x" in the appropriate box.

2. The counselor gave me the feeling that I was more than "just another student."

3. At times the counselor dominated the discussion too much.
4. The counselor was a warm person.

5. I would have preferred it if the counselor had made more suggestions.

6. The counselor understood my feelings.

7. Of the problems we worked on, the counselor dealt insufficiently with those which were important to me.

8. During my counseling sessions, I felt free to say whatever I wanted to.

9. The counselor wanted me to talk about my personal life too much.

10. The counselor spent too much time giving me concrete information like test scores, school requirements, etc.

11. As a result of counseling, there has been a change in what I am doing or planning to do.

12. I received benefit from counseling through information about occupations and/or courses of study.

13. I received benefit from counseling through learning more about myself through interviews.

14. I received benefit from counseling through getting things off my chest.

15. I received benefit from counseling through obtaining scores on various tests.

16. I received benefit from counseling through getting new perspectives.

17. I received benefit from counseling through starting on a plan for my future.

18. I accomplished no more through counseling than I could have accomplished myself.

19. The counselor tended to jump to conclusions.

20. I felt comfortable with the counselor.

21. I was worse off for having come for counseling.

22. The counselor was helpful.

23. The counselor was down to earth.
24. The counselor was "on the beam."
25. I am well satisfied with my counseling experience.
26. If things get rough I would like to return to my counselor.
27. If things get rough I would like to return to the Counseling Center.
Appendix C
Counselor Evaluation Questionnaire

The items of the counselor evaluation questionnaire are given below. A seven point rating scale was printed next to each item. The definition of the rating scales varied as a function of the item content, so the end points of each scale are given at the end of the item.

1. Below is a list of possible objectives in coming to the Counseling Center. From this list, check in the first column those objectives which apply to this counselee. In the second column, rank the ones you checked in the order of their importance.

a) Making a vocational choice
b) Finding out about interests
c) Learning how to improve studying
d) Making a choice of major
e) Deciding on a change of major
f) Improving grades
g) Getting help for personal problems
h) Finding out about abilities
i) An opportunity to check out decisions
j) Planning immediate steps after leaving the campus
k) Other.(Specify)

2. I enjoyed working with this counselee (Very much to Not at all)

3. This counselee would probably have done better with some other counselor (Strongly agree to Strongly disagree)

4. I worked with what the counselee thought he needed (All to None)

5. I worked with what I thought the counselee needed (All to None)

6. This counselee was emotionally involved in the counseling (Strongly agree to Strongly disagree)

7. I was helpful to this counselee (Strongly agree to Strongly disagree)

8. Our rapport was (Excellent to Poor)
9. I understood this counselee's feelings (Quite well to Not at all)
10. Given this case, I took the initiative (Far too much to Far too little)
11. I understood this counselee's dynamics (Quite well to Not at all)
12. I was well satisfied with my handling of the case (Strongly agree to Strongly Disagree)
13. Counseling had an impact on this counselee (Strongly agree to Strongly disagree)
14. We talked about matters which I assume the counselee would usually keep confidential (A great deal to Not at all)
15. I had doubts as to how to help this counselee (Very many to None)
16. The hours seemed to drag with this counselee (Strongly agree to Strongly disagree)
17. If this counselee returns I would prefer not to see him (Strongly agree to Strongly Disagree)
18. I understood this counselee's problems (Very well to Not at all)
19. This counselee aroused feelings in me which hindered our progress (Strongly agree to Strongly disagree)
20. In terms of what was needed at this time, we accomplished (All of what was possible to None of what was possible)
21. During counseling the counselee worked out a plan
   a. (Strongly agree to Strongly disagree)
   b. (Very appropriate to Very Inappropriate)
   c. (Quite a new departure to No change)
Appendix D

Correlations of Client Questionnaire Items with Clusters

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### Appendix D (continued)

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Summary

The purpose of this research project was to examine the effects of the matching of client and counselor on the course and outcome of counseling. Clinical experience and previous research indicate that the effectiveness of counseling is influenced by how well the characteristics which the client and counselor bring to counseling fit together. At present, however, we know relatively little about what makes for a good fit and what makes for a poor one. Thus our aim was to explore systematically characteristics of clients and counselors which can be used to provide an empirical basis for effective matching procedures. The variables chosen for study were client-counselor similarity and compatibility in personality, complementarity of client-counselor expectations about counseling, sex matching and accuracy of the counselor's perceptions of his clients ("empathy").

The study was conducted at the Counseling Center of the University of California, Berkeley. Data were collected on six separate samples in a way which was designed to interfere minimally with the normal process of counseling. Before their first interview, clients were asked to participate in a research study which they were assured would have no effect on their own counseling. A series of personality tests and a questionnaire about expectations were administered to those clients who agreed to take part (about 85% of those asked). The counselors completed the same tests. After termination, the counselors and clients evaluated the counseling by means of questionnaires developed for this study.

The major findings were these:

1. Analyses of the outcome questionnaires. The cluster analyses of the outcome questionnaires indicate that both the client and the counselor respond primarily in terms of a general evaluative set, but that they also discriminate to some extent among different aspects of the counseling process. Although favorable evaluations of the interpersonal relationship are usually associated with the judgment that the objective of counseling was achieved, in many cases both client and counselor report that little was accomplished despite a good relationship or that counseling was effective even in the context of an uncomfortable relationship. These findings suggest that a "good" client-counselor relationship is not a sufficient and perhaps not even a necessary condition for successful counseling.

2. Effects of client-counselor personality similarity on outcome. The similarity of client and counselor in terms of the Myers-Briggs Type Indicator (MBTI), is positively associated with the duration of counseling. However, the relationship is a complex one, for high dissimilarity almost always leads to short coun-
suling while high similarity leads as often to short as to long counseling, i.e., there is greater variability of duration for high similarity than for low similarity pairs. This is a very consistent finding. High similarity is also associated with the failure of clients to appear for scheduled interviews. Such failures usually occur quite early in counseling, but if the client returns, he is likely to remain for a relatively large number of sessions. In one sample, MBTI similarity was related in a curvilinear fashion to client evaluations of outcome, middle similarity being the most favorable condition. However, this result was not replicated in a second sample. In neither case, though, did high similarity produce notably favorable results.

3. Effects of the similarity of client expectations and counselor role perceptions on outcome. We were unable to obtain any support for the argument that the mutuality of client and counselor expectations about counselor approach and behavior is a necessary condition for counseling success. Neither client expectations alone nor in combination with counselor variables had any discernible effect on outcome. These data lead to the conclusion that the importance of the role of client expectations in counseling has been exaggerated in the theoretical literature. The one result of any significance for this set of variables is that male clients (but not female clients) evaluated most favorably those counselors who expect clients to take responsibility for their own decisions and who expect to offer immediate, practical help.

4. Effects of client-counselor compatibility (FIRO-B) on outcome. The compatibility of the client and counselor as operationalized by FIRO-B was related to outcome only for female clients. Compatibility in the two need areas most concerned with the affective aspects of relationships, Inclusion and Affection, is consistently associated with unfavorable outcomes, a rather surprising result. Compatibility in the control need area is associated with favorable outcomes. The results for the females are quite strong and provide perhaps the clearest example of the potentiality of effective matching. These results also point very clearly to the necessity of considering sex differences in counseling research.

5. Effects of sex matching on the outcome of counseling. There is no evidence that sex matching per se has any effect on the outcome of counseling; overall, same sex client-counselor pairs produce no more and no fewer favorable outcomes than opposite sex client-counselor pairs. Sex matching does appear to operate as a moderating condition, however, since personality matching variables have a considerably stronger effect within opposite sex than within same sex groups. There is also evi-
ence that female counselors hold clients longer in counseling and tend to be somewhat more successful with clients who are seeking help for personal problems.

6. Effects of experience and presenting problem. There are no significant differences attributable to level of counselor experience itself. However, clients with different kinds of problems respond differentially as a function of counselor experience. Those clients who have personal problems evaluate counseling most favorably when they are matched with an experienced (more than five years) counselor. Males whose primary stated objective is to acquire information are least satisfied with inexperienced counselors, while females with this objective are most satisfied with inexperienced counselors. Experience of the counselor makes no difference to clients seeking to make vocational or academic decisions. The significance of this finding lies in the fact that experience proved an important variable only when its interactions with the sex and presenting problem of the client were considered.

7. Effects of accuracy of the counselor's preceptions of the client on outcome. The accuracy with which a counselor predicts the pre-counseling expectations of his individual clients is positively related to relatively long duration and to favorable evaluations of counseling. However, on closer examination, the accuracy measure was found to be an artifact of the degree to which the client is stereotyped in his expectations and the degree to which the counselor predicts him to be stereotyped. These two factors are basically independent however and the results of a series of analyses indicate quite clearly that the counselors are not capable of individual difference accuracy at all. Thus the finding that "accuracy" leads to favorable outcomes seems best understood as the result of the chance coming together of two unrelated processes operating in the client and counselor. If a client is stereotyped in his response and, for some unknown reason, the counselor believes him to be stereotyped, accuracy will be high and counseling will be viewed as successful by both client and counselor. This is not, strictly speaking, a matching study but it does raise questions about the role of "empathy" in counseling and point to the important influence of stereotypes, both real and perceived, on the process of counseling.

The potential importance and utility of systematic, empirically based, matching of client to counselor are clearly indicated by, at least, some of these results. It does make a difference which counselor interacts with which client and it is possible to analyze such interactions in an objective, empirical fashion. However, the nature of these relationships is expectably complex, complex enough to preclude
specific suggestions for matching at this time. The picture is further complicated by the presence of some thorny methodological problems inherent in naturalistic research in counseling, but the findings reported above provide important leads for future research. Ideally, what is needed now is a systematic effort to establish replicated findings in samples of sufficient size and variety to allow generalizations which are relatively free of the biases of particular settings. More modest efforts are quite feasible, though; all that is required is some systematic record keeping about client assignments and a standardized assessment of outcome. There is a good chance that such efforts would have a considerable pay-off for individual clinics and counseling facilities.

From the theoretical standpoint, perhaps the most interesting and important findings of the project have to do with the function of the client-counselor relationship in counseling. It is, on the surface, surprising that factors which in non-clinical relationships lead to increased interpersonal attraction and liking, i.e., similarity and compatibility, are not necessarily related to positive outcomes of counseling. Similarity in personality seems to be a rather volatile condition which can lead to early termination and missed sessions as well as to counseling of relatively long duration. It does not lead, in these data, to notably favorable evaluations of counseling. Compatibility in need areas related to the more affective components of relationships, Inclusion and Affection, is not associated with outcome measures at all for males and is associated with unfavorable evaluations of counseling by females. These findings are consistent with some of the data derived from small group studies in which it has been found that emphasis on good interpersonal relationships may interfere with accomplishment of the group task (Lott and Lott, 1965). Stogdill (cited in Lott and Lott, 1965), for example, suggests that "the effort that is devoted to the development of integration might be conceived as a subtraction from the efforts that are devoted to productivity". A similar situation could apply in counseling - the relationship may become an end in itself to the detriment of achieving the goals for which the client initially sought counseling assistance. Factors which promote liking and interpersonal attraction could, thus, also foster excessive concentration on the relationship. There is, in addition, the possibility that the client-counselor relationship may become too close and lead the client to withdraw from an involvement whose intensity is threatening. The present data suggest that this is a particularly important factor early in counseling, a time at which the client is still evaluating the appropriateness of counseling for him.

Whether or not these suggestions are correct, the present data argue against the position that a "good" counseling relationship is a variant of "good" interpersonal relationships in general. Further they raise questions about the central importance which has been ascribed by some writers to the relationship. We are not arguing that comfort, rapport, etc. are irrelevant but rather that the task and relationship
aspects of counseling need to be considered separately. As was noted before, in many cases both client and counselor report that little was accomplished despite a good relationship and vice versa. The study of "empathy" likewise raises questions about how deeply the counselor can or needs to understand his clients as individuals. We would argue, in short, that at least a minimally satisfactory relationship is necessary to maintain counseling contact, but that achievement of counseling goals depends more on the cognitive, problem-oriented, goal-directed activities of the client and counselor.

Although we have been discussing relationship in a general sense, it is apparent that not all clients are equally sensitive to the interpersonal aspects of counseling. There is some evidence that clients with personal problems are strongly influenced by relationship factors and, indeed, it is conceivable that for some the establishment of a satisfactory and sympathetic relationship is precisely their counseling goal. But it is in the area of sex differences that the strongest indications of differential sensitivity to the personal interaction in counseling appear. Male clients seem, in general, to be more goal-directed than the females - apparently what the counselor does to help solve his problems is more salient than what the counselor is like in an interpersonal sense. The picture is very different for female clients and it also changes to some extent for the males when they are paired with a female counselor. The data point to the conclusion that when a female is involved in counseling, whether as a client or counselor, the relationship, as traditionally conceived, becomes a central matter of concern. Matching effects, for example, are most pronounced in opposite sex client-counselor pairs and for female clients. The differences between males and females in sensitivity and responsiveness to the interpersonal setting seems a matter of considerable practical importance to the counselor and it is certainly a variable that should be included in all counseling research. Given the consistency with which sex differences in social behavior have been found, the usual failure of researchers and theorists to consider the possibility that males and females may not have the same needs and perceptions in counseling is a serious oversight. This is an area which demands much more investigation.

The one major group of analyses which failed to produce clearly significant findings was that concerned with client expectations about counselor behavior. There is no evidence that either client expectations alone, nor the mutuality of client and counselor expectations, affect counseling to an appreciable degree. The possibility cannot be dismissed that some other set of expectations than that we studied would be important, but the literature is not terribly encouraging in this regard. It is our view that pre-counseling expectations are not strongly held and so events in counseling play a predominant role. It may, however, be important whether or not the client perceives that he is getting what he wants (rather than what he expects) in counseling. This is another area which is in need of systematic investigation.
The results of this project tend, as a whole, more to raise questions than to provide answers and this has been true of the previous literature on matching as well. Consequently, there is not yet a stable body of findings which can serve as a basis for action. There is, however, ample evidence that the likelihood that the personalities of client and counselor will "click" can be increased by systematic assignment based on the study of the effects of matching. Effective matching alone can hardly guarantee success, but the results of this project strongly suggest that it is a feasible and practicable way to facilitate favorable counseling outcomes.