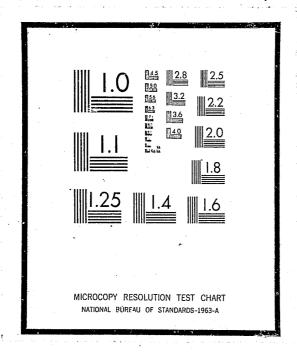
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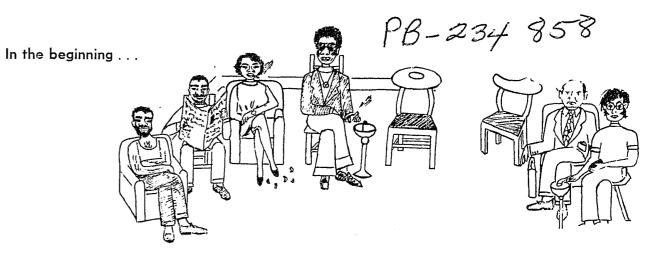
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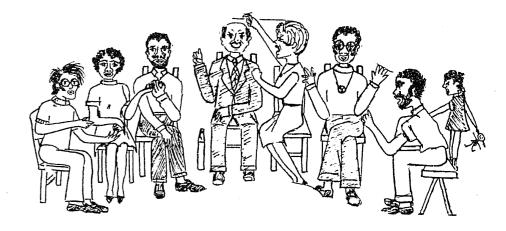
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COUNSELING
IN
PROBATION
AND
PAROLE:

A RESEARCH REPORT

Date filmed, 11/24/75

#### SIGNIFICANT IMPLICATIONS

- . Personality characteristics can be reliably evaluated through paper and pencil instruments
- . Probation officers are as effective in group methods as they are in individual methods
- . The preference of probation officer should be a strong consideration in the determination of the treatment mode which he uses
- . The use of measured personality variables to predict counseling outcome is not warranted
- The goals of the probation process should be clearly stated and relevant behavioral concomitants identified
- . Assessment of personality before differential assignment of probationer or parolee to either group or individual counseling is not warranted
- Basic questions as to the effectiveness of counseling with probationers and parolees are in order
- . New treatment modes for rehabilitation of offenders need to be actively investigated
- Counselors perceived that client change was greater for clients in group counseling
- . Clients perception of counselor was more positive for those engaged in individual counseling

# COUNSELING IN PROBATION AND PAROLE

A RESEARCH REPORT

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#### ABSTRACT

A research project conducted in the Probation Office for the United States District Court for the District of Columbia was designed to obtain preliminary answers to three questions relating to whether clients with a particular configuration of personality traits could be observed to show greater improvement in one treatment mode as contrasted with the other. The treatment modes employed were individual and group counseling. The project was of two years duration and consisted of two separate but related counseling experiments.

In the first experiment, data were analyzed for a total of 87 clients who had been randomly assigned to either group (N=47) or individual (N=40) counseling. Data obtained from pre and post testing on four personality instruments, and collected as criterion measures on variables defined as indicative of desired behavioral change, were analyzed in an attempt to test the hypotheses. Each of the three hypotheses, of no differences by treatment mode, tested by tests, was retained.

In the second counseling experiment, data were analyzed for 122 clients randomly assigned to individual counseling (N = 40), group counseling (N = 58) or control group (N = 24). Data obtained from pre and post administrations of four personality instruments and seven criterion measures were analyzed in an effort to test four hypotheses. The first two hypotheses were tested by MANOVA, with the data stratified by level according to age, occupation, and school grade completed. The third and fourth hypotheses were tested by single and multiple correlation analyses respectively. The results revealed no consistent trend. Thus, for the most part, the test and non-test criteria did not differentiate clients by treatment.

It was concluded that it was not feasible to make assignments to a particular treatment mode based on personality of the counselee using the specific personality instruments and criterion measures.

A range of implications is suggested, including appropriateness of test instruments and criterion measures employed, length of experiment and nature of counseling, and appropriateness of the research questions as relevant areas of investigation.

#### PREFACE

This report describes a research project on the rehabilitation of offenders. An educational-adjustive orientation in the treatment of offenders is consistent with sound mental health practices. Such an orientation was prevalent in the setting in which this project was conducted.

The results of this study demonstrate the paucity of information on the effectiveness of efforts in this area, basic assumptions which need to be tested, and the necessity for continual evaluation of rehabilitation efforts.

This report provides demonstration of the possibilities of cooperative efforts to these ends between an operating rehabilitation setting and a university.

#### ACKNOWLEDGMENTS

The research project described in this report represents a cooperative effort between the grantee agency, the University of Maryland and the Probation Office for the United States District Court for the District of Columbia, where the project was conducted. The efforts of all those within both institutions who provided initiative, cooperation, and support is acknowledged. Deserving of special acknowledgment are those individuals who provided leadership for the project within the Probation Office and provided invaluable liaison between the two institutions—George Howard, Fred Petersen, Herbert Vogt, and John Williams.

George L. Marx Project Director

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#### CHAPTER I

#### INTRODUCTION

Rehabilitation services include services to individuals who, because of handicap, require specialized help. Handicaps most often focused on are physical or mental in nature, and handicapped people include those who are blind, deaf, disabled, retarded, etc. This general orientation has the deficiency of not including a large group which is equally handicapped, but in ways which are emotional or cultural in nature. As a result this latter group is not as specifically nor frequently provided rehabilitation services.

Included in the group of persons who can be characterized as handicapped in emotional or cultural ways are those individuals who have committed various kinds of legal offenses and have either been placed on probation by a court of law, or have been paroled following imprisonment.

A basic orientation of this research project and report is that probation or parole status carries with it the implication that its recipients are indeed handicapped, and are thus deserving of rehabilitation services. Support for this contention is derived from a statement about probation, also applicable to parole, offered by Dressler (1959). The premise for Dressler's statement is his contention that there are certain kinds of offenders who are reasonably safe risks in our society, to the extent that it would not facilitate their adjustment to remove them to institutions. Where evidence indicates that the offender will be able to conform to society's legal demands an opportunity for him to do so, conditionally and under supervision, serves both the individual and the community.

The project described in this report was an investigation, over a two-year period of certain aspects of rehabilitative efforts for probationers and parolees. These were individual casework and group counseling activities of one probation office within the federal probation system, the Probation Office for the United States District Court for the District of Columbia.

This section of the report provides an introduction and background for the study. It includes a description of the Probation Office for the United States District Court for the District of Columbia, background information, a rationale for the project, and a statement of the specific research questions investigated.

## Setting for the Project

The Probation Office for the United States District Court for the District of Columbia serves a clientele of more than one thousand active clients, whose crimes include a wide range of felonies. In the Fall of 1967, there was a ratio of one parolee to every five probationers.

The professional staff of this Probation Office consists of four supervisory personnel and 24 probation officers. Of this number, 18 are engaged in activities most concisely described as casework, and 6 of them have as a primary responsibility the preparation of presentence reports.

The probation officers engaged in casework were those directly involved in this project. They are described in terms of duties, caseload, and programs which were developed as efforts to enhance effective performance of duties. While the style of functioning varies, a general description of functions of these staff members would include:

1. providing assistance to the court in sentencing,

2. working with the offender individually and in groups in an effort to effect rehabilitation,

3. providing protection of the community through supervision,

4. making collateral contacts with those involved with his clients,

5. participating in case conferences,

6. performing dictation and record keeping necessary to performance of the duties specified above.

A ratio of one probation officer to every fifty clients is approximated within this office. Ordinarily this is distributed evenly among the casework probation officers. However, during the research project being reported, distribution of caseload was somewhat altered. The six probation officers involved in the project carried a caseload ratio of approximately 1/35, and the twelve other probation officers carried a ratio of approximately 1/90.

The probation officer, working with a clientele characterized by difficulty with authority figures in varying degrees, has a special need to have sufficient time and procedures to develop a relationship with his client. He, however, carries a heavy caseload and must engage in a number of administrative activities, as indicated above. Thus, he is plagued by one of the persistent problems in the mental health professions, insufficient time for working with those clients for whom his service ostensibly exists.

The Probation Office has developed two programs with the intent of increasing the probability that the officer will be able to develop more than an administrative relationship with his clients. The first of these is the orientation program. The orientation program consists of four sessions, one and one half hours in length, extending over a four week period. The purpose of the sessions is to provide probationers and parolees with certain kinds of information about the probation program, but more importantly, to establish the "tone" of the office and to demonstrate to them that it is "safe" to exhibit hostility and to be verbally aggressive without retaliation.

The second activity carried on by this office to increase the rehabilitative efforts of the officers is the on-going group counseling program. The purpose of these groups is to provide a means by which the client can come to better understand his behavior and to learn alternative modes of coping with his environment. The group leader, and the group itself, serves as a catalyst for this learning. The study described in this report concerns itself with this program.

The group counseling program in the Probation Office for the United States District Court for the District of Columbia was initiated in 1959. It is described in detail by Vogt (1961). It was instituted as an alternative to the traditional (i.e. individual casework) method of helping the offender arrive at a more favorable adjustment in the community. From very modest beginnings, the group program in this office has developed to a point where it constitutes a significant portion of the treatment mode.

The probation officers, from individual casework experiences in general and group counseling experiences in particular, made several observations. It appeared that certain clients profited from the group experiences while others appeared to have gained little Likewise, it appeared that some members of the professional staff were more comfortable, if not successful, in working with their clientele in the group than they were working with clients on an individual case basis. Conversely, some counselors appeared to be more comfortable and/or successful in their individual contacts than they were with clients in the group setting.

It was recognized that many variables contaminated these impressions. Nevertheless, if there were definable and unique characteristics associated with those clients who were assisted by participation in group counseling as contrasted with those who participated in individual counseling, then this information could be a variable affecting the type of treatment within the Probation Office that a person would receive. In similar vein, if there were definable characteristics of counselors who were more productive in individual treatment modes than group processes, then differential work assignments could be made within the office.

Although these appear to be discrete problems it is immediately apparent that an interaction dimension (i.e. the characteristics of the counselor in conjunction with those of the client) is a more accurate and basic statement of the concern. If such characteristics and/or interaction are definable, the implications are both immediate and practical. Those clients who have similar configuration of traits as found to be related to efficacy of a treatment mode could be assigned to that procedure. Likewise, counselors could be assigned to group or individual contacts depending on their defined characteristics. In a sense, clients could be "matched" with officer and/or treatment where the greatest probability of effecting change existed.

In summary the Probation Office developed a group counseling program in an effort to enhance its effectiveness. After observation, it

was hypothesized that effectiveness could be increased if a procedure for assigning clients and probation officers to treatments for which each was best suited could be developed. The rationale for this project thus stems from this hypothesis.

# Rationale for the Project

This project emanates from a philosophy of probation as an educational or adjustment activity, with intent to help probationers become "more comfortable in, part of, and identified with social living in their communities" and, at the same time, protect the community against the probationer who gives evidence of recidivating (Dressler, 1951, p. 4).

The typical practice within probation offices for carrying out such a philosophy is through application of individual casework principles and techniques.

"Casework...may be defined as a process of attempting to understand the needs, impulses and actions of an individual and of helping him to recognize these in a way that is satisfying to himself and in keeping with the demands of social living [Taber in Diana, 1960, p. 192]."

However, from an operational point of view, probation which purports to follow individual casework procedures appears to be quite different from such an ideal conception. Diana describes it as:

"...primarily a process of verifying the behavior of an offender (1) through periodic reports of the offender and members of his family to the probation officer and (2) by the incidence or absence of adverse reports from the police or other agencies. Secondarily, probation is a process of guiding and directing the behavior of an offender by means of intensive interviewing utilizing ill-defined case work techniques [Diana, 1960, p. 202]."

A less common activity to implement an educational-adjustment philosophy is through the use of group counseling procedures. A growing body of literature concerns itself with group counseling, although it is within the last 30 years that major emphasis has been given to it. Although varying emphases are provided in definitions of group counseling, one definition which is consistent with the activities of the Probation Office of the United States District Court for the District of Columbia is:

"...a dynamic interpersonal process focusing on conscious thought and behavior and involving the therapy functions of permissiveness, orientation to reality, catharsis, and mutual trust, caring, understanding; acceptance, and support. The therapy functions are created and nurtured in

a small group through the sharing of personal concerns with one's peers and counselor(s). The group counselees are basically normal individuals with various concerns which are not debilitating to the extent of requiring extensive personality change. The group counselees may utilize the group interaction to increase understanding and acceptance of values and goals and to learn and/or unlearn certain attitudes and behaviors [Gazda, Duncan, and Meadows, 1967]."

The majority of the reported group counseling research studies deal with high school or college samples and have as a criterion some aspect of academic or vocational adjustment. Few studies classifiable with the above definition of group counseling are reported which use as a sample an offender population, and no studies are reported which use as a sample a non-institutionalized adult population. A major impetus for this study was the absence of research findings which were directly related to offender populations and specified non-institutionalized adults. Thus, the findings of the study may potentially be of relevance to the growing number of persons interested in this subgroup.

One of the questions in group counseling on which there is little or no research is information about the variables associated with differential success of the methodology, specifically the dimension centering around the characteristics of the counselor and clients and any interactions which may be operating.

The question of counselor traits as a variable and its relationship to client traits and/or counseling success has been reported, albeit in the literature dealing with individual counseling (Mendelsohn, 1966; Tuma & Gustad, 1957; Krumboltz, Varenhorst, & Thoreson, 1967). In effect then, the observations and concerns of the officers working in the group counseling program (i.e., characteristics related to counselor traits and group work) were not dealt with in the literature, both because of the paucity of research with this subgroup and because of a paucity of research on this question.

#### Statement of the Problem

The general research questions of group counseling in corrections, with an educational-adjustment philosophy of probation are the focus of this investigation. The more specific questions focused on relate to the interaction between probation officers (counselors) and counselee personality traits. Thus, the practical and immediate concerns of the Probation Office for the United States District Court for the District of Columbia, coupled with the lack of relevant research in the field of corrections, provided impetus for this study.

Three more specific research questions were posited:

1. Is there a relationship between a specific configuration of client personality traits and changes in client behavior during group counseling?

- 2. Is there a relationship between a specific configuration of client personality traits and changes in client behavior during individual counseling?
- 3. Is there a relationship between counselor traits of personality and changes in client behavior during individual or group counseling treatments?

The project reported herein was intended as a preliminary study in obtaining some kinds of answers to these questions. It was recognized that this represents an ultimate goal of a project of this nature, and that many more basic issues would have to be focused on first. These issues and their relevance to progress in answering the three posited research questions are reported in Chapters IV, V, VII, VIII, and IX.

The specific, practical use to which findings of the project could be put by the D. C. Probation Office has already been alluded to-more effective and efficient use of the office's manpower, resulting in more effective and efficient service to its clients. Ultimately, it is hoped that research efforts similar to this one will result in an instrument or other means by which clients are assigned to individual or group counseling, and probation officers are selected to administer each treatment. Thus, it is hoped that this project will serve as a stimulus to further research efforts in the D. C. Probation Office, and more generally, in those rehabilitation agencies which include offender rehabilitation as a part of their concept. It is also hoped that other probation offices throughout the United States will be encouraged to experiment with group counseling, or to undertake research examinations of existing group counseling programs.

# Organization of the Remainder of the Report

The project consisted of two counseling experiments, each an entity and somewhat different from one another. The underlying rationale and relevant literature is germane to both experiments. Thus, variation in the traditional format is used. The methodology, findings, and conclusions of each of the related experiments are presented separately. Therefore, Chapter II will consist of a review of the literature relevant to the investigation as a whole, Chapters III, IV, and V will be a presentation of methodology, findings, and conclusions of Phase I, the first counseling experiment, and Chapters VI, VII, and VIII will be a presentation of Phase II, the second counseling experiment. The report will be concluded with Chapter IX, a summary and synthesis of both experiments.

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#### CHAPTER II

#### REVIEW OF RELEVANT LITERATURE\*

This section of the report on the investigation of the individual and group counseling programs of the Probation Office for the United States District Court for the District of Columbia consists of three major components. These include research reports on individual counseling with probationers and parolees and the status of group counseling with similar populations, both of which require an investigation of the literature within the correctional field. The literature dealing with the third component, interaction effects of counselor and client personality, is found almost exclusively in individual counseling research outside of corrections.

## <u>Individual Counseling in Probation and Parole</u>

Description. Counseling in probation and parole is part of the larger supervisory process. A survey by the National Council on Crime and Delinquency (1967) lists counseling as one of the three major elements of probation supervision and treatment. Surveillance and service are the other two aspects described. As an area of counseling, correctional counseling shares generic characteristics with the field. However, since the protection of society is a major concern of probation and parole, there are differentiating factors distinguishing probation and parole counseling. First, the protection of society receives priority, and second, the relationship between officer and offender is essentially an imposed one (Loos, 1963). With these factors in mind, individual correctional counseling may be defined as:

"...a dynamic and personal face-to-face relationship between two individuals, where one seeks to aid the other to accept and discharge his own responsibility for his own choices and decisions, and their consequences [Loos, 1963, p. 470]."

While counseling is specified as only one aspect of the supervisory process, the differentiation is not always made. Thus, of ten it is necessary to infer from the literature that aspects of the supervisory process described are applicable to counseling, or relevant only to counseling.

Parole and probation supervision are based largely on the principles and methods of social casework (Bell, 1957). Chappell (1964) states that the effectiveness and success of the supervision are related to the extent to which casework principles are applied. Going one step further, the extent to which the principles are applied is seen to depend primarily on the nature of the relationship between officer and offender (United Nations, 1951).

<sup>\*</sup>This section was prepared by Gail Bradbard, Ross Harris, and Linda Nemiroff, assistants on the project.

The above statements are parsimonious; however, the issues are not so clearly defined or resolved. While there is agreement concerning such concepts as rapport and acceptance, there are writers who do not endorse a "therapy" approach to probation and parole, or accept the principle of client self-determination (Miles, 1965). Lofquist (1967), for example, views the probation officer as an expert in the use of authority. In studying the attitudes and techniques of untrained probation officers in interactions with "unpromising clients," Lytle (1964, p. 133) reports: "We agreed that most of the things they were doing were wrong, or at least not considered professionally accepted casework." Yet the cases were brought to successful conclusion by these officers, while experienced workers felt that they would have been unable to achieve the same result.

The current status of individual correctional counseling is exemplified by the following. Viewing the work of the probation officer, Shireman (1963) comments that during the past few decades, there has been an increasing emphasis on rehabilitation of offenders as opposed to punishment and deterrence. In contrast, Thorne, Tharp, and Wetzel (1967) write:

"When a probation officer enters a [client's] life, his 'treatment' plan is traditionally built around points of law, the prestige of the judge, threats of incarceration, the punishments and restrictions he can create in the home and community...Psychologists would describe this as an aversive schedule of reinforcement-only unpleasant or punishing consequences are used [p. 22]."

Descriptive statements of the supervisory (counseling) relationship abound in the literature. Loos (1963) outlines the fundamental psychological principles on which the relationship is based, and proceeds to list elements of the relationship such as self-determination by the offender and attainment of specific objectives. Techniques such as respect, sincerity, and confidence are cited as means of developing the relationship. Finally, the use of counseling in meeting the client's emotional, intellectual, and sociological needs, and in providing psychological support, is described.

Similar, although not as comprehensive accounts, may be found in Chappell (1964), Chute and Bell (1956), and Lippman (1958). As Reeves (1961) suggests, the majority of approaches may be classified as "needs, crisis, or significant others" relationships. The one outstanding feature of them all, however, is the lack of experimental and statistical data to support the basic concepts and frame of reference. In essence, what each author presents is his own subjective point of view.

A majority of the research in probation and parole supervision represents an external approach. Factors such as offender age, criminal record, economic background, and offense category are related to probation or parole success and failure (Gottfredson, 1967; Graham, 1946; McCafferty, 1965). No attempt is made to study the specific counseling

process or outcome. Counselor behavior is not measured, nor are the nature and quality of client-counselor relationships. In essence, predictive statistics or expectancy tables of probation and parole are the focus of the results of the research.

A pioneer study which did attempt to assess some of the internal factors of the probation experience is reported by Rumney and Murphy (1952). In a follow-up of 1,000 persons placed on probation 11 years previously, the meaning of the overall probation experience, attitudes towards officers, appraisal of their work, and the relation between social adjustment and the evaluation of the probation experience were sought. It was found that the general evaluation of probation was satisfactory. A majority of the subjects had a friendly attitude toward the officers, and felt that the officers had a friendly attitude toward them. Nearly two-thirds of the probationers felt the officers had done a good job. Probation was found to bring about economic adjustment, but it did not seem to have much effect in other life areas. It was concluded that several types of offenders responded differently to the various questions regarding their probation experience. In addition, techniques and case work performance of the officers were related to ultimate adjustment.

Miles (1965) studied 116 probation officers in Wisconsin through interview and questionnaire. He found that the experienced agent does not consider himself to be a social therapist. Instead he views his basic functions as the protection of society, with rehabilitation of the offender a secondary but important function. Three years later, 110 officers were sampled. Slightly less than 20 per cent accepted a psychoanalytic explanation of human behavior, with a majority of officers viewing 80 to 95 per cent of offenders as "wrong" rather than "sick."

It is apparent that the studies cited are only the beginning in terms of understanding the correctional counseling process. In a time span of over 10 years, little research progress or sophistication was achieved. The need for research related specifically to the process and outcome of correctional counseling has been recognized by writers in the field. Gottfredson (1963, 1967), Lofquist (1967), and Shireman (1963) decry the status of theory and systematic investigation in the area of probation and parole counseling.

Grant (1960) reports a study being undertaken by the California Department of Corrections, Special Intensive Parole Unit, to investigate differential effects of internal and external treatment on parolees of high and low social maturity. It is hypothesized that the internal approach will be more successful with high maturity subjects, the external approach with low maturity subjects.

McCafferty (1965) reports on two research projects in operation (similar to that reported by Grant) which are also designed to determine what types of probationers are likely to respond to special types of supervision. The first, in San Francisco, involves examining the effects of size, intensity, and type of supervision on different types of probationers. The second, in Illinois, is evaluating

intensive probation supervision.

Summary. In the majority of probation and parole systems, the search for improved procedures is not accompanied by systematic study of results. As Newman (1965) remarks, the basic one-to-one relationship in probation and parole has not yet been exposed to adequate examination.

# Group Counseling in Probation and Parole

<u>Description</u>. The search for improved procedures for working with probationers and parolees has resulted in the establishment of group counseling or therapy programs in some systems. Group counseling with non-institutionalized offenders is defined by essentially the same characteristics as individual counseling, with the notable exception of the increased number of interactions occasioned by a group as opposed to a one-to-one relationship.

To date, relatively little has been written about group counseling with non-institutionalized offenders. Most authors' contributions to the literature have been based on their experiences. Generally, the topics explored as descriptions of group counseling cluster around either the group leader--his role and attitudes, or the group--its function, composition, process, and outcomes.

Although it is generally agreed that the therapist should provide a warm, accepting, atmosphere, there is a marked lack of consensus as to how this is to be accomplished. In his description of a program of counseling with heterogeneous groups of probationed children and their parents, meeting separately but concurrently, Geertsma (1960) suggests that the group leader maintain an accepting, problem centered, reality endorsing milieu, but not directly help group members to reduce their anxiety. Preliminary to conducting a controlled research project designed to demonstrate the effects of group therapy in favorably changing attitudes of probationers toward authority figures and social conformity, Smith, Berlin, and Bassin (1963) discussed approaches to counseling within the Rogerian framework. They stress that the therapist's function is to provide a neutral atmosphere in which members feel free to explore and communicate their feelings.

In contrast, in his case study of a group of juvenile probationers, Walker (1959) concluded that a non-directive approach is too anxiety provoking to group members. While he must create a warm, accepting, informal atmosphere in the group, the leader must also be able to accept his authority and leadership role. From his experience in organizing a group therapy program for probationers, Hays (1960) concluded that the therapist's role is dictated by the nature of therapy in a correctional (i.e., authoritarian) setting--supportive, directive, and cathartic.

The counseling or therapy group generally has been considered apart from its leader. Based on his experience with a group which sought continuation of therapy after discharge, Taylor (1963) considered the case for groups outside the prison. He concluded that the apparent lack of interest in attending sessions after initial contact means that outside groups have a function which differs from inside groups. They must be

flexibly or ganized, with the therapist content to play a steadying initial role and then a reliable occasional contact, so as not to prolong dependence on the group, but to give the ex-prisoner the security of knowing that he can turn to a group if he is in difficulty. Taylor, therefore, sees the dissolution of the group as a positive sign of the successful rehabilitation of its members.

In his report of counseling with parallel groups of delinquent children and their parents, Geertsma (1960) saw the groups as: offering insight into problems and needs; producing change in attitudes; aiding in recognition of group and social values and pressures; developing helpful, supporting, and maturing relationships; helping parents recognize their own problems apart from their children; assisting the family as a whole to accept responsibility for problems expressed in the child's difficulty; and helping the family to achieve a more realistic view of probation.

From his case study of a group of juvenile probationers, Walker (1959) concluded that no elaborate selection is necessary for meaningful group participation; chronological age, emotional maturity, and intelligence, the only significant factors in selection, may be adequately evaluated by a trained probation officer without elaborate measuring techniques.

The group process has been described in very different ways. Resnik and Peters (1967) observed four distinct phases in the group process with sex offenders: (1) development of trust and confidence in the therapist; (2) development of peer relationships within the group, with the therapist influencing anti-social attitudes as a peer member; (3) working-through with open discussion of (sexual) problems, increased self-esteem, and modified behavior; and (4) modification of social behavior and improved relationships with authority. The authors feel that the process is most likely to be successful if instituted shortly after the offender's court trial when he is less defensive and thus relatively accessible to psychotherapy.

Smith, Berlin, and Bassin (1963) consider the meaning of one aspect of the process, silence. Members may be thinking about what to say and how, waiting for something to happen, encountering difficulty in adjusting to the group and speaking before strangers, waiting for reassurance from the therapist that what they say is important and will not be punished, or expressing hostility toward the therapist, who must be alert to the nuances of the group's feeling as expressed in silence and react constructively.

With few exceptions, the research into group counseling in probation and parole has attempted to assess the effects of group therapy by comparing pre and post treatment data. Two exceptions are described first, followed by descriptions of the outcome studies.

The divergent attitudes of group counselors were studied by Kassebaum, Ward and Wilner (1963), who surveyed staff of the California Department of Corrections for their attitudes and experience in corrections, especially group counseling. The California F Scale, designed to measure authoritarian attitudes, and a questionnaire were completed by 4,062 staff members in institutions, camps, and parole offices, 827 of whom were engaged in group counseling. Comparisons were made of attitudes of group counselors and non-counseling staff members, and group counselors according to type of job (custodial or treatment), institution, and F Scale scores. It was found that counselors were more likely than non-counselors to consider emotional problems the etiological basis of crime, and counseling and psychotherapy the most valuable rehabilitation activity; to place greater priority on treatment needs as opposed to custody needs, and less value on conformity to traditional authority; and to be less inclined toward more severe penalties for law violations. When counselors were compared, those holding the minority position, a traditional (primitive-custodial) orientation, were more likely to have high authoritarian values, and to hold custodial and supervisory, rather than treatment, positions. Less authoritarian counselors, and those whose job responsibilities were primarily treatment, were more likely to use problems to stimulate group discussion.

Smith, Bassin and Froehlich (1962) examined phase sequences and equilibrium in two-client-centered groups of eight and seven probationers respectively, meeting in weekly 90-minute sessions. From records of verbal acts, according to Bales categories, it was concluded that the phase sequence of the probation therapy group did not follow the phase sequence pattern of Bales' laboratory problem solving model. The absence in a probation group of a tendency to establish equilibrium suggested to the authors that the groups studied were more nearly therapy groups than problem solving groups.

O'Brien conducted three studies of the group therapy experiences of juvenile delinquents. In the first study (1962), he showed that a random sample of California Youth Authority parolees did not differ significantly between two groups of control and two groups of experimental subjects on 18 scales of the California Personality Inventory (CPI). After one school year of weekly two hour sessions, the effects of treatment were inferred from attendance data, differential commitment or recidivist rates between experimental and control groups, and pre and post treatment psychometric measures. Findings revealed that attendance for both experimental groups was 58% and 83%, that the recidivist rate was slightly lower for the experimental subjects, and that both the total profile of the CPI and the two specified scales, Responsibility (Re) and Socialization (So) dropped, where low scores indicate high delinquency. To explain this psychometric and behavioral inconsistency, it was reasoned that one of the major effects of group therapy was to reduce treated subjects' resistance to revealing themselves, while members of the control group were being reinforced for giving socially acceptable responses to test items.

In a second study, O'Brien (1963) used modified group therapy in a public school setting with delinquent adolescent boys. He again found that the Re and So scales of the CPI dropped significantly following group therapy. In a third study O'Brien (1966) constructed an interview schedule and subsequently conducted follow-up interviews of all available participants in the 1962 study. The following observations were obtained from interview data. First, there was a close concurrence between notes recorded during treatment and experiences and associations recalled by treatment subjects eighteen months after the termination of treatment. There was a general consensus as to the phases of group development: mistrust of other members and the therapist, gradual thawing of psychological distance and coldness, being comfortable in discussing difficulties and revealing feelings. Third, subjects observed that the therapist was basically interested in them personally and that his personal involvement, essentially passive and non-directive, enabled them to respond effectively to treatment. Further, social pressures, either positive or negative, seemed to have little influence on how subjects attended or used treatment sessions. Fifth, changes which are reflected in test scales seem to be related more to a modification of attitude toward taking the test than to effects of therapy. Changes in the direction of delinquency, as measured by the Re and So Scales of the CPI, were thought to have been brought about through increased insight into one's own emotional difficulties and concomitant willingness to share this awareness with others (i.e., via the CPI items). Finally, all subjects said that they would enter treatment again if offered on the basis of the original study, and all but two said that the therapy was helpful to them in effecting a more adequate personal adjustment.

Another group of studies was performed at the Brooklyn Association for the Rehabilitation of Offenders (BARO) by Smith, Berlin, Bassin and Froehlich. In a follow-up study of a group of probationers a year after termination of treatment, Smith, Berlin and Bassin (1960) obtained ratings by probation officers, parents, wives, or other close relatives of change in five areas: attitudes toward law and police, attitudes toward parents and/or wives, attitudes toward job and work, attitudes toward law abiding friends, and record of arrests. Improvement was reported for almost all former probationers, and many of the comments expressed enthusiasm about the offender's rehabilitation.

Bassin (1957) and Smith (1959) compared two groups of probationers and a control group with respect to two projective tests administered at the beginning of therapy and at the conclusion of fifteen weeks of treatment. Results showed that the probationers exposed to group therapy showed statistically significant changes in a positive direction as compared with the control group, which showed no appreciable improvement.

Smith, Bassin, and Froehlich (1960) investigated the relationship between verbal participation and change in attitudes in a therapy group of 15 adult probationers after 15 weekly 90 minute sessions. Verbal participation was recorded by an observer, and changes in attitude were calculated using pre and post administrations of a modification of the TAT designed to elicit attitudes toward authority figures. The Human Relations Inventory (HRI), a 37 item projective questionnaire designed

to assess social conformity based on the subject's need value system, was also administered before and after treatment. Subject's ranks on degree of verbal participation, TAT and HRI change scores were correlated. There was no significant correlation between changes in attitudes and degree of verbal participation. The authors suggest that the variable which is a function of improvement is not verbalization, but the experience of being accepted and understood in the therapy situation.

Summary. The research literature on group counseling with non-institutionalized offenders is sparse and characterized by varying degrees of methodological rigor. It is generally agreed that the therapeutic setting should be warm, accepting, and conducive to communication and the expression of feelings, but there is disagreement as to the most effective behavior of the therapist. It also appears that while the group process is ideally characterized by a gradual movement from mistrust and suspicion to openness and self-revelation, the nature of the process in correctional settings may be different from that of other settings. While group treatment is positively viewed by probationer and parolee participants and those close to them, attempts to determine the effects of group counseling with this population have yielded diverse results.

This review leads to the conclusion that the reported research is best viewed as preliminary for studies on the question of the effectiveness of group methods in work with probationers and parolees.

# Interaction of Counselor and Client Personality

A recurring conclusion in counseling research is that the counselor both acts upon and is acted upon by the client in an interaction which is assumed to be therapeutic and conducive to growth and movement toward the realization of the client's goals. An inquiry into research efforts which were the bases for this conclusion reveals that much emphasis has been placed upon the identification of aspects of counselor personality which facilitate this interaction, less emphasis has been placed upon the interaction itself, and virtually no emphasis has been placed upon the interaction as it contributes to counseling outcome.

Counselor Personality. As an attempt at unraveling patient-therapist interaction, Truax (1963) poses the question, "What do we as therapists do that makes for constructive personality change in our patients?" He then suggests that:

"Psychoanalytic (Alexander, 1948; Halpern and Lessner, 1960; Ferenczi, 1930; Schaffer, 1959), client centered (Dymond, 1949; Jourard, 1959; Rogers, 1951; Rogers, 1957) and eclectic theorists (Fox and Goldin, 1963; Rausch and Bordin, 1957; Shoben, 1949; Strunk, 1957; and Strupp, 1960) have emphasized the importance of the therapist's ability to understand sensitively and accurately the patient's inner experiences [p. 256]."

Also they have stressed the "importance of non-possessive warmth" and acceptance of the patient and have emphasized that the therapist be mature, "integrated and genuine within the relationship." These elements are common to a wide variety of psychoanalytic, client centered and eclectic approaches to psychotherapy.

These have been defined by Truax as three therapist "conditions" and have been the subject of investigation in a campus counseling center carried out by Halkides (1958) and Barrett-Lennard (1959). Their evidence suggests the importance of the three therapist conditions for success in counseling, although a replication of the Halkides (1958) study by Hart (1960) failed at confirmation. Research has also indicated the relevance of these therapist personality characteristics to effective group psychotherapy with hospitalized mental patients (Truax, 1961).

Lowinger and Dobie (1964) studied the therapist variable at the time of the initial interview. They suggest that the competent therapist is outgoing, ambitious, and aggressive. He acknowledges more discomfort in the interview situation than the less competent therapist, who sees the patient as more dependent and himself as passive and inhibited.

Frayn (1968) found that psychiatric residents rated by their supervisors as having the greatest ability were described as being flexible, assertive, and less concerned about social conformity; those with less ability were compulsively rigid, with a need to conform.

In a more recent study, Truax (1963) has assessed the effects of therapist levels of (1) accurate empathic understanding of the patient, (2) unconditional positive warmth for the patient, and (3) therapist self-congruence or genuineness. Comparisons of levels of therapist conditions offered during therapy with measures of constructive personality change in the patient, using a matched control group, suggest that when patients receive high conditions of therapy, they show positive personality change; when they receive low conditions of therapy, they show negative personality change. Truax suggests that his findings reflect the fruitfulness of focusing on the therapy behavior of the therapist.

It is Epstein's (1963) conclusion that the significant factors contributing to therapists' therapeutic ability are related to their personality, that poor therapists do not appear to improve with time, and that poor therapy makes patients worse.

In later evaluations of research derived from the molar approach to counseling, Truax (1966) asserts even more strongly the "accumulated, overwhelming evidence" suggesting that therapists who provide relatively high levels of accurate empathic understanding, non-possessive warmth, and genuineness casually induce greater self-exploration throughout therapy. He points to the diverse human groups in which constructive behavior change has been researched--schizophrenics (Betz, 1963),

college underachievers (Dickenson & Truax, 1966), neurotic or emotionally disturbed outpatients (Strupp, Wallach, Wogan, & Jenkins, 1963), and juvenile delinquents (Truax, Wargo, & Silber, 1966).

Research into the kinds of personalities which can and cannot utilize the well-developed "conditions of therapy" is still wanting. The whole area of the investigation of the counselor's contribution to facilitative processes and constructive outcomes is sparse. Pool (1965) points out that the vocational counselor is faced with a situation in which he recognizes the existence of personality factors that bear on the counseling goals, but there is little research data to which he can turn for clarification.

Brams (1961) attempted to profile the effective counselorpersonality by means of the MMPI, MAS, TAV (Index of Adjustment and Values), and the POQ (Berkeley Public Opinion Questionnaire) but without great success. Judges and peer group evaluations proved to be as impressive as assessors of counselor competence as were the instruments.

In a significant contribution, Truax and Carkhuff (1965a) seek to uncover the counselor attribute called by Rogers (1957) "therapist genuineness or self-congruence." Transparency is seen as a highly facilitative factor, providing a model for the client to imitate. The findings confirm the hypothesis that the greater the therapist transparency, the greater the positive personality change in the patient. The contrary finding among delinquents, where the less the transparency the greater the positive change, suggested that self-exploration may be of negative value for antisocial groups.

Much of the research on the therapist variable in counseling has revolved around counselor experience. Bohn (1965) assessed the relationship between Counselor Dominance, Counselor Experience and Client Type. However, since the personality variable (Dominance) was controlled, the findings only reflect variance in counselor experience. His results, therefore, are indicative of a decrease in directiveness among experienced counselors. Campbell (1962), in an earlier study, had reported counselor background to be of more significance in counseling behavior than were counselor personality factors. Strupp, et. al. (1963) showed that experienced counselors used a greater variety of techniques than inexperienced counselors. Fiedler's (1950) study seems to have given rise to the thought that inexperienced counselors are less effective than experienced counselors. It seems worthwhile to emphasize that Fiedler's work merely indicated that experienced counselors, independent of orientation, function in ways more similar than inexperienced counselors.

Frayn's (1968) finding of no significant relationship between years of training experience and effectiveness as a psychotherapist supported the earlier conclusion of Rosenbaum, Friedlander, and Kaplan (1956) and Frank, Gliedman, Imber, Nash, and Stone (1957) that the degree of patient improvement was not determined by the experience of the therapist.

Carkhuff (1966) attempts to draw questions of experience closer to personality issues by asking the question, "What kind of experience is related to effective practice?" Appropos of this issue is the Mills and Abeles (1965) study in which two counselor personality variables -- the need for affiliation and the need for nurturance -- are shown not to correlate for experienced counselors. Only for "the most inexperienced counselors" was "Liking" related to nurturance and affiliation. Carkhuff's question is "Does the experienced practitioner become fractionated?" The questions relevant to this review are: "Do counselor personality variables become less pertinent with experience in counseling? Does the practitioner substitute techniques for personal commitment to the relationship?" A recent study by Carkhuff, Kratochvil and Friel (1968) seems to lend added weight to the question just phrased. This experiment "showed a non-significant decline in levels of empathy, regard, genuineness, concreteness, self disclosure and overall level of conditions communicated" from the beginning of training to advanced stages of training. Ratings suggest that, in general, trainees moved in the direction of functioning of their professors. Kirchner and Nichols (1965), Bradley and Stein (1965) and Fretz (1965) all link the movement of counselors in training with the predictive performance of their teachers.

Abeles (1967) returned to the issue of counselor "liking" for clients and studied the relationship between this variable and therapist projections of anxiety and hostility on the Holtzman inkblot. It was found that therapists who like their clients tend to show more (to significance) hostility and anxiety on this projective test. An additional finding was the high correlation between anxiety and hostility among therapists.

It seems reasonable to link "liking" of client with personal investment in the relationship on the part of the therapist. The next stage of research needs to be an investigation of the connection between "liking" and client improvement. Present indicators suggest that the line is not clearly drawn. Truax and Carkhuff (1965a) established that counselor positive regard (and empathy) elicits client involvement. But in work with delinquents in group counseling, Truax and Carkhuff (1965b) showed that those group members who explored themselves most deeply (i.e., became involved most profoundly) demonstrated the greatest amount of deteriorative change.

Counselor Personality Variables and Client Variables. Counselor personality variables are considered most appropriately in interaction with relevant client variables. Van Der Veen (1965) studied the level of therapist-offered dimensions and client problem expression. It was found that the rated interview behavior of the patient was a function of the patient, the therapist and the particular therapist-patient pair. The behavior of the therapist was found to be a function of the therapist and the patient. Mendelsohn (1966) has worked most extensively in this area. He concluded that similarity between client and therapist leads to a greater number of counseling sessions and also to greater

variability in the number of sessions. Tuma and Gustad (1957) had described client-counselor similarity as linear, in the sense that high similarity is associated with positive outcomes, but other studies have described the relationship as curvi-linear (Mendelsohn & Geller, 1965) in the sense that "middle similarity is associated with high criterion scores."

Gamsky and Farwell (1966), in further confirmation of the impact of client on counselor, surveyed counselor (verbal) behavior in various conditions of client hostility. Along each of the dimensions examined, it was found that client hostility proved a modifier of counselor behavior.

Counselor-client personality interaction has been studied by means of both verbal and non-verbal behavior in the counseling situation. Pallone and Grande (1965), quoting Borgatta, speak of "client rapport", the way in which "the other with whom ego participates affects ego's behavior." Their conclusions were generally negative, showing rapport was dependent on other factors than verbal style and content. Krumboltz, Varenhorst, and Thoresen (1967) sought to survey non-verbal counselor behavior as facilitating factors in counseling. They chose essentially client-perceived variables, such as counselor "attentiveness." Hence, they were working at a behavioral level and were dealing with observable entities closely related to what Carkhuff and Truax (1965a, 1965b) had called "genuineness."

Client Improvement. Pool (1965) related client improvement to client personality factors. Elton (1966), in dealing with discipline problems in dormitory populations, similarly related outcome to client personality factors. Shelley and Johnson (1961) demonstrated the ability of group counseling to change the attitudes of youthful offenders, measured by a decrease in antisocial opinions. These investigators, however, make no estimate of what in the group therapy program is responsible for the decrease in antisocial attitudes. Mintz (1966) similarly reports the usefulness of group (heterosexual) therapy for homosexual men. Changes noted include dissolution of rationalizations about homosexuality, strengthened identity, emergence of anxieties about heterosexual drive, etc. Again, however, the report is simply descriptive of outcomes and no analysis of facilitating factors is attempted. A study of Sonne and Goldman (1957) focused on the interaction of counselor-client personality patterns and showed the preference of both authoritatian and equalitarian clients for eclectic style counselors. Insofar as it may be assumed that counselor mode is a function of counselor personality, this approach may prove a useful avenue for future research.

Summary. The research relating to counselor personality is plentiful, with much of it focusing on counselor personality as it operates in providing a facilitating relationship, and counselor experience as related to effective practice. However, in the vital area which links therapist personality and client improvement there is little. The studies which focus on counselor personality rarely engage in questions of counseling outcome; the reports of work in the field of client change

rarely spare a line on counselor personality. As Carkhuff (1966) states, "The present state of affairs of most research in which one process may relate to another but neither relates to constructive change or gain in the counselee is a tragic waste of human energy and time [p. 476]."

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#### CHAPTER III

#### METHODOLOGY OF THE STUDY: PHASE I

The project was conducted in the Probation Office for the United States District Court for the District of Columbia, in cooperation with a research team from the University of Maryland, headed by Dr. George L. Marx. The researchers are briefly described in Appendix I, Figure A.

The first phase of the study was of nine months duration, running from October, 1967 through May, 1968. The subjects, treatment methodology (i.e. group and individual counseling), and data collection and analysis procedures for Phase I are described in this section.

#### Research Subjects

Clients and probation officers of the Probation Office for the United States District Court for the District of Columbia served as subjects for this study. Clients were randomly assigned to either a group or an individual counseling treatment, and each of the participating probation officers administered both an individual and a group counseling treatment. This allowed the study of both client and counselor traits of personality in relation to counseling outcomes differentiated by treatment mode.

Client Group. Included in the study were all male clients who came under the supervision of the Probation Office for the United States District Court for the District of Columbia from January 1, 1967 through September, 1967. Excluded from this group were those who were either revoked from parole or probation status, or were not able to report to the Probation Office with any regularity due to such factors as age, illness, physical handicaps, or conflicting work schedules. Of the 245 clients who came under supervision during this time, a total of 175 were identified for participation in the study. They are regarded as a sample in time of all those clients who remain under supervision in the D. C. office and meet the above restrictions.

From this initial group identified for participation in the study, substantial reductions were made in the number of clients who began the experiment, completed it, and on whom complete data were obtained. Problems which are inherent in research with a clientele of this nature, such as revokation, transfer to another jurisdiction, client's unwillingness to report for testing, or records which were incomplete for other reasons, reduced this number by 55. There were four clients on whom complete data were obtained, but not usable due to errors in recording. In addition, the 28 clients who were assigned to one of the participating probation officers were omitted from the analysis when that probation officer's illness necessitated a change in personnel. As a result of these reductions, the analysis of data is based on a total of 88 subjects.

A summary of information about the project clientele is presented in Table 1. The summary includes all those clients who were originally

identified for participation in the experiment, with the exception of those who left the jurisdiction of the office before any data could be collected. This was no later than mid-November, a month after the project began.

Information is reported in Table 2 for those clients who completed the project, and on whom complete data were available. Noteworthy differences are cited.

TABLE 1
Characteristics of Project Clientele

				Mean	Median	Mode
Length of perio	d of	supervision	(mos.)	43.85 31.12	36 27	36 24

	Numb	er Per Cen
Status Probation Parole	11 5	.2 69 52 31
Race Negro White		14 83 28 17
Residence Family Non-family		16 71 48 29
Occupation Professional, technical, managerial Clerical and sales Service Processing		23 14 16 10 03 62 3 2 7 4
Machine trades Structural Miscellaneous (include unemployed)		6 3 7 4

 $a_{\mathrm{N}}$ 's for categories range from 164 (residence) to 169 (race), obtained from data available.

The period of supervision of those assigned to the Probation Office ranged between 10 and 99 + months, with the modal number (77) serving periods of supervision of 36 months duration. The mean age for all clients was 31.13, with ages ranging between 18 and 73. The modal (N = 19) age was 24, and the median was 27. While the age range was broad, 86 or fifty-four per cent of the clientele was in the 18-27 age range.

Slightly more than two-thirds (69%) of those clients identified for participation in the project were on probation. The Probation Office reports that a figure of 85% is representative of the proportion of probationers of its usual clientele. As shown in Table 1, 83% of the group were Negro. This is somewhat larger than data which indicate that, as of 1967, 71% of the total population of Washington, D. C. was Negro (Government of the District of Columbia, 1969).

Data relating to residence of the clients are also reported in Table 1. Family was defined as including all those clients who resided with one parent, both parents, other relatives, or spouse; non-family was defined as those clients who lived alone or with some other person. A substantial majority of the clients, 71%, resided with family.

The occupational classification system used was according to the <u>Dictionary of Occupational Titles</u> (U. S. Department of Labor, 1965). In cases where a client had more than one job, the classification recorded was the kind of work which the client most typically did.

One might be led to conclude that clients were in continuous employment during the project time, especially considering that one of the requirements of probation is that a client seek and maintain employment and many of the efforts of the Probation Office are directed along this line. However, many clients were not in continuous employment, and either changed jobs two or three times and/or had periods of unemployment. Therefore, the data presented here indicate the types of employment in which clients were involved, when they were working.

Seven occupational groups are reported. Sixty-two per cent of the project's clients were engaged in service occupations. An additional 24 per cent had employment in either professional, technical, managerial or clerical and sales occupations. The remaining 14 per cent of the clients were distributed among processing, machine trades, structural, and miscellaneous occupations.

The essential data about project completers bear sufficient resemblance to that already summarized for all project clientele as to make the presentation appear almost to be a repetition. It is presented in Table 2 below and will be followed by a comparison of the two groups.

As shown in Table 2, the period of supervision of project completers ranged between 12 and 99 + months, with, as the median and modal data indicate, a vastly larger number of clients (43) serving a period of supervision of 36 months than any other length of time. However, the mean

period of supervision is somewhat higher than this, at 43.7 months. The mean age for all clients was 32.2, with ages ranging between 18 and 66, with half of the clients' ages ranging between 18 and 27, and the remainder ranging between 27 and 66.

TABLE 2
Characteristics of Project Completers

	Mean	Median	Mode
Length of period of supervision (months) Age <sup>a</sup> (years)	43.7	36	36
	32.2	27	24

					Number	P	er Cent
L:	.•			· .			
Status <sup>b</sup>					63		74
Probation Parole					22		26
Race					73		83
Negro White					75 15		17
Residence					64		73
Family					24		27
Non-family	7				24		، ب
Occupation			- 4		13		15
Profession	nal, techni	cal, manageri	aı		13		15
Clerical a	and sales				51		58
Service					2		2
Processing					5		6
Machine t Miscellan	rades eous (inclu	de unemploye	1)		4		4

<sup>&</sup>lt;sup>a</sup>Data not reported for three clients. <sup>b</sup>Data not reported for two clients.

Also shown in Table 2 is probation or parole status of project completers, with 74 per cent on probation. Six occupational categories are shown. Fifty-eight per cent of the project completers were engaged in service occupations. An additional thirty per cent of the clients were involved in either professional, technical, and managerial, or clerical and sales occupations. The remaining twelve per cent of the clients were divided between processing, machine trades, and miscellaneous occupations.

In comparison of the two groups, there were five per cent more clients on probation among project completers than among total project clientele. Length of period of supervision were almost identical, with the only difference being a mean of .15 month greater for all project clientele. Much the same exists for age of clients, where median and modal ages were the same, but the mean age for project completers was 1.08 years older than for all project clientele. In both cases, there were eighty-three per cent Negro and seventeen per cent white clients in the project. A slightly greater percentage, two per cent, of the project completers resided with family than did all project clientele.

Some variation did exist in employment of clients. Employment of all project clientele fell into seven categories, while it fell into six for project completers. Three per cent of all project clientele were engaged in structural work, while there were no project completers in this category.

There was one category which had greater percentage of <u>all</u> project clientele than project completers. This was service, with a difference of four per cent. In three categories there was a greater percentage of project completers than all project clientele. These were professional, technical, and managerial; clerical and sales; and machine trades, with differences of one, five, and two per cent respectively. In two categories--processing and miscellaneous--the percentages were identical.

From the differences noted between all project clientele and project completers, it was concluded that, on these dimensions of client characteristics, no major observable differences existed. Thus, it is assumed that project completers were from the same population as all project clientele. A table showing characteristics of project noncompleters is shown in Appendix II, Table A.

Counselor Group. Probation officers assigned to the Probation Office served as the counselors in the study. The eight officers participating in the study were those who would have had new groups begin during the time between January 1, 1967 and September, 1967, when clients were being assigned to participate in the study. Seven of the officers conducted treatments, and one served as a substitute or alternate. Approximately midway through the experiment, one of the probation officers was unable to continue due to illness and was replaced by the alternate. Because this disruption in continuity of counselor represented a major divergence from the research design, these two probation officers and their clients were not included in the data analysis. The data regarding training and experience of the six probation officers who completed the entire experiment are shown in Table 3 which follows.

Although it is not possible to describe a composite probation officer, it can be seen that all were trained in sociology or a closely allied field. Experience as a probation officer, in the Probation Office, and as a group leader ranges from six months to fifteen years. Two of the officers in the experiment have been leading groups in the D. C. office almost since the beginning of the program; two had less than a year's experience as a group counselor. Three of the officers have had specialized training in psychodrama, obtained through the Psychodrama Department

TABLE 3

Highest degree Major	A	<b>B</b>	C	Ω	闰	[II.
Major	MSW	BA	BA	BS	BS	BA
	Social Work	Sociology	Sociology	Crimin- ology	Sociology	Crime
	? ! )			Correc-		1
Total years as				tions		
probation officer	6 mos.	. 15	2	4	\$	10
Total years in D. C.						
probation office Total years as	6 mos.	10	8 mos.	<del></del> 1	7	9
lor	6 mos.	∞	8 mos.	H	7	9
counseling		programs		St. Eliz.	programs	
		at St. Eliz.		psycho-	at St. Eliz	
				drama		
Other advanced			•			
training		24 graduate credits	approach- ing	work toward MS:		course work in
			Master's	Summer		Criminol-
				Institute		ogy, Social
						Work,
						Behavioral
						Therapy

aAt outset of experi <sup>b</sup>Letters correspond counseling treatment.

at St. Elizabeth's Hospital. Five of the probation officers are involved in, or have completed, graduate work in areas closely related to their current work. One of these has completed a Master's degree, and three are pursuing a Master's.

The table shows similarity in training, and kind of experience, but wide diversity in length of experience. It does not show philosophical orientation, nor does it give any indication of a particular probation officer's techniques in dealing with his clients. This ingroup counseling treatments prepared by probation officers, and presented in a subsequent section.

# Description of the Treatment

In this section each of the counseling treatments is described, prefaced by an overall description of aspects shared by both treatments, including time dimensions, assignment of clients, and supervision.

The counseling began in October, 1967 and extended through May, 1968. Each probation officer served as both a group counselor and an for 1½ hours, and maintaining weekly contacts with each client assigned six probation officers participated in the experiment as counselor subjects.

Clients were randomly assigned to either an individual or group counseling treatment, and then randomly assigned to one of the probation officers who were administering the treatments. Randomization in each instance was done using a table of random numbers. Because a critical factor in any client's period of supervision is his maintenance of employment, and because all counseling groups were conducted in the evening, there were occasions when a client who had been assigned to a group could not participate in the study if he was assigned to a group. In these situations, the Probation Office suggested that the researcher follow reassignment procedures, either to a different probation officer

<sup>1</sup>St. Elizabeth's Hospital is federally operated and has an ongoing clientele of approximately 6,500 inpatients and 1,000 outpatients. Among its many services is its Psychodrama Department, which has achieved national recognition. It is directed by Mr. James M. Enneis, who also serves as a consultant to the D. C. Probation Office in its group counseling program.

The concluding activity for the experiment was a party for all participants catered by one of the research subjects. At the party certificates of appreciation were presented to the participants (See Appendix I, Figure B).

or to a different treatment, depending upon which was more feasible for each client involved. In 20 cases, clients were reassigned to treatments, but with the same probation officer, and in an additional five cases were reassigned probation officers, but remained in the same treatment. The extent to which the reassignment is a contaminant factor remains unknown. The total supervision of each client in the project was carried out by the probation officer assigned to him.

Group Counseling. A total of six groups which consisted of 75 originally assigned clients comprised the group counseling treatments. Of this number, complete data were available and were analyzed for 48. Each group met weekly for one and one-half hour sessions. Descriptive data concerning the groups are summarized in Table 4.

TABLE 4
Characteristics of Counseling Groups

Probation Officer <sup>a</sup>	A	В	С	D	E	F
Number of clients Number of sessions X Attendance per session	8 <sup>b</sup> (14) <sup>c</sup> 27 9	3 <sup>d</sup> (13) 28 7	7(11) 32 5	12(13) 34 8	8(13) 23 6	10(1 <b>2</b> ) 27 8
X Sessions attended per client	18	24	17	24	16	19

<sup>&</sup>lt;sup>a</sup>Letters correspond to probation officer identifying letters used in written description of group counseling treatment.

Assigned group sizes ranged between eleven and fourteen clients. The smallest group originally continued to be the smallest throughout the project, with an average attendance of five, while the largest originally had the largest average attendance, nine clients, throughout the project.

There was some variation in the number of group sessions which were held, ranging between twenty-six and thirty-four. While group sessions were scheduled each week, several factors contributed to the fact that no group did meet every week, and some groups had more cancelled meetings than others. Factors which caused cancellation of all group sessions included the Thanksgiving, Christmas, and New Year's

holidays, the Washington riots in April, and the Washington bus strike in May. In addition, weather conditions during the winter caused cancellation of four or five groups.

Poor attendance in the latter weeks of the study occurred in all groups, and, for the most part, groups did meet, but, with an average attendance of two or three clients.

One of the conditions of probation or parole for those clients who were assigned to groups was that they attend group sessions regularly. A few clients attended nearly every session although the table indicates that it was far more common for a regular attender of the group sessions to attend somewhere between one-half and two-thirds of the sessions.

A numerical description of the groups gives an indication of such factors as group size and attendance, but gives no indication whatever of what occurred during the group sessions. The definition of group counseling offered in the first section describes, in general terms, what each probation officer attempted to accomplish during the group sessions. At the outset of the experiment, it was agreed that each probation officer would conduct his group in the manner most comfortable for him, as he typically conducted his counseling groups in the Probation Office. In spite of the fact that groups were conducted according to somewhat different styles and techniques, the six demonstrated similarity with regard to group development. Three stages-beginning, middle, and final--were clearly discernable.

The early stages of the groups, which extended through approximately the sixth to ninth sessions, were characterized by questioning of the value of the group, and hostility toward being required to attend. Resistance to making a commitment to the group was exhibited in a variety of ways. In two cases, it was characterized by high verbal output, but on a superficial level; in another case it was characterized by either silence or superficial verbiage. Hostility was directed toward the leader, and occasionally toward the research assistant. The accuracy of the probation officers' statements that the group was a place where they could speak freely was continually tested.

The middle stage of the group began at varying times, somewhere between the seventh through tenth sessions. Generally, the five groups moved toward demonstrating greater trust in the group and in the leader, as well as concern for other group members. However, there was variation in the extent to which group members were willing to discuss personal problems, from reluctance or refusal to free and open discussion. The middle stage of the groups may be characterized as a "working" stage.

One of the groups differed in the middle stage, in that resistance continued, with little productive working occurring. In this group the productive sessions which occurred did so in its concluding stage.

This was contrary to the phenomena which occurred in the concluding stage of the other five groups. This stage occurred in April through late

bon whom data were analyzed.

<sup>&</sup>lt;sup>c</sup>Clients originally assigned.

 $<sup>\</sup>ensuremath{d_{\text{Two}}}$  additional clients completed the project, but their data were omitted through clerical error.

May. There was less emphasis in this period on personal concerns and questioning of the value of the groups reoccurred. Members, however, seemed to have grown in concern for one another, so that the groups did not return to their original stage, although much of the behavior was similar.

Although an analysis of the group summaries revealed a pattern of development for groups as a whole, variations did occur. Each probation officer conducted his group according to his personal orientation and style and therefore a statement about group counseling behavior of each of the probation officers is appropriate.

Each probation officer's self-description of his group counseling orientation, style, and goals is presented below.

Probation Officer A (as specified in Tables 3 and 4):

"The primary method used in conducting my group employed social group work skills and techniques. Emphasis was placed on developing stages of growth and movement in the group to allow each group member to use the experience in a positive manner. The first task as group leader was to help the group become interested in opening channels of communication among themselves in order to begin working on their concerns. During the early stages of the group this was difficult to achieve due to resistance on the part of several members. Consequently, efforts were directed to reduce the resistance by my taking a more active part in guiding the group by questioning and creating a situation for the group to explore. This centered around information known to me about various group members which was shared with the group by creating a situation for them to work on together.

"Efforts in the last stage of the group were directed toward crisis situations. Here, role playing was used to help the group observe the crisis situation directly. In addition, emphasis was placed on developing roles in the group so that members could share and challenge another member's actions and comments.

"Lastly, my goal for the group was to have them develop positive feelings about relating with one another through their interaction in the group in order to assist each other. This was a difficult goal to achieve in nine weeks, but progress was noted."

# Probation Officer B:

"Initially, I attempted to structure the group along the lines of milieu therapy; that is, encourage the group to develop standards and values for each other that could be used as a yardstick in June to determine whether each member should be recommended for termination of supervision, with the group taking responsibility for making individual recommendations as to termination. There was a great deal of resistance to this attempt on my part and it finally died a slow natural death, with the group unwilling to determine even very simple standards of behavior to use, and obviously unwilling to 'judge' each other as the members expressed it.

"Following this, as a leader, I attempted to stay primarily in the role of a leader who clarifies what the issues are and attempts to stimulate interaction between members around the central issues. I seldom used a director-directed warm-up as I necessarily did at first, but rather let the group arrive at its own concerns each meeting. Role playing techniques were used occasionally."

#### Probation Officer C:

"Initially, as leader, I attempted to play the role of a member of the group by denying any special status except requiring attendance in the group activities. Hoping the group would form some identity of its own through values presented by its members and through association with one another, I took a 'nondirective' role. The contract was clearly stated in terms of how membership in the group was to be useful by offering a place where problems of day-today living could be discussed. Efforts were also made to have the members evaluate their relationship to one another: parallels were then drawn to show the connection between this relationship and adjustment difficulties with others. Not accustomed to a lack of direction since many of the members had previously been incarcerated, the group began to flounder for some weeks with erratic attendance as one after another person attempted to give content, for example, through class discussions of the world issues or topics relating to the crime problem, etc., all avoiding the stated purpose. Support was given to those who were willing to share problem areas, though few real issues were dealt with as the group succumbed to the game of 'hide and seek.' When several warrants were requested because of failure to report and one fellow died from an overdose of drugs, I became tired of the 'game playing' and despaired of waiting as the group fell apart so I openly challenged the behavior of several members by confronting them with their irresponsible behavior. These sessions became the most lively."

# Probation Officer D:

"My approach to group counseling is that of a laissezfaire attitude which is the willingness to discuss and
work with anything providing it can, at least, maybe in
some remote way, be profitable and related to group members.
I see one of the main functions of the group as reacculturation of an individual to the culture and subculture from
which he comes.

"To effect the reacculturation of group members, I call on all skills of counseling known by this writer and use psychodrama and role playing to help develop empathy and to emphasize or to obtain a better understanding of the problems. This writer has found that on many occasions, group members have been able to provide better and more realistic solutions to other group members' problems. As the group develops, it becomes a functioning unit whereby they can help or treat each other."

# Probation Officer E:

"Initial efforts were spent setting forth the goals of the group and trying to overcome the hostility that existed in the group. The director-directed warm-up was used while trying to achieve the above. After several weeks the group began to solidify and interaction increased. Role playing was used intermediately. About midway through the program the group selected a leader from amongst themselves and he was allowed to lead a few group sessions. As a leader I only intervened to clarify certain issues when called upon by the group. Toward the end of the program the group functioned as a unit, trusting and having a genuine concern for each other."

# Probation Officer F:

"The general design of my group evolved from a relatively directive to somewhat of a non-directive approach. I found it necessary, during the early life of the group, to operate within a structured framework so as to relieve anxieties of members and reduce the level of hostility. With the passage of time, however, I found I could be less directive with group members with their feeling more at ease, less defensive, more prone to verbal participation, and more readily discussing problems with a great deal of feeling tone. The group seemed to arrive at this juncture after about eight weeks. Within several months following, I found myself less compelled to initiate discussions. It was at this point the group solidified, participants became more trusting of each other, perpetuating a loyalty to the group, and there emanated distinct catalysts. These catalysts could be considered as the group leader's 'helpers' who would be

especially sensitive to what was taking place at any given time and who would zero in on such group concerns. Being somewhat 'non-directive' at this stage, I found my most important role was to ascertain the central concern and, having accomplished this, keeping the group focused on it. Related to this was my task of constantly being aware of various polarizations and their meaning. I found, as I am sure was also the case of the research assistant, that the technique of intermittant role playing was quite useful, especially in the dramatization and solution of the difficulties of group members in social interaction."

In each group was an observer, who was a research assistant in the project. A specific assignment of each observer was to keep a written report of content and process of each group meeting, as a means of gathering descriptive data regarding the group counseling treatment. Beyond this, each probation officer made further definitions of appropriate research assistant functions, consistent with his group counseling practices. Thus the role of assistants varied somewhat from incidental observer and occasional participant when called upon by group members or leader to a more active role, which on occasion resembled that of co-therapist. The assistants were graduate students in the Department of Counseling and Personnel Services at the University of Maryland.

Individual Counseling. Individual counseling was the assigned treatment for 87 clients. Of this number, 40 remained at the conclusion of the project and are included in the data analysis. Before the project began, it was decided that a weekly contact with probation officer would be required of each client in individual counseling. While this represents, at best, a loose definition of counseling, it allows for the full range of contacts typically made with probation officers. The requirement of a weekly contact was in excess of usual practice in the Probation Office for non-group clients. It was decided that the content of the session should consist of matters of "concern" to the client. Table 5 summarizes number, length, and usual topics during individual contacts.

The number of individual contacts ranged from a mean of seven for one probation officer to 29 for another, and from 16 to 32 minutes in length. Those probation officers who had the smallest average number of individual contacts, also had among the most lengthy contacts, 31 and 32 minutes in length, respectively. As a probation officer's number of individual contacts increased, their length decreased.

Topics of discussion included personal, family, or employment matters, with personal matters given as the topic of concern most discussed by the clients of four of the probation officers, and employment by two. Other topics included health and legal problems. In several cases, clients reported no major concerns, and the contacts were recorded as "routine reporting."

Contacts were most frequently made in the Probation Office, although on occasion they were made in other settings such as the client's home or place of work.

Individual

•						
Probation Officer	₽	æ	O	<b>Q</b>	ш	Œι
Mumber of clients	6 <sup>b</sup> (13) <sup>c</sup>	2 <sup>d</sup> (10)	9(13)	8(10)	5(13)	10(12)
X number contacts per client	7	16	17	26	11	29
X length (minutes) of contacts	31	21	19	16	32	22
Modal topics of concern - ranked	Persona1.	Personal.	Personal.	Employ.	Employ.	Personal.
	Family,	Family	Employ.,	Family,	Legal,	Employ.,
	Employ., Routine		Family, Routine	Routine Rep't.,	Personal, Family	Family, Routine
	Rep't.		Rep't.	Health, Personal	•	Rep't.

aletters correspond to probation counseling treatment.

bon whom data were analyzed.

originally assigned

the

Although no specific information is available concerning probation officer's counseling behavior during individual contacts, their reports indicate that it ranged from "therapeutic counseling" to "advice-

# Data Collection

Data were collected from all clients for the purpose of assessing client personality traits in general, as well as along more specific dimensions, namely anomie and delinquent characteristics. Pre and post testing was undertaken in an effort to determine if change, assuming that it could be measured on the instruments, could be observed. In addition, several additional criterion measures were used which were considered to serve as indicators of clients' increased adaptation to acceptable social standards. These were obtained through a regular check on client progress, and observer ratings. Additional data collected on clients included written summaries of each client's progress, group session behavior ratings, and records of individual contacts.

As probation officers were also research subjects, data were collected for them, including test data and ratings by clients. Each of these aspects of data collection--client tests, criterion measures, and counselor data--are described below, followed by a description of data analysis procedures used.

Client Tests. A problem encountered prior to the outset of the experiment centered on selection of instruments which could be suitable for this population. It was necessary to select those instruments which took into consideration the factors of low reading ability and low measures of intelligence, while at the same time obtaining a reliable indicator of the kinds of information needed, including client traits of personality, alienation from society, and delinquent characteristics.

The three instruments which best met these criteria were the Sixteen Personality Factors (Cattell, 1967), the Jesness Inventory (Jesness, 1962), and the Elmore Scale of Anomie (Elmore, 1962). They were administered to clients in October and again in May.

The Sixteen Personality Factors is a factor analytically derived instrument designed to measure the main dimensions of personality. Form E, which was designed for low literates, was used in this project. It contains 128 items, with 8 items for each factor. This particular form of the instrument is new, and at the time of the writing of this report research reporting its use was not available.

The majority of the statements concern interests, personality preferences, self reports of behavior and questions on intelligence. The items are responded to in yes or no answers. The instrument yields sixteen primary personality factors for which the descriptions for low to high scores are given below:

reserved vs. outgoing; less intelligent vs. more intelligent;

lower ego strength vs. higher ego strength; humble vs. assertive; sober vs. happy-go-lucky; expedient vs. conscientious; shy vs. adventurous; tough-minded vs. tenderminded; trusting vs. suspicious; conventional vs. imaginative; forthright vs. shrewd; confident vs. insecure; conservative vs. experimenting; group dependent vs. self-sufficient; lax vs. controlled; relaxed vs. tense.

The Elmore Scale of Anomie, an unpublished experimental instrument, is designed to measure the psychological construct, anomie. This is defined by Elmore (1962) as "a person's subjective reaction to the unstable state of affairs in society brought about by rapid social or economic change accompanied by a conflict in belief systems and social mores, and characterized by feelings of confusion, frustration, and despair." The instrument was selected for use in the project because anomie, as defined by Elmore, was assumed to be characteristic of an offender population, but subject to change as clients learned more socially adaptive ways of behaving.

The scale consists of 72 factor-analytically derived items, each of which is responded to on a five category scale, giving various degrees of a respondent's degree of feeling with that item. The scale yields a general factor, labeled meaninglessness, and five sub general factors, valuelessness, hopelessness, powerlessness, aloneness, and close-mindedness.

The wording of 38 of the items was altered slightly to conform more closely to the reading and intellectual ability of much of the clientele. Three items, selected at random from those which were changed, are given below, first as they originally appeared and then as changed.

- "It's getting more difficult all the time to have a Item 6 happy family."
  - "It's getting harder all the time to have a happy family."
- "Those men who are in power are concerned with Item 32 assisting the individual man."
  - "The bosses who are in power are interested in helping each man."
- Item 63 "I was never allowed to express my opinions when I was a child."
  - "I was never allowed to say what I thought when I was a child."

The Jesness Inventory is a structured personality-attitude test developed for the purpose of measuring dimensions relevant to delinquency proneness, the classification of clients into types, and the evaluation of change. These purposes of the instrument were the bases for its use in the project, as it was necessary to obtain a measure of delinquency proneness, as well as change, before and after the experiment. The original version of the Jesness Inventory was designed for juvenile males.

The version used in this project is a revision for adults of the original inventory. It consists of 155 items, which provide scores on ten personality characteristics, plus a delinquency proneness index based on the ten scales. The subject responds to the items in a yes - no dichotomy. The scales include measures of social maladjustment, value orientation, immaturity, autism, alienation, manifest aggression, withdrawal, social anxiety, repression, denial, and asocialization. The number of items for each scale ranges from sixty-three (social maladjustment) to twenty (denial).

Additional Data on Clients. A check on client progress was made periodically using a form (see Appendix I, Figure C) developed specifically to meet the needs of the project. Progress checks were made at the conclusion of each three months of the project time, in the areas of employment, legal difficulties, and general adjustment, including family, relationship to supervising officer, and supervising officer's assessment of client change. In addition, the Client Progress Form provided for inclusion of essential data such as age and length of period of supervision for each client. The specific criterion variables which were obtained from the Client Progress Form were length of period of supervision, number of difficulties with law during experimental period, number of job changes during experimental period, amount of income and number of days worked during experiment, and probation officer's global

Probation officers rated each client at the outset and conclusion of the project, using the Cough Adjective Check List (ACL) (Gough, 1952). The observer is asked simply to check those adjectives of 300 which describe the client. Reliability information for such a use of the instrument is found in the manual (Gough, 1952). Reported reliability coefficients between .61 and .70 were regarded as a satisfactory indication that the ACL can be used by trained observers.

In this investigation, use was made of only the positive adjectives checked. An adjective was judged positive when there was agreement between at least seven of nine judges. The purpose of using the instrument in this manner was to obtain an indication of probation officer's "liking" for each client, the thought being that this was likely to be a significant contribution to client change.

A behavior rating system, devised especially for the project, was used in the group sessions. It provided a means of recording frequency of group members verbal behavior. It also provided the research assistants with a systematic means of focusing attention on each client's behavior rather than becoming involved with the group process. The data

Judges were the Project Director and the eight research assistants assigned to the project, each of whom judged whether he considered each of the adjectives positive, negative, or neutral.

obtained from these ratings were not regarded as an integral part of the study, and thus were not included in the analysis of the data.

At the conclusion of the project each research assistant submitted a brief description (one or two paragraphs) summarizing each client's behavior during the group sessions. Probation officers prepared similar summaries for each of those clients assigned to individual counseling.

Probation Officer's Data. One of the objectives of the project was to determine whether counselors could be "matched" with clients to enhance the possibility of effecting positive behavioral change. It was, therefore, necessary to have some indication of counselor similarity to client, his degree of authoritarianism, and his personality characteristics. Three instruments, the Elmore Scale of Anomie, The Minnesota Multiphasic Personality Inventory (Psychological Corp., 1943), and the Rokeach Scale of Dogmatism (Rokeach, 1960) were administered to the probation officers at the outset of the project.

The Elmore Scale of Anomie was selected to measure the similarities or dissimilarities between client and counselor populations on the construct of anomie. To give an indication of counselor's authoritarianism the Rokeach Scale of Dogmatism was selected. Finally, as a measure of overall counselor personality, the Minnesota Multiphasic Personality Inventory was selected.

Counselors were rated, using the Gough Adjective Check List, by each of their clients at the conclusion of the experiment. Clients were asked to check those adjectives which described their Probation Officer. As the liking variable was considered to be of as equal relevance for clients as it is for Probation Officers, the ACL's were scored for positive adjectives only.

In summary, data were collected for clients through pre and post testing on three instruments—the Sixteen Personality Factors, Jesness Inventory, and Elmore Scale of Anomie—as well as through a Client Progress Form and ratings by probation officers. Probation officer data were collected from three instruments—the Rokeach Scale of Dogmatism, MMPI, and Elmore Scale of Anomie. The procedure used in data analysis included t-test, intercorrelations, stepwise regression, and point biserial correlation. The design and results of the data analyses are presented in Chapter IV.

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#### CHAPTER IV

#### ANALYSIS OF THE DATA: PHASE I

The primary questions of concern in the study dealt with differences in criterion outcomes due to two different methods of counseling: group counseling and traditional, or individual, counseling. It was hypothesized that differential configurations of observed personality variables were related to type of treatment and outcome with reference to both client and counselor, and their interaction.

#### Design

The dearth of previous knowledge concerning both counselee and counselor characteristics in situations similar to the setting of the study has been discussed in Chapters I and II of this report. Of equal significance is a similar paucity of information with reference to test and other variables—both predictors and criteria.

Four test instruments were used to measure personality characteristics of counselees. These instruments, the Elmore Scale of Anomie (six factors), the Jesness Inventory (ten factors), the Sixteen Personality Factors Questionnaire (sixteen factors), and the Gough Adjective Check List (assumed to be a quantitative measure of "liking" for a person) served as variables which were used as criteria and for predictors, as appropriate. The first three instruments were completed by all counselees in October (pre) and again in May (post) at the conclusion of Phase I of this study. The Gough Adjective Check List was completed for each counselee by his counselor at approximately the same times. This variable was included in the study under the assumption that the positive feeling of either the counselee or the counselor for his counterpart would contribute significantly to the desired behavior changes.

In addition to these test variables, five demographic variables were observed. These included:

- 1. Length of period of supervision.
- 2. Number of difficulties with the law.
- 3. Number of job changes over the time of the study.
- 4. Amount of income over the time of the study.
- 5. Number of days worked during the time of the study.

A final variable included as a criterion was a global rating made by his counselor for each counselee. The rating was an estimate of behavioral change over the course of the study. The ratings used three categories: progress toward desired behavior, no change in behavior, and evidence of recidivism.

It was hypothesized that if the counselors in the study were able to accomplish desired behavioral changes differentially in terms of the two types of counseling treatments, such a result might have implications for some of the questions now largely unresolved in the area. For example, if a counselor was able to deal more effectively in a group counseling mode than in individual counseling, it would be appropriate to attempt to learn the reason. Accordingly, three instruments were completed by the counselors at the beginning of the study. These were the Elmore Scale of Anomie, the Minnesota Multiphasic Personality Inventory, and the Rokeach Scale of Dogmatism.

The definition of the criterion for this aspect of the study was a particularly difficult one. The literature is vague in suggesting evaluative measures. The variable of "liking" has been mentioned as a possible contributor to effectiveness for aiding in behavioral change. Therefore, each counselee in addition rated his counselor on the ACL at the conclusion of Phase I of the study.

Each counselee was assigned at random to one of the two types of counseling treatments. The counselors employed both treatments with each counselor conducting group counseling sessions and also counseling with other clients in the individual counseling procedure.

In summary, the design of the study included the administration of three personality instruments to the counselees at the beginning and end of the study, the administration of three personality instruments to the counselors at the beginning of the study, a measure of "liking" by the counselor for each counselee at both the beginning and end of the study, a similar measure by each counselee for his counselor at the end of the study, data on seven demographic variables for the counselees at the beginning and/or end of the study, and a global rating of change in behavior of the counselee as made by his counselor at the end of the study.

The resultant data were used to assess the differences in outcomes as a result of one of two types of counseling methods. Where differences were found, an attempt was made to allocate the source of such differences to selected variables with reference to the counselors in the study.

### The Sample

There was a total of 88 counselees and six counselors for whom complete data were available at the conclusion of Phase I of the study. These persons comprised the sample. They have been described, along with others in the population, with reference to non-test variables in Chapter III of this report. Table B, Appendix II, presents a psychometric description of the counselees. Included are the means and standard deviations for each subtest, demographic and rating variable at both the beginning and end of the study. These statistics are reported separately for the two counseling treatments, as well as for the total group. There were 48 counselees in the group counseling treatment and 40 in the individually counseled treatment.

Table C, Appendix II, presents a psychometric description of the counselors with reference to non-cognitive variables as measured by the three instruments completed at the beginning of the study (Elmore, Rokeach, MMPI).

#### Hypotheses

Three primary questions were to be answered in the study. They were generally concerned with differences in outcome variables as a result of the two counseling treatments employed by the counselors. The questions are stated as follows:

- 1. Was there a difference in the means of the criterion measures between those counseled in the group setting and those counseled in the individual setting?
- 2. Was there a difference in the means of the criterion test variables for the treatment groups when their initial status on each variable was accounted for?
- 3. Was there a difference between counselors according to the treatment employed on the criterion of behavioral change?

It was assumed that answers to these questions would provide evidence to substantiate the efficiency of one treatment over the other in accomplishing behavioral change. The questions, in statistical form, are:

- Ho<sub>1</sub>: There was no difference between the group means on the test and non-test criterion measures at the end of the experiment.
- Ho<sub>2</sub>: There was no difference between the group means of the gain scores (post pre) on the test variables at the end of the experiment.
- Ho3: There was no difference between counselors according to treatment employed on the criterion of behavioral change.

#### Criteria

The criterion measures consisted of group means scores for the various subtests, the demographic data, and the ratings of behavioral change. These were all collected at the end of May. In terms of the specific hypotheses stated above, the criteria for Ho<sub>1</sub> were post subtest mean scores from the Elmore, Jesness, and Sixteen Personality of length of the period of supervision, number of difficulties with the law, number of job changes, amount of income earned, and number of days worked. The gross rating of behavioral change made by the counselor for each counselee was also used.

With reference to  $\mathrm{Ho}_2$ , mean differences between the first (pre) and second (post) administrations of the subtests of the Elmore, Jesness, and Sixteen Personality Factor Tests, and the number of positive

adjectives on the ACL checked for each counselee by his counselor, served as the criteria.

The criterion for  ${\rm Ho}_3$  was the number of positive adjectives checked on the ACL provided by the counselee in description of his counselor at the end of the experiment.

#### Results

Considerable statistical information was generated from the data collected over the course of the study. Those data of specific importance are reproduced in the body of the report, and the remainder are reported in Appendix II.

The efficiency of the random assignment of counselees to the two treatment groups was verified by testing the difference between the means of the scores from the subtests of the Elmore, Jesness, Sixteen Personality Factor Questionnaire and the Adjective Check List. Homopeneity of the variance for each pair of means was checked with the Fratio. All variances were homogeneous at the 5 per cent probability level or greater.

The significance of the difference between the treatment group means was tested by the t-test for independent samples. Table D, Appendix II, presents the results of the application of this test to each pair of means. From that table, the significant ratios observed are two in number, subtests H (P = .10) and O (P = .05) on the Cixteen Personality Factor Questionnaire. The subtests H and O denote Venturesomeness and Apprehensiveness, respectively, and the mean score is greater for the persons in the group counseling treatment for the former and greater in the individually counseled group in the latter. With P = .10 as the limit of rejection of the hypothesis of significant mean difference the two treatment groups were quite similar in the great majority of characteristics, as measured by the subtests of the instruments.

The status of the counselees at the end of the study on other criterion variables is presented in Table  $6\,\cdot$ 

The average ratings of the counselees for their counselors in terms of the ACL procedure is presented in Table 7, categorized by treatment group.

Hypothesis I was verified, again by the t-test for significant difference between independent means. The variances of the means for all criterion variables were tested for homogeneity with the F-ratio. All were found to be homogeneous at the P 105 level or greater with the exception of "Amount of Income" and "Days Worked." The results of the application of the test are seen in Table D, Appendix II, under the column headed "Post." From the table, significant t-ratios were extracted and are shown in Table 8.

TABLE 6

Group Statistics for Counselees on Selected Non-Test Criterion Variables, Categorized by Treatment Method, at End of the Study

	Indiv	idual	Gro	b up	Tota	al <sup>c</sup>
Variable	X	S.D.	$\overline{x}$	S.D.	$\overline{\mathbf{x}}$	S.D.
Length of period of	<del></del>		<del></del>			<del></del>
supervision (mos.)	44.5	14.5	44.1	16.0	44.3	15.3
Number of difficulties	•.					
with law	5.2	.7	6.9	1.1	6.1	.9
Number of job changes	1.8	.4	1.9	.3	1.8	.4
Amount of income	\$3456.	\$40.53	\$2936.	\$15.88	\$3106.	\$29.93
Number of days worked	158.8	36.6	140.9	54.3	147.5	49.9
Global rating of changes	1.4	.6	1.5	.7	1.4	.7

 $a_{N} = 40$ 

TABLE 7

Group Statistics on Adjective Check List for Counselors as Rated by Their Counselees

	Individual	Group	Total
Variable	$\overline{X}$ s.D.	$\overline{X}$ s.d.	$\overline{X}$ S.D.
Adjective check list	29.26 19.0	34.48 20.3	34.44 20.1

No differences among groups means were significant at less than the 5 per cent probability level. Of the six variables showing significant differences, one was significant at the P  $_{05}$  level and five were significant at the P  $_{10}$  level of probability. The one difference found to be

 $b_{N} = 48$ 

c N = 88

significant at the P level was conscientiousness (16 PF, G) found to be higher in mean score in the individually counseled group. Of the additional five differences, significant at P<sub>.10</sub>, three were found to have higher mean scores in the individually counseled group. These were 16 PF-C (emotional stability), Elmore-E (aloneness), and days worked. The two variables found to be significantly higher for group counselees were 16 PF-O (apprehensiveness) and 16 PF-H (venturesome).

The number of real differences is less than that expected to occur if chance alone was operating (i.e., a minimum of 5 per cent of the differences would be expected to be significant at that probability level). It is concluded that the two treatments did not differentially effect either the test, demographic or behavioral change rating criteria. Statistically, the hypothesis of no difference between the groups classified by treatment method for all variables, except those listed above, was accepted. In general, it may be concluded that the treatments did not produce differences between the groups.

TABLE 8

Variables Showing Significant t-Ratios for Mean Differences by Treatment Groups

Variable	Significant t-ratio	Level of Probability
Post - Elmore E Post - 16 PF, C Post - 16 PF, G Post - 16 PF, H Post - 16 PF, O Days worked	1.70 1.95 2.11 1.81 1.64 1.74	.10 .10 .05 .10 .10

The variables for which there were pre and post data collection permitted the analysis of the mean difference or gain scores categorized by treatment groups. Gain score is defined as the mean difference between post and pre scores for each treatment group on each subtest. This procedure was used to verify the second hypothesis. The mean gain scores for each of the treatment groups were compared, again using the t-test for significant mean differences. All variances were found to be homogeneous (F-ratio, P = .05). Results of the application of the test are seen in Table E, Appendix II. One significant difference was found-that for the ACL score. The mean gain score of the group counseled counselees was significantly higher than that of the individually counseled counselees at the P.05 level (t = 2.38).

Behavioral change over the period of the study as inferred from pre and post differences scores on the subtests for individuals is obscured by the group statistics employed. Evidence of the large variation within groups is seen from the size of the standard deviations presented in Table E, Appendix II. These are very large compared to the mean differences because the gain scores ranged from +30 to -19 on some of the Elmore scales, +23 to -21 on some scales on the Jesness Inventory, and from +7 to -6 on some scales of the Sixteen PF Questionnaire. The range of gain scores on the ACL was from +38 to -11. The great variation adds to the probability of obtaining a non-significant difference between the treatment groups.

The evaluation of the third hypothesis concerning the differential likeability of the counselor in the two treatments was accomplished by testing the mean difference between the Adjective Check List scores (number of positive adjectives checked). These scores were obtained from each counselee completing the instrument for his counselor. The mean difference between the scores, categorized by treatment, was found to be non-significant (t = 1.20), thus the hypothesis was accepted. From this result it is inferred that the characteristics of the counselor were not differential with respect to the two methods of counseling, when the ACL scores were used as the criterion results.

#### Summary

A few significant differences were found between the two groups. However, the number of differences is smaller than the number expected to occur if chance alone was operating. Therefore, each of the three hypotheses was accepted. It was concluded that, on the test and nontest variables used, there were no differences observed between treatment groups.

#### Additional Analyses

A great deal of information was available as a result of the data collection over the period of the experiment. The study was designed to test differences in selected criteria as a result of the differential effects of the two treatments. It was observed that the null hypotheses were not rejected and that any differences between group criteria could not be assigned to treatment as the source of the difference. However, because of the lack of knowledge of the characteristics of the population in this study, some additional hypotheses were established and tested, with the assumption that such testing would add to the meagre knowledge existing in terms of the instrumentation used in the study.

Since the effects of the treatments were not different for the two groups, scores from the instruments were combined into a single group of scores. Thus, the subsequent reporting of data analyses are concerned with a single group of subjects meeting the criteria previously described. The questions raised center around the independence of the various factors measured by the instruments and the possibility of prediction of the outcome variables (both test and non-test) for the total group, independent

of either kind of counseling treatment. Since the effectiveness of the prediction process is dependent on the extent of independence of the various predictors involved, it was appropriate to observe the extent of this factor in the data.

Specific questions relating to this question were formulated. These were:

- 1. How independent were the various factors in each instrument, both at the beginning and at the end of the study?
- 2. Were the factors in each instrument generally different from those in the other instruments, both at the beginning and end of the study?
- 3. Were the non-test criterion variables independent of each other?

These questions were answered by the statistical technique of correlation analysis. Scores for each variable were correlated with scores for each other variable. Results are presented in Table F, Appendix II.

Correlation Analysis. The zero order correlations are, in general, quite low. This result is seen for both pre and post test administrations. However, observations of the relative degrees of relationship of the subtests in the three instruments show that the subtests of the Jesness Inventory are much less independent than those of the Elmore Scale of Anomie and the Sixteen Personality Factor Questionnaire. (See sections of the table where correlations are presented which show degree of interrelationships of subtests at the beginning and end of the study; pre-pre and post-post are the appropriate column and row headings.)

In the Jesness, it is seen that all subtests are related to an appreciable degree with the exception of "Re." This factor appears to be relatively independent of the others in the instrument. Another outcome is the negative or inverse relationship of "De" with the other subtests. It may be concluded that nine of the ten factors in the Jesness appear to be somewhat related. Approximately 70% of the correlations, both pre and post, are significant at the P<sub>.01</sub> level and range between .28 and .88. Although the values of the correlations are not high enough to allow substitution of one subtest for the other, they are of the magnitude to question the independence of the factors.

In Table F, Appendix II, it was observed that the correlations of the test variables with the various criteria were relatively low. Thus, for the purpose of predicting criterion behavior, test scores obtained from the administration at the beginning of the study were inefficient. In other words, it was not possible to predict outcome behavior accurately on the criteria from the test performances of clients on the various subtests of the three pre-test measures.

In an attempt to increase the efficiency of the prediction of the criteria, the pre-test scores for each subtest were combined using a multiple correlation technique. The computer program used for this purpose was the Biomedical Series BMD-02R, Stepwise Regression. This

technique observes the largest zero-order (single) coefficient between the criterion and a predictor and adds each variable sequentially to obtain a multiple index of relationship (R).

All subtest scores from the three test instruments used as predictors were added sequentially to form an index of multiple relationship against the following criteria:

- 1. Post Adjective Check List (ACL<sub>CL</sub>Post). Clients described by
- 2. Post Adjective Check List (ACL Post). Counselors described by their clients.
- 3. Number of difficulties with the law.
- 4. Number of job changes.
- 5. Amount of earned income.
- 6. Number of days worked during the experiment.
- 7. Judged progress in counseling (ratings of change in clients by their counselors).

In addition, multiple correlation indices were computed against the pre-Adjective Check List (clients rated by counselors at the beginning of the study) to obtain information about the possibility of predicting such criterion scores from instrument scores only.

The results of the analyses showed, in general, that at each step in the multiple correlation computation, the resulting index was significant at the P<sub>.01</sub> level for three criteria: Pre-Adjective Check List, Post-Adjective Check List (in both cases these were scores obtained from counselors as describing clients), and "number of difficulties with the law." The indices at each step were significant at the P<sub>.05</sub> level rating of change." This variable showed no significant relationships at any step at either the P<sub>.01</sub> or P<sub>.05</sub> levels of significance.

The addition of variables sequentially to each criterion generally resulted in small increases in the multiple correlation index (R). The great majority added less than three per cent each, when combined with preceding ones to the explanation of the criterion variance. Table 9 which follows summarizes the results of the analysis in general. The table shows the variables contributing three per cent or more in addition to the amount of variance explained by the single variable showing the highest relationship to the criterion. In some cases, other variables intervene in the stepwise technique between the sequential application of each new variable score. These are delineated in Appendix II, Tables of through N where the application of the technique to each criterion is presented and discussed. In Table 4, the standard error of the multiple index is given (SER); this figure is indicative of the amount of error involved in the prediction of the criterion.

<sup>&</sup>lt;sup>1</sup>The evaluation of the multiple correlation coefficient is perhaps best accomplished by noting the amount of criterion variance which explains:  $R^2$  = amount of explained variance;  $1 - R^2$  = amount of unexplained variance in the criterion.

TABLE 9

Summary of Variables Explaining Three Per Cent or More of the Criterion Variance

Criterion	Variable	No.	Variables Added	R	R <sup>2</sup>	Increase in R <sup>2</sup>	SE <sub>R***</sub>
			0	.30**	.09	.09	13.77
Post-ACL <sub>CL</sub>	Jesness Au		1	.38**	.15	.06	13.41
<b>02</b>	16 PF J		3	.45**	.20	.03	13.16
	Jesness Me		4	.48**	.23	.03	13.01
	Jesness Wi			.25*	.06	.06	19.63
Post-ACLCO	16 PF A		0 1	.29*	.09	.03	19.48
	16 PF Q4			.37*	.14	.03	19.18
	Elmore B		3	.46*	.22	.04	18.60
	16 PF E		6		.26	.03	18.33
	Elmore F		8	.51*	.11	.11	.4363
No. difficulties	16 PF J		0	.33**	.16	.03	.4287
with law	Elmore E		2	.40**		.12	.8847
No. job changes	Jesness Au		3	.35*	.12	.03	.8753
1,0, 102 0	16 PF Q <sub>2</sub>		L <sub>t</sub>	.39*	.15	.03	.8672
	16 PF L		5	.42*	.18		\$2932
Amt. of earned	Elmore D		0	.23*	.05	.03	\$2865
income	Jesness Re	·	1	.32*	.10	.05	\$2810
THEOME	16 PF E		2	.39*	.15	.04	•
	16 PF A		3	.44*	.19	.04	\$2753
	Elmore B		4	.47*	.22	.03	\$2720
	Elmore A		5	.50*	.25	.03	\$2678
	Jesness Sa	1	7	.56*	.32	.04	\$2579
	16 PF C		0	.19*	.04	.04	49.29
No. of days	16 PF A		1	.25*	.06	.03	48.87
worked	16 PF Q3		$\overline{2}$	.32*	.10	.04	48.12
	16 PF G		3	.39*	.15	.05	47.15
			5	.28	.08	.08	.67
Rating of	Jesness A	u, .	•	. •			
change	ma 0		0	.33**	.11	.11	12.24
Pre-ACL <sub>CL</sub>	Elmore C		1	.42**		.07	11.81
	16 PF A		6	.54**		.03	11.33
	Jesness A	u	0			• • •	

<sup>\*</sup> R significant at P.05.

The factors of Jesness Au (autism) and 16 PF A (reserved vs. outgoing) appear four times each in the relationship indices explaining three per cent or more of the variance in several criteria. This outcome may be indicative of the type of personality trait involved in the

criterion prediction, or lead to assumptions about what is relevant to the criterion. However, in cases where these variables are predictive, the resulting error is quite large. It is concluded, therefore, that these variables and the others listed, account for such small proportions of the criterion variance that little knowledge is available from the findings as to precisely what traits are involved in the prediction of the criterion.

In summary, the addition of separate variables aids in the explanation of the criterion variance to some degree, but each addition adds such a small amount of knowledge that the question is raised as to whether the computational effort involved is worth the result. For example, to add ten variables to a single relationship index may produce an increase in R of .10 (from .30 to 40), but the criterion variance explained is increased by only seven per cent (9% to 16%), and the process as practically applied is unwieldy and cumbersome. Little knowledge exists in the literature about the characteristics of the subjects in the study and the population of which they are a sample, in relation to the total problem being investigated, therefore, more specific data are presented in Appendix II, Tables G through N. In each instance, the results of the application of the multiple repression technique to each of the separate criteria are discussed. In general, the degree of relationships observed among the several criteria and the test variables are of approximately the same magnitude. The range explained criterion variance is between 29 and 46 per cent. The highest proportion of the explained criterion variance is 46 per cent for Pre-ACL. Thus, for this particular relationship, 64 per cent remains unexplained. In the total analysis, in all cases, the majority of the criterion variance is unexplained.

Item Analysis. The large number of possibly duplicative items in the three instruments is one of several explanations for the relatively low relationships observed between the test scores and the various criteria.

An analysis of the responses to each item in the instruments with reference to a selected criterion was accomplished to see if the results would add further knowledge to the relationship. The criterion Post-ACL<sub>CL</sub> was selected. This criterion was chosen because the absence of significant findings in this study combined with a dearth of research knowledge from similar populations, led to the assumption that a basic element such as likeability between counselor and client might influence behavioral change occurring during counseling.

The statistical technique used to estimate the degree of relationship of the test item responses with the Post-ACL $_{\rm CL}$  scores was the point-biserial correlation coefficient  $({\rm r}_{\rm pbi})$ . The computer program used for the analysis was developed at the University of Maryland. In addition to the correlations, the program output includes the frequency of response to each option for each item and also provides some responses to each option for each item and some descriptive characteristics of the total scores on each test. These characteristics include the Spearman-Brown, Kuder-Richardson 20 and 21 estimates of reliability and the standard error of measurement.

<sup>\*\*</sup> R significant at P.01.

<sup>\*\*\*</sup> Figures given are in raw score terms.

There were 25 items, from a total of 380, which were found to be significantly related to the criterion at either the P $_{.01}$  or P $_{.05}$  levels of significance. The items are listed in Table 10 with the appropriate indices of relationship.

TABLE 10

Item Responses Related Significantly\* to the Post-ACL<sub>CL</sub> Criterion

Test	Item	r <sub>pbi</sub>	Test	Item	<sup>r</sup> pbi
Elmore	5	.32	Jesness (contd.)	66	.27
	. 8	.27		74	.31
	14	.23		77	.22
	22	.28		80	.24
	27	.22		109	.23
	28	.29	16 PF	8	.23
	42	.22		24	.29
	49	.26		32	.24
Jesness	9	.27		37	.23
	19	.22		72	.25
	40	.29		74	.21
	46	.28		98	.34

\*All values of .28 and above are significant at  $P_{.01}$  level of significance; all other values are significant at  $P_{.05}$  level.

The point biserial correlation coefficients are given in Tables O, P, and Q in Appendix II for these and all other item responses for all items in the Elmore, Jesness, and 16 PF tests, respectively.

The degree of relationship in this analysis is similar to that found between the test results on various subtests with the various criteria employed in the study. The value of this analysis is seen, perhaps, as providing evidence for generation of hypotheses to explain the relationships.

It is concluded, however, that for purposes of this study, there is little practical value in using the results. Although the indices are statistically significant, they are so low that the error involved is extremely high.

The specific items identified numerically in Table 5 are presented in Appendix II, Table R. Preceding each item is the per cent of the total group who responded as indicated. The reliability coefficients and the standard errors of measurement for the total set of scores for

each test are presented and discussed in Appendix II, Table S. Because of the scoring system for the Elmore Scale of Anomie, these characteristics are given for each of the six subtests of the total scale. They are presented for total scores from the other two tests.

### Summary

The results of the additional analyses indicated that, due to generally low correlation, it is not feasible to predict outcomes from pre test performances; predictability was aided slightly by the multiple correlation techniques, but again not enough to be of practical value in this study. After the item analysis procedure, the majority of of little practical value in this study.

For purposes of this study, a major effort of the generally non-significant outcomes was a close scrutiny of the research design employed. Conclusions from this study, as well as design question raised, are discussed in the next chapter.

### CHAPTER V

CONCLUSIONS: PHASE I

This investigation, concerned with the general questions of the rehabilitative activities of the Probation Office for the United States District Court for the District of Columbia in the rehabilitation of offenders, had as a specific focus the comparison of group counseling with individual casework procedures. The intent at the outset of the investigation was to ascertain whether or not probationers and parolees with particular configurations of personality characteristics were more likely to make more satisfactory adjustments to society in one procedure than in the other. A secondary purpose of the investigation was to determine if probation officers could be identified who would more appropriately work in one of the two treatment modes, as opposed to the other.

Achievement of the two purposes specified above was contingent upon observing differences on the instruments used to measure the personality characteristics of both the clients and the probation officers. Specifically, the Elmore Scale of Anomie, the Jesness Inventory, the Sixteen Personality Factor Questionnaire, and the Gough Adjective Check List were the instruments used to assess client characteristics. The instruments used to measure counselor (probation officer) characteristics were the Minnesota Multiphasic Personality Inventory, the Elmore Scale of Anomie, the Rokeach Scale of Dogmatism, and the Gough Adjective Check List.

The criteria of client change selected were those aspects of behavior which were seen as manifestations of the objectives of the probation program, including employment, absence of arrests, stable family life, and general adjustment to society. These were in addition to the criteria of change on the pre test instruments.

The initial data analysis failed to reveal significant differences between clients who were group counselees, as contrasted with those for whom the individual casework methodology was employed. It was therefore concluded that the efficacy of group counseling was similar to that of the individual treatment used by the Probation Office. This conclusion is restricted to the definitions of treatment used in the investigation, the criteria and measuring instruments used in the study, and the population.

A practical implication of the conclusions is that the decision to use either the individual or the group counseling method must be resolved on the basis of other variables, such as supply of counselors and facilities. When these are in limited supply, the results of the study indicate that the application of the group method of counseling will be as efficacious as traditional individual casework. Counseling may be seen as more efficient, in terms of limited supply of counselors, where group methods are employed.

Although it was not a part of the original design, it was decided to conduct further data analyses to determine if predictive levels and research hypotheses could be generated. Subsequent analyses included multiple regression and an item analysis using ratings in the post ACL as criterion. The similarities of the indices of relationship among the test scores, test item responses, and the appropriate criteria was an interesting outcome of the analyses. Irrespective of the criterion used. the relationships of various test scores and/or item responses with it were seldom higher than an index in the low .30's. The combination of various scores against specified criteria also resulted in similar increases of the multiple correlation coefficient, from the .20's and .30's to the low .60's. Application of these findings would result in a cumbersome procedure for predicting criterion outcomes, as the additional knowledge obtained is quite small in relation to the number of variables necessary to obtain it. Therefore, it is concluded that relationships between single variable results and the criteria offer as much practical knowledge as do multiple relationships when the additional computational problems are taken into account. Further, it should be noted that, in all cases, the relationships were low and involved a large amount of error.

A number of questions about the basic research design were raised as a result of both the initial and the additional analyses.

A question reemphasized by the research results and not considered in Phase I of the investigation was the basic question of the effectiveness of treatment when compared with no treatment. It should be recalled that this study addressed itself only to the question of a comparison of two methods of treatment, and made the assumption that treatment, per se, was advantageous in effecting behavioral change. In the absence of any discernible differences in the two treatments in any of the dimensions selected, the question of the differences between treatment and no treatment became more apparent as a defect in the research design.

A second question which was raised as a result of this phase of the study centered around the instruments selected to measure personality characteristics, particularly those of the clients. The instruments selected, while possessing certain desirable characteristics for this population, had distinct limitations. Because these were new and/or experimental instruments, their reliability, not to mention their validity, were not as well established as desirable. This became more apparent when an inspection was made of both mean scores and dispersion. The lack of any consistent pattern raised the question of how reliable the instruments were.

A third concern related to the loss of data, and therefore subjects, from the data analysis. It was clearly demonstrated that, on the dimensions considered relevant, there was no significant difference between those who began the project and those for whom complete data were available for analysis. It was conceivable, however, that a systematic bias was effecting the absence of significant results.

Finally, the question of the criteria of change which were selected became relevant. From the outset, it was decided to use behavior in the general areas of adaptation to society as criterion of change. Such behavior included employment records, earnings, and family stability. These were deemed to be more appropriate than behavior within either group counseling or individual counseling sessions. However, if the kinds of change specified are appropriate, then it is reasonable to use as a time dimension a period of time of longer duration that the experimental period.

These questions, while theoretically available at the time of the inauguration of Phase I, became more potent with the data derived from the analyses. Therefore, the second phase of the investigation was devised with these questions as integral parts of the research design. Specifically the following modifications were instituted:

- 1. The question of the efficacy of treatment as contrasted with no treatment was accounted for through the introduction of a control group.
- 2. Reliability of the instruments was ascertained through a test-retest procedure.
- 3. Research data collection procedures were revised to minimize the loss of data.
- 4. Long-term behavioral change was the subject of a follow-up study conducted in a random sample of clients in Phase I.

In the section of this report which follows, the methodology of the second phase is discussed, with emphasis on those procedures which differed appreciably from Phase I.

### CHAPTER VI

### METHODOLOGY OF THE STUDY: PHASE II

The second phase of the study was of nine months duration, running from October, 1968 through May, 1969.

### Modifications in Design

The absence of significant findings in the first phase occasioned modifications in the design of the second phase of the investigation. One of the assumptions which had been made was that counseling was an effective way of facilitating behavior change for an offender population. A second assumption made was that the instruments used as indicators of client personality and measures of change were reliable. Both of these assumptions were challenged by the findings of the first investigation. Procedures were therefore instituted to obtain more information about the accuracy of the assumptions.

As a means to establish the basic assumption of the effectiveness of counseling, the design of the second phase was modified so that it included a group which did not receive either individual or group counseling, thus serving as a no treatment or control group. The only contact that this group of 30 clients had with the Probation Office was that required by law, typically once monthly reporting.

In order to establish reliabilities, for this population, of the personality measures used (i.e., the Elmore Scale of Anomie, the Jesness Inventory, and the Sixteen Personality Factors) a test-retest reliability study, over a time span of between two and six weeks, was conducted. The reliability check was made with a group of 50 clients assigned to the jurisdiction of the Probation Office after the onset of Phase II of the investigation. These 50 individuals were not part of the experimental group, although assumed to be drawn from the same population. The tests were administered under similar conditions as those which existed for project clients. The range of reliabilities, obtained through Pearson product-moment correlations, are reported in Table 1. A complete listing of each of the reliability coefficients is presented in Appendix IV, Tables A, B, and C.

TABLE 1
Range of Test-retest Reliabilities

Instrument		Range
Elmore		.1070
Jesness 16 PF		.6280 .3276

### Research Subjects

Clients of the Probation Office for the United States District Court for the District of Columbia were randomly assigned to one of three groups: 1.dividual counseling, group counseling, or no treatment control group. The counseling treatments were administered by the same six probation officers who participated in Phase I.

Client Group. Included in the study were all clients who came under the supervision of the Probation Office from January through August, 1968.

A total of 222 clients were identified for participation in the study. A total of 178 began the experiment, and data analysis was done on 124. Of those identified for participation, 44 did not begin the project due to such factors as revokation, transfer to another jurisdiction, or inability to report to the Probation Office on a weekly basis. In spite of rigorous efforts of the research assistants to obtain complete data on all clients, a total of 54 clients who began the project were not available for data analysis. Table 2 below specifies the number of subjects who were lost from the data analysis for the various reasons.

TABLE 2
Clients Lost From Data Analysis

Rearrested	Absconded	Incomplete Data	Moved	Other
16	3	28	3	4

For most of the 28 clients with incomplete data, test data were incomplete. Of the four clients shown as "other," one was ill, one was transferred to more specialized treatment, and two were never accounted for.

A summary of information about the 124 clients on whom data were analyzed is presented in Table 3.

The clientele for Phase II did not differ appreciably from the clientele from Phase I in most of the demographic characteristics specified. The most notable exception is on the status of probation and parole. The proportion of clients who were on probation, as opposed to parole, was greater in Phase II of the project. A partial explanation for this is that some of the clients formally assigned to the Probation Office, those sentenced under the Youth Correction Act, were assigned to

another probation office in the District of Columbia. Since the classification of parole as opposed to probation was not basic to the design of this study, such variation was not seen as crucial.

	Mean	Media	n Mode
Length of period of supervision Age	50.28 31.26	36 28	36 22
•	Number		Per cent
Status			
Probation	121		
Parole	3		97
Race	Ş		3
Negro	91		70
White	33		72
Residence	, پر		26
Family	85		ćo
Non-family	39		68
Occupation	39		31
Professional, technical, managerial	12		9
Gierical and sales	30		24
Service	51		41
Farmers, fishing, forestry	1		1
Machine trades	5		4
Bench work	1		1
Structural work	5		4
Miscellaneous	12		9
No occupation	7		6

 $<sup>^{</sup>a}N = 124$ .

Counselor Group. The six probation officers who participated in Phase I also served as the counselors in Phase II. An alternate was also available who conducted groups during infrequent absences of the regular probation officers. Information about the six regular probation officers is summarized in Chapter III, Table 3 and need not be repeated here.

### Description of the Treatment

In this section, each of the counseling treatments and the control group is described. The counseling began in October 1968 and extended through May 1969. As in Phase I, each probation officer served as both a group counselor and an individual counselor. Group sessions and individual counseling contacts were structured in the same way as in Phase I.

Group Counseling. Six groups which consisted of 83 originally assigned clients comprised the group counseling treatments. Of this number, complete data were available and analyzed for 59. The group sessions again met on a weekly basis for one and one-half hours. Descriptive data concerning the groups are summarized in Table 4.

TABLE 4
Characteristics of Counseling Groups

Probation Officer <sup>a</sup>	A	В	С	D	E	F
Number of clients	8 <sup>b</sup> (15) <sup>c</sup>	11(15)	10(12)	11(17)	9(13)	10(11)
Number of sessions	29	30	28	31	29	28
$\frac{\overline{X}}{X}$ attendance per session $\overline{X}$ sessions attended per	8	10	9	10	6	8
client	17	19	21	18	13	22

<sup>&</sup>lt;sup>a</sup>Numbers correspond to probation officer identifying letters used in written description group counseling treatment.

Group sizes, at the outset, ranged between 11 and 17 participants. In each group there was a decrease, for the reasons specified in Table 2, ranging from 1 in group F to 7 in group A. The number of group sessions held was fairly consistent, ranging between 28 and 31 meetings. The average attendance per session was also fairly consistent, ranging between 8 and 10 with the exception of group E, where the average

attendance was 6. The consistency was maintained in client attendance, with the average number of sessions attended per client ranging from 17 to 22. The exception in this category was group E, where the average attendance was 13.

Each of the groups was conducted according to the orientation and style of its leader. The groups were described in terms of process and development by the research assistant, and although the content varied, middle and closing stages. Resistance is most descriptive of the kind of behavior which was observed during the beginning stage, followed by a working stage where members presented and dealt with matters of concern to them. The concluding stage was either characterized by a flurry of activity, or by a leveling in intensity.

The groups were conducted in the way each group leader felt was most appropriate. The statements below by group leaders reveal individual differences in group leadership as well as some modifications in procedures from Phase I.

Probation officer A (as identified in Table 4):

"Initial efforts were spent setting forth the goals of the group in trying to overcome the hostility that existed in the group. The director-directed warm-up was used while trying to achieve the above. After several weeks, the group began to solidify and interaction increased. About midway through the program, the group selected individual leaders among themselves and were allowed to lead group sessions. As a leader, I only intervened to clarify certain issues when called upon by the group. Toward the end of the program, the group functioned as a unit, trusting and having a general concern for each other."

### Probation officer B:

"In conducting group sessions, primary emphasis was placed upon the use of psychodramatic techniques. This involved the use of action techniques whereby a common concern of group members was put into action by the use of a star to represent the group concern. The use of auxilliaries in playing roles of significant persons in the concern of the star were also used. Other techniques such as role reversal, doubling, autodrama and soliloquy were used extensively. All sessions dealt with current concerns of the group members although action techniques were not always utilized. Other group sessions were conducted along more traditional lines in terms of guiding interaction in the group to discuss and examine behavior of group members in their everyday life."

bClients on whom data were analyzed.

<sup>&</sup>lt;sup>c</sup>Clients originally assigned.

The concluding activity was a party for all project participants each of whom received a certificate of appreciation (See Appendix II, Figure A). At a subsequent activity, certification and pictoral descriptions of the groups' progress were presented to the probation officers (See Appendix III, Figures B and C).

### Probation officer C:

"The general design of my group evolved from a relatively directive to somewhat of a non-directive approach. It was necessary, during the early life of the group, to operate within a structured framework so as to relieve anxieties of members and reduce the level of hostility. With the passage of time, however, it was possible to be less directive with group members with their feeling more at ease, less defensive, more prone to verbal participation, and more readily discussing problems with a great deal of feeling tone. The group seemed to arrive at this juncture after about eight weeks. Within several months following the leader was less compelled to initiate discussions. It was at this point the group solidified, participants became more trusting of each other perpetuating a loyalty to the group, and there emanated distinct catalysts. These catalysts could be considered as the group leader's "helpers" who would be especially sensitive to what was taking place at any given time and who would zero in on such group concerns. Being somewhat non-directive, at this stage, the leader's most important role was to ascertain the central concern and, having accomplished this, keep the group focused on it. Related to this was the leader's task of constantly being aware of various polarizations and their meaning. The technique of intermittent role playing was quite useful, especially in the dramatization and solution of the difficulties of group members in social interactions."

### Probation officer D:

"During the first several meetings of the second year of the group counseling project, effort was made to structure the program more thoroughly than last year with emphasis placed on the fact that attendance was a necessary condition of probation. It is felt that this emphasis resulted in better attendance this year than last year. Because of the presence of a psychodrama intern from Saint Elizabeths Hospital, role-playing techniques were used somewhat more than they were last year, although in the majority of the sessions, we did not go into action. The leader was concerned this year with developing group interaction between the members, relating to what was going on between themselves in the group. Efforcs were made to get the members to relate to each other and to respond to each other around issues and around occurrences that were happening in the group, rather than have the members talk about the problems they had with persons outside the group or in the past."

### Probation officer E:

"This approach to group counseling is that of a laissez-faire attitude which is the willingness to discuss and work with anything providing it can be profitable and related to the group members. Another aspect that may affect my behavior is that clients are not seen as mentally deranged persons but as normal persons who have expressed normal human behavior which is beyond the limits set by one's culture. Therefore, one of the main functions of the group is to reacculturate one to the culture and subculture from which he comes.

To effect the reacculturation of group members, all the skills of counseling known by this writer are used, as well as psychodrama and role playing to help develop empathy and to emphasize or to obtain a better understanding of the problems. This writer has found that on many occasions, group members have been able to provide better solutions to other group members' problems. As the group develops, it becomes a functioning unit whereby they can help or treat each other."

### Probation officer F:

"To counter the major faults of the first year's leadership which was clearly passive, at least in the beginning, and resulted in poor attendance, and a general failure to take responsibility for behavior both inside and outside of group activities, we started and maintained throughout this year, the role of a confronting, demanding interpretative but aggressive male. Interpretation of behavior was commented on as deemed appropriate with the notion that awareness and frankness on my part would eventually promote candid behavior among and between group members. Conflict with the law was interpreted as largely due to a common failure among the members to take responsibility for themselves. By demanding regular and prompt attendance as well as stressing the fortunate aspects of being granted continued freedom, we emphasized even further the personal responsibility required. When this was taken by a member of the group, realistic approval was given. When responsibility was avoided, it was immediately pointed out to the person with the expectation that other means of handling the situation be explored. Criticism by others in the group as well as suggestions by the members became a major value system in the group, which was the goal of the leader."

In each group was an observer, a research assistant in the project, whose specific assignment was to keep a written report of content and process of the sessions. In addition, each of the assistants performed other functions as determined by each probation officer. These ranged

from passive observer to active participant to co-leader. In some cases, the assistants served as substitute leaders in the absence of the regular leader. The assistants were graduate students in the Department of Counseling and Personnel Services at the University of Maryland.

Individual Counseling. A total of 65 clients were assigned to individual counseling. Data were analyzed for 41 of these clients. The individual counseling treatment was defined in the same way as it was in Phase I consisting of a weekly contact with the probation officer in which the content consisted of matters of concern to the client.

Table 5 below summarizes number, length, and usual topics during individual contacts.

TABLE 5
Characteristics of Individual Counseling Contacts

Probation Officer <sup>a</sup>	A	В	C	D	E	F
Number of clients X number of contacts	9 <sup>b</sup> (14) <sup>c</sup>	5(6)	6(11)	9(11)	6(12)	6(10)
_ per client X length (members)	27	17	32	24	23	17
per contact Modal topics of	23	29	20	18	17	17
concern - ranked	Voca-	Voca-	Persona1	Voca-	Voca-	Proba-
	tional	tional	Voca-	tional	tional	tion
	Proba-	Persona1	tional	Family	Per-	status
	tion		Legal	Proba-	sona1	Voca-
	status		Family	tion	Family	tional
	Family		-	status		Lega1
	•					Family

<sup>&</sup>lt;sup>a</sup>Numbers correspond to probation officer identifying numbers used in written description of group counseling.

The number of individual contacts ranged from a mean of 17 for one probation officer to a mean of 32 for another. The probation officer who had the smallest mean number of contacts per client, also had the most lengthy ones, averaging for the most part at least ten minutes longer.

Topics of discussion included vocational concerns as most frequent for four of the officers, with personal and probation status first for the other two.

Reports indicate that probation officer behavior during individual counseling" to "advice giving."

Control Group. Thirty clients were identified as members of a no treatment control group. Of this number, data were analyzed on 24 clients. These clients maintained only these contacts with the Probation Office which were required by law. In most cases, this was in the form of monthly reporting to the Probation Office. These clients were supervised by the probation officer to whom they were regularly assigned.

### Data Collection

Data were collected for all clients for purposes identical to those specified in the methodology of Phase I. The instruments used are mentioned below, and differences from Phase I are noted.

The data collected for probation officers consisted of ratings on the ACL, as completed by each client in description of his probation officer. These ACL ratings were done at the conclusion of the experiment, and they were scored for the number of positive adjectives checked.

Client Data. The four instruments which were used in pre and post administrations were the Elmore Scale of Anomie, the Jesness Inventory, the Sixteen Personality Factors Questionnaire, and the Gough Adjective Check List.

A check on client progress was made periodically, using a form developed specifically to meet the needs of the project. The form which was used in Phase I was modified so that a more usable format was employed (see Appendix III, Figure D). Progress checks were made at the end of each three months of the project time.

The behavior ratings which had been used in the groups in Phase I were eliminated from Phase II. Reasons for eliminating the ratings included their irrelevance in data analysis, as well as evidence from written reports that research assistants were able to focus on behavior of individuals without becoming involved in group process.

The criteria in the investigation was the behavior of the clients or, more specifically, changes in behavior in those areas which are the objectives of the probation program. Such behavior as employment, family stability, employers evaluation were judged as more germane to the counseling outcomes than a more intermediate criteria such as behavior in the group or individual counseling situation. However, measures of change were taken in process and immediately after process. The lack of significant findings raised questions as to the timing of criteria assessment. It was hypothesized that one of the reasons that no significant results were demonstrated was because the criterion measures were collected before any effects of the treatment process had

bon whom data were analyzed.

<sup>&</sup>lt;sup>c</sup>Clients originally assigned.

time to be manifest. For this reason, a supplemental, exploratory study was conducted on the subjects who were in treatment in Phase I.

A random sample of 48 clients who completed the program in Phase I was selected. The research assistants made persistant attempts to locate the subjects and conducted a structured interview either by telephone or in person. Information gathered concerned present status of subjects, as well as their reactions to the treatment. While the information collected could be considered as supplemental criterion measures, it was collected primarily to gather information about procedural problems, as well as possible future research leads. The results of this follow-up study are reported as part of Phase II, although the data is for the previous year's sample.

The statistical design used for the analysis of data for Phase II was altered to maximize the probability of the demonstration of statistical significance, if in fact it did exist. The design for the analysis which was used was a treatment by levels analysis of variance and stepwise regression. The results of the data analysis are presented in the following chapter.

### CHAPTER VII

### ANALYSIS OF THE DATA: PHASE II

The research questions in this study, concerned with the differential effects of two methods of counseling, were derived from the findings of Phase I. In general, the findings of that phase indicated that the two methods of counseling (group and individual) did not differentiate between the groups' criterion behavior as reflected by test scores and other relevant criteria.

In order to obtain preliminary data regarding differences in client behavior over an extended time period, the subjects who participated in the project in the first phase were surveyed approximately one year after the termination of their counseling experience in the Probation Office.

A sample of 48 clients was selected at random from the group of 87 subjects on whom the data analysis in Phase I was based. It was decided to ascertain present status of the clients and to explore methodology problems of a follow-up study with this clientele.

The research assistants assigned to the project made repeated attempts to contact the clients in the sample. Visits to the home and work, as well as telephone and written contacts, were used. Presented in Table 6 is the data on results of these contacts.

TABLE 6
Results of Attempts to Contact Follow-up Sample

	In	dividual	L	Group	Total
The same states that the state of the state		<del></del>			**
Interviewed		15		17	32
Prison		0		3	3
Absconded		3		1	4
Hospitalized (mental)		0		2	2
Moved		1		0	1
Deceased		1		0	1
No contact possible		3		2	5

The information which follows is based upon the results of a structured interview (See Appendix III, Figure E) conducted by the research assistants with the 32 clients for whom contact was possible.

All clients interviewed reported that they were presently employed. The employment was in predominantly service areas for both individual and group clients. When comparisons are made between group clients and individual clients on certain dimensions no apparent differences appear, as shown in Table 7.

TABLE 7
Occupation of Follow-up Clients

	Group	Individual	
Occupation Clerical and sales Service Trade and industry Miscellaneous	5 5 5 2	4 7 2 1	
Source of job lead Friend Direct application Previous employer Miscellaneous	5 6 2 4	4 4 2 3	
Earnings (per month) Above \$600 \$300 - \$599 \$100 - \$299	6 8 3	2 9 4	

The data obtained from the structured interview regarding the clients' reactions to the counseling is similarly fraught with the limitations of this type of data collection. In response to the question, "Did the counseling help?" 11 of 15 clients seen individually responded positively, as did 11 of the 17 group respondents. Other questions raised such as frequency of contact, regularity of contact, and helpfulness of officer failed to reveal any differences between the two groups of clients.

The results of this follow-up study conducted approximately one year after completion of the first phase failed to reveal major differences on the criteria selected between clients in either treatment.

The results of the follow-up were not available at the time that the decision to revise the design for Phase II was made. However, the results supported the decision. The main feature of the revision was greater control over the variables involved.

The specific questions asked in the phase of the investigation were:

- 1. Were there differences among the average (mean) outcomes on selected variables (criteria) for the treatment groups when the subjects were classified by age, school grade completed, and occupation?
- 2. Were there differences among mean gains (over the time of the study) on selected criteria for the treatment groups when the subjects were classified by age, school grade completed, and occupation?
- 3. Was there a relationship for the total group of subjects between the behavior at the beginning of the study (as reflected by test scores) and at the end? Can the criterion behavior be successfully predicted from data obtained at the beginning of the subjects' involvement in counseling?
- 4. Was the relationship, as specified in 3 above, increased by a combination of results from various tests obtained at the outset of the study?

Answers to these questions could provide additional knowledge of the behavioral characteristics of this group of subjects with reference to counseling methods, which might be of practical, as well as of theoretical value.

For example, if differences were found in criterion behavior which could be assumed to result from a particular counseling method, that method might be used with other persons (similar to the subjects in the study) to produce the desired behavioral changes. Additionally, the knowledge of relationships existing among status of behavior at the beginning and termination of the counseling relationship could be of value in estimating the amount and direction of change to be expected in persons' behavior who may enter the counseling situation in the future.

The theoretical value of the results stems from the fact that little knowledge is presently available about the characteristics of persons in this environmental situation. Any increase in such knowledge should add to the efficiency with which such persons can be helped to deal with problems in their current environments.

### Instrumentation

The same four tests were used to provide psychometric data for the subjects in the study. Three of the four tests contained various subtests  $^{\rm l}$  assumed to measure differential personality variables. These three tests were:

- 1. Elmore Scale of Anomie (six variables):
  - A Meaninglessness
  - B Valuelessness

<sup>&</sup>lt;sup>1</sup>Each subtest has been described previously. They are listed here to establish codes used throughout the remainder of this discussion.

C - Hopelessness

D - Powerlessness

E - Aloneness

F - Closed-mindedness

2. Jesness Inventory (ten variables):

A1 - Alienation

Au - Autism

De - Denial

Im - Immaturity

Ma - Manifest Aggression

Re - Repression

Sa - Social Anxiety

Sm - Social Maladjustment

Wd - Withdrawal

Vo - Value Orientation

3. Sixteen Personality Factor Questionnaire (sixteen variables):

A - Reserved vs. outgoing

B - Less intelligent vs. more intelligent

C - Lower ego strength vs. higher ego strength

Humble vs. assertive

Sober vs. happy-go-lucky

G - Expedient vs. conscientious

Shy vs. adventurous

I - Tough minded vs. tender minded

Trusting vs. suspicious

Conventional vs. imaginative

N - Forthright vs. shrewd

0 - Confident vs. insecure

Q<sub>1</sub>- Conservative vs. experimenting

Q2- Group dependent vs. self sufficient

Lax vs. controlled

Q4- Relaxed vs. tense

These tests were administered at the beginning (October, 1968) and at the end of the experiment (May, 1969). The behavioral characteristics of the subjects were assumed to be measured accurately by these instruments. The fourth instrument used was the Gough Adjective Check List (ACL), which was modified with respect to scoring. 2 This instrument was used in two different ways:

1. Counselor described each of their subjects by checking appropriate adjectives both at the beginning (Pre ACL) and at the end (Post ACL) of the experiment. Scoring was on the basis of the number of positive adjectives checked.

2. Subjects described their counselors at the end of the study by checking appropriate adjectives on the ACL (ACLPO). Scoring was on the basis of the number of positive adjectives checked.

# CONTINUED

## 10F2

 $<sup>2 \, \</sup>mathrm{See}$  discussion in Chapter III of this report.

Additional data collected over the course of the study were:

Ch - A global rating of behavioral change was made for each subject by his counselor. The ratings were quantified as:
1. progress toward desired behavior;
2. no change in behavior;
3. evidence of recidivism.

<u>Diff</u> - Number of difficulties with the law. A frequency count was made of the number of times a subject became involved with the law (arrests, etc.).

Job Ch - A frequency count was made of the number of times a subject changed jobs.

<u>Day W</u> - A frequency count of the number of days worked by each subject was made.

<u>Contac</u> - The number of non-required contacts with his probation officer was recorded for each subject.

The rationale for selecting these variables for study was based, in part, on the outcomes of the prior study and, in part, on the assumptions deduced from the available literature. For example, in Phase I of this study, the variable measured by the number of positive adjectives by counselor and client was found to be a variable affected by the counseling method.

### Design

The design of the study was one of equivalent groups in a treatment by levels format. The available subjects were assigned at random to one of three treatment groups. The treatments were:

Gr - Group counseling

In - Individual counseling

Co - No counseling (control)<sup>4</sup>

The variables selected as "levels" in this design were age, school grade completed, and occupation. Each was arbitrarily stratified into categories as follows:

Age in years:

Level 1 - Under 21 Level 2 - 21 - 30

Level 3 - 31 - 45

Level 4 - Over 45

<sup>3</sup>Described in Chapter VI of this report.

<sup>&</sup>lt;sup>4</sup>These subjects did not complete the ACL because of their limited contact with the Probation Office.

School grade completed:

Level 1 - Grade 8 or below

Level 2 - Grades 9 - 11

Level 3 - Grade 12

Level 4 - Post high school training

Occupation<sup>5</sup>:

Level 1 - Professional, technical, and managerial;

clerical and sales

Level 2 - Service

Level 3 - Outdoor occupations; processing; machine trades

Level 4 - Unemployed, and miscellaneous

The statistical hypotheses derived from the questions asked in the study were as follows:

Ho<sub>1</sub>- There are no differences among treatment group mean scores on the following criterion variables when the data are classified by age, school grade completed, and occupation:

- 1. Post Elmore
- 2. Post Jesness
- 3. Post 16 PF
- 4. Post ACL
- 5. ACL<sub>PO</sub>
- 6. Global rating of behavioral change
- Number of difficulties with the law
- 8. Number of job changes
- 9. Number of days worked
- 10. Number of non-required contacts with probation officer

Ho2- There are no differences among treatment group means of gain scores (post - pre) for the following criterion variables when the data are categorized by age, school grade completed, and occupation:

- 1. Elmore
- 2. Jesness
- 3. 16 PF
- 4. ACL (no results were available on this test for the control group)

 ${
m Ho}_3$  - There is no relationship among pre-scores and the criterion variables listed in Ho1.

How: The combination of test pre-scores does not increase the efficiency of the prediction for the criterion variables specified in Ho1.

The decision to evaluate Ho3 and Ho4 by treatment and/or relevant variables was dependent on the outcomes of the testing of Ho's 1 and 2. If, in general, these Ho's were retained, little additional knowledge would be gained by the evaluation of Ho's 3 and 4 by treatment and/or relevant variables.

The decision was made at the outset of the investigation to evaluate the hypotheses using only those subjects for whom complete data were available. This limitation resulted in unequal numbers of subjects in the treatment groups and attenuated the size of the total group of subjects. The number of persons for whom all data were available at the conclusion of the study was 1226, of which 24 were in the control group, 58 in group counseling, and 40 in individual counseling.

The psychometric description of the subjects is seen in Appendix IV; Table D presents means and standard deviations on all pre test variables by treatment group and for the total sample. Table E presents similar data for all post test variables; Table F gives similar data for the gain scores.

The testing of the hypotheses was accomplished through the facilities of the University of Maryland Computer Science Center. Hypotheses 1 and 2 were evaluated by means of the Multiple Analysis of Variance program (MANOVA) written at the Biometric Laboratory of the University of Miami. Hypothesis 3 was tested with correlational analysis by means of the University of California program Biomedical series BMD02D, and hypothesis 4 was tested by the "stepwise regression" program BMD02R of the same series. The probability level for significance was set at the .10 level in hypotheses 1 and 2, and at the P 05 level in 3 and 4.

### Results and Discussion

The variances of all group means were tested for homogeneity at the P.O5 level of probability. The hypothesis of no difference in variance was retained in all cases, thus permitting the test for significance between means.

The hypothesis of no difference among treatment groups means (Ho<sub>1</sub>) was rejected for twelve of the criterion variables at the specified probability level. These variables, with the corresponding levels of significance, are shown in Table 8 below. The table also indicates the direction of the difference (i.e., in which treatment group or groups the subjects scores are higher). The hypothesis was retained for all remaining variables.

<sup>&</sup>lt;sup>5</sup>Levels correspond to Dictionary of Occupational Titles Classification and are assumed to be ordinal -- interval in nature.

 $<sup>^6</sup>$ A total of 124 clients are described in Chapter VI, as the snumber was available for descriptive purposes.

TABLE 8

Criteria in Which Mean Scores Differed by Treatment as Classified by Relevant Variables

	<u> </u>	Level Grade	of Probability Occupation	Treatment
Criterion Variable	Age	Grade	Occupation -	· · · · · · · · · · · · · · · · · · ·
Post ACL	.001	.001 .104	.001 .097	Individual Group &
Jesness Al Jesness Au Jesness De	.075 .050 .008	.080 .077 .012	.074 .063 .008	Individual Control Control Group & Individual
Jesness Vo 16 PF C 16 PF G 16 PF I	.047 .018 .066 .090	.047 .020 .054 .097	.046 .016 .068 .099	Control Individual Individual Control & Group
16 PF 0	.049	.045	.054	Control & Group
16 PF Q <sub>1</sub> Rating change (global)	.075	.083 .004	.081	Control Group

As shown by the results there appears to be no consistent superiority of any treatment modality over any other. Two of the seven nontest criterion variables were affected by the treatment variables; these were the Post ACL and the Global Change in Rating mean scores. However, the outcome difference was in favor of the individual counseling treatment in the former case and in favor of the group counseling treatment in the latter. Both of these differences due to treatment were relatively large, as evidenced by the level of probability at which  $\operatorname{Ho}_1$  was rejected (P < .01). The results were similar across all relevant variables.

Half of the differences were in favor of the Control group, or both the control and group treatments. It will be recalled that the control group had little or no contact with the counselors in the study.

The hypothesis of no difference among treatment group means of gain scores Ho<sub>2</sub> was rejected for three of the test variables; it was retained for all others. Table 9 identifies these variables, along with the probability levels for rejection, and identifies the treatment group or groups in which higher scores were seen.

TABLE 9

Variables Where Mean Gain Scores Differed by Treatment as Classified by Relevant Variables

		Leve	el of Probabili	ty
Criterion Variable	Age	Grade	Occupation	Treatment
Elmore A	.001	.001	.001	Group
Jesness Sa	.062	.062	.072	Control
16 PF E	.103	.092	.100	Control

The difference in treatment group means for the Elmore A variable was significant at a lower level of probability (P  $\leq$  .01) than for the other two differences. The direction of the difference is seen by the difference in the group treatment mean; it is higher than the others. The results were again quite similar across the relevant variables.

It should be noted that the differences among treatments x levels have not been reported for two reasons. First, the requirement of complete data for all subjects included in the psychometric data analysis resulted in extremely small numbers of scores in some cells of the design. Evidence for this is seen in Table 10 where the numbers of persons classified on each level of the relevant variable are reported. A second reason is that a number of the cell mean variances were not homogeneous—a finding also due to the small N—and the interpretability of the mean differences is thereby questionable.

TABLE 10

Cell Frequencies Resulting from Treatment x Levels Classification

Level Treatment		Leve1	Level Treatment		Level	Level Treatment					
Age	Co.	Gr.	In.	Grade	Co.	Gr.	In.	0cc	Co.	Gr.	In.
1	1	2	3	1	2	9	4	1	10	19	13
2	16	33	19	2	9	27	22	2	5	31	14
3	3	16	13	3	8	15	9	3	8	- 5	10
4	4	7	5	4	5	7	5	4	1	. 3	3

Accordingly, the results of the hypothesis testing are not reported here in terms of the stratification of the relevant variables, because the effect of the small number of observations on the reliability of the results is adverse and great in magnitude. Appendix IV reports the results for informational purposes only. In addition, the data may serve as the bases for the generation of hypotheses in future research.

The assumption of unreliability in the results also is reflected in the testing of hypotheses 3 and 4. If the significant results of the treatment x levels had been considered reliable, the appropriate procedure would have been to develop relationship indices for separate treatment x level subgroups. However, this was not the case and, in addition, there was little consistency of effect by treatment singly over all the variable differences investigated in the testing of hypotheses 1 and 2. Accordingly, the relationships among pre test scores (predictors) and post data (criteria consisting of both test scores and frequency count data) were ascertained for the total group of subjects, N = 122.

The results of the test of Hypothesis 3, of no relationship among the predictor and criterion variables, is reported in detail in Appendix IV, Table G, for those variables where the relationship was significant at the P.05 level or less. The data considered to be most relevant to the testing of the hypothesis are presented in Table 11.

The magnitude of the relationships are not large. The meaning of the index is perhaps best inferred by the square of r, which is the proportion of the criterion variance explained by the common element (s) in the predictor and the criterion. It is seen that the highest proportion of the criterion variance explained is approximately 46 per cent; this is between the Pre ACL scores and the Post ACL scores. This outcome is questionable because of the confounding effect of rating each person on the same instrument twice--once at the beginning and again at the end of the study. With reference to those criteria assumed to be independent of the predictors, the greatest amount of criterion variance explained is nine per cent. The variables involved were the Elmore F scores and the number of non-required contacts with the counselor. All other relationships explained less of the criterion variance. Although these reported results are statistically significant, they are probably not practically so, since the amount of error involved in each case is much higher than the r itself.

In general, it can be seen (Appendix IV, Table G) that the relationships among the remaining pre and post test variables (Elmore, Jesness, 16 PF) are somewhat higher than those reported here. The magnitude of the separate r's ranges from .74 to .17, with the average r being in the low .20's. There are many negative relationships observed, indicating that when change does occur in specific variables the relationship is often inverse, which is interpreted to mean that subjects are equally liable to score lower rather than higher on the post test variables. Again, the amount of error involved in the prediction of the criterion is large.

TABLE 11  $\begin{array}{c} \text{TABLE 11} \\ \text{Indices of Relationship (r) Between Predictors and Criterion ACL,} \\ \text{ACL}_{PO}, \text{ and Non-Test Variables} \end{array}$ 

				Crit	erion	Variab1	.es	
		Post ACL	$\mathtt{ACL}_{\mathtt{PO}}$	Ch	Diff	Job C	Days W	Contac
	Pre ACL	.68	.28		**************************************	.18		
	Elmore A Elmore C	.27 22					22	
	Elmore F Jesness De Jesness Im	.20	.20				22	.30
Ø	Jesness Ma Jesness Sa		20	. 23			22	18 19
iabl	Jesness Sm Jesness Vo	.19 .26	21	.18				.15
Var	16 PF A 16 PF C			.24				
Predictor Variables	16 PF G 16 PF H					.19		.23
Pred	16 PF I 16 PF O						28	21
	16 PF Q <sub>3</sub> 16 PF Q <sub>4</sub>			.20				.19 18

The relative inefficiency of the prediction of the ACL,  $ACL_{PO}$ , and the non-test criteria by single pre test predictors resulted in the testing of Hypothesis 4. An attempt was made to increase the efficiency of the criterion prediction by the combination of predictor variables (multiple correlation). The results are presented in detail in Appendix IV, Tables H through N. Table 12 summarizes the details. The increase in the multiple relationship (r) is given by the range of increase and the number of predictor variables to be combined to produce the maximum index of relationship.

The relationships are greatly enhanced through the combination of predictor variables; however, the number required is great in each case. This outcome appears, in general, to be quite typical of the findings of research studies carried out with many different predictors and criteria in many varied types of situations. It is generally the case that a few predictors add to the explanation of the criterion variance to some degree. The remainder add nothing or such a small proportion to the explanation that it is practically not worthwhile to use them. Table 13 presents the predictor variables which explain

approximately two or more per cent of the criterion variance of each variable in Table 12; the remaining predictors are not of value for practical application.

Criterion Variable	Range of r	Increase Max R	No. of Variables Required for Increase
Dark ACT	<u> </u>	20	2.1
Post ACL	. 68	.80	31
ACL <sub>PO</sub> Ch	.28	.59	30
Ch	. 24	.52	30
Diff	.19	.48	24
Job C	.19	.28	28
Days W	.28	.62	29
Contac	.30	.57	28

TABLE 13  $\label{thm:predictor} \mbox{ Predictor Variables Explaining Two Per Cent or More of the Variance in the Post ACL, ACL_{PO}, and Non-Test Criterion Variables }$ 

Criterion	Predictor	R	R <sup>2</sup>	Increase in R <sup>2</sup> (%)
Post ACL	Pre ACL	.68 <sup>a</sup>	.46	.46
	Elmore C	.69	.48	.02
	16 PF A	.70	.49	.02
$\mathtt{ACL}_{\mathtt{PO}}$	Pre ACL	.28	.08	.08
10	Jesness De	.32	.11	.03
	Jesness Wd	.36	. 13	.02
	Elmore B	.39	. 15	.02
	16 PF Q <sub>4</sub>	.42	.17	.02
	16 PF M	.44	.19	.02
	16 PF N	.46	.21	.02
	Elmore F	.48	.23	.02

<sup>&</sup>lt;sup>a</sup>Figures are rounded to two decimal points.

TABLE 13 (continued)

Predictor Variables Explaining Two Per Cent or More of the Variance in the Post ACL,  ${\rm ACL}_{\rm PO}$ , and Non-Test Criterion Variables

Criterion	Predictor	R	R <sup>2</sup>	Increase in R <sup>2</sup> (%)
Ch	16 PF A	.24 <sup>a</sup>	.06	.06
	Jesness Ma	.32	.10	.04
	Elmore D	.35	.12	.02
	16 PF Q <sub>4</sub>	.36	.13	.02
	16 PF H	.39	.15	.02
Diff	16 PF A	. 19	.04	.04
	16 PF G	. 24	.06	.02
	16 PF M	.27	.07	.02
	Jesness Au	. 29	.08	.02
	Jesness Ma	.35	.12	.04
Ch	16 PF G	.19	.04	.04
	Pre ACL	. 28	.08	.04
	16 PF L	.32	.10	.02
	Elmore F	.35	.10	
	16 PF B	.38	.12	.02
	Elmore D	.41	.17	.02
Days W	16 PF I	.28	.08	.03
	Elmore C	.36	.13	.08
	Jesness Im	.42	.17	.05
	Elmore F	.44	.19	.05
	16 PF A	.46	. 21	.02
	16 PF H	.49	. 24	.02
	Jesness Sa	.52	.26	.02
	16 PF Q <sub>2</sub>	.53	.28	.03
	Jesness Ma	.55	.30	.02
Contac	Elmore F	.30	.09	.02
	16 PF H	.35	.12	.09
	16 PF A	.38	.14	.03
	Jesness Re	.41	.16	.02
	Elmore C	.43 e	.18	.02 .02

<sup>&</sup>lt;sup>a</sup>Figures are rounded to two decimal points.

### CHAPTER VIII

### CONCLUSIONS: PHASE II

This study was designed to gain knowledge concerning the effect of three methods of counseling (treatments) on the outcome behavior of a group of law offenders (subjects). The differential treatments used were: (1) counseling in small groups, (2) counseling in a traditional or individual relationship, and (3) a control group (no treatment). The counseling was done by probation officers as a part of their regular professional duties.

Subjects were randomly assigned to one of the three treatment groups at the beginning of the study. Outcome behaviors (criteria) consisted of test scores resulting from the administration of four instruments assumed to measure personality factors. These tests were the Elmore Scale of Anomie (six variables), the Jesness Inventory (ten variables), the Sixteen Personality Factor Questionnaire (sixteen variables), and the Adjective Check List. In addition, five non-test variables were quantified. These were: (1) global rating of behavioral change in each subject by his counselor, (2) number of difficulties with the law, (3) number of job changes, (4) number of days worked, and (5) number of non-required contacts with the probation officer. Data for the non-test variables were collected over the course of the study and the test data were collected at the beginning and conclusion of the experiment.

Four hypotheses were derived for testing. Two of these were concerned with the differential effects of the treatments; the other two were concerned with the prediction of outcome variables (criteria) from the test score obtained at the beginning of the study (predictors) Relevant variables assumed to affect the treatment outcomes were age, school grade completed, and occupation. The hypotheses were:

- Hol: There are no differences among treatment group means of the criterion variables when the data are controlled by age, school grade completed, and occupation.
- Ho<sub>2</sub>: There are no differences among treatment group gain score means (post-pre) of the test variables when the data are controlled by age, school grade completed, and occupation.
- Ho3: There is no relationship among the predictor and criterion variables.
- Ho<sub>4</sub>: The combination of predictor variables does not increase the efficiency of the prediction of selected criterion variables.

The first two hypotheses were evaluated by the multiple analysis of variance statistical technique (MANOVA), the third was tested by

correlation analysis, and the fourth was evaluated by the technique of multiple correlation (stepwise regression). All calculations were performed at the University of Maryland Computer Science Center. A probability level of ten per cent  $(P_{.10})$  was established as the significance level for rejection of the first two hypotheses;  $P_{.05}$  was set for rejecting the third and fourth hypotheses. The relevant variables were empirically controlled by classifying the data in a treatment x levels design for each variable.

A part of the data were unavailable for some of the subjects in the study. This occurred, in part, because of one of the general characteristics of this population—the tendency to fail to report for testing. As a result, it was decided to use only complete data for analysis; (i.e., any item missing for a particular subject caused the exclusion of the remainder of the data for him). This limitation caused the number of cases in the cells in the treatment x levels design to be markedly unequal and very small in some of the levels (strata) of the relevant variables. Thus, the data were not analyzed in terms of some of the variables due to the unreliability of a large number of cell comparisons due to the effect of the small N. The data were analyzed for treatment effect on the three equivalent groups only.

The results of the analysis of the data were:

- Ho<sub>1</sub> was rejected for the following variables: Post ACL, Jesness De, Global Rating of Behavioral Change (P.O1 or less), Jesness Vo, 16 PF C, 16 PF O (P.O5-.01), Elmore E, Jesness Al, Jesness Au, 16 PF G, 16 PF I, 16 PF Q1(P.10-.05). The hypothesis was retained for all other variables.
- ${
  m Ho_2}$  was rejected for the variables Elmore A (P<.01), Jesness Sa and 16 PF E (P.05-.10). It was retained for all other variables.
- Ho<sub>3</sub> was rejected for 18 of the predictor variables (Pre ACL; Elmore A, C, F; Jesness De, Im, Ma, Sa, Sm, Vo; 16 PF A, C, G, H, I, O,  $Q_3$  and  $Q_4$ ). The hypothesis was retained for all other variables With the exception of the Pre-Post ACL relationship (r = .68), all correlations between the low predictors and criteria were low in magnitude (range of r = .18 to .30).
- Ho<sub>4</sub> was rejected for all seven criterion variables. The single predictor relationships with the criteria were increased by the combination of them an average of .24; the range of increase was from .09 to .34  $(r \rightarrow R)$ .

In general, the results of the study revealed no consistent trend. The superiority of any of the treatment methods in affecting behavioral change was not demonstrated when the latter is defined by test scores and selected non-test data.

Certain outcomes appear to be conclusive, however. There was a difference in the criterion Post ACL in favor of the individual counseling treatment; there was an equal difference in the criterion Global Rating

of Change in favor of the group counseling treatment (both differences significant at P < .01). The remainder of the differences were not in favor of any treatment method consistently; in four of them, the difference was in the control group; in two others, the difference was in the individual counseling group, and the rest of the differences were seen in favor of two of the treatments as opposed to the third.

One test-retest variable, Elmore A, was differentiated by treatment. The subjects in group counseling scored higher (mean) than those in the remaining treatment groups.

The relationships of the criteria variables to initial test scores were likewise low. In only one case (Pre-Post ACL) was the relationship moderately high (r = .68); the remainder were .30 or less. The combination of the predictors did increase the prediction of the non-test criterion variables appreciably, but in each case a large number of single variables was required for the increase--each variable contributing a very small (less than 2 per cent) increase in the explanation of the criterion variance.

General observations offer some explanation for the inconsistent outcomes of the data analysis. In the first place, the variation in the scores of each treatment group was very large in relation to the average score. This finding, in general, works adversely on the probability of observing significant differences among group means, both in the criterion variable comparisons and in the pre-post test variable comparisons. In other words, the total group of subjects is very heterogeneous in most of the variables used in the study.

A second source of difficulty is the definition of the criterion variable. The test variables were of the "self report" class, the ACL and non-test variables were essentially quantified from "observations" of behavior and this procedure may be saturated with unreliability. The gross nature of the non-test criterion variables may be an additional partial explanation.

A third explanation, in terms of the treatment effects, may be due to the differential relationships of the specific variables to a treatment modality. For example, a difference was seen in favor of the group counseling treatment when the criterion was Global Rating of Change. It is also suggested that the raters might have been biased in favor of the group treatment method, since this method is perhaps more efficient, in general, in the subjective sense since there are large numbers of law offenders in relation to the number of probation officers who work with them. On the other hand, a difference was found in favor of the individually counseled group when the criterion was the Adjective Check List score. Since this criterion consists of describing an individual in terms of a list of positive adjectives, it is reasonable to assume that the accuracy of the rating (ACL score) is increased in the one-to-one counseling relationship as there may be a much greater opportunity to get to "know" the subject, as compared to

"knowing" him in the group counseling treatment. Other similar inferences can be offered as explanations of the statistical outcomes.

It seems that certain behaviors of this group of subjects are differentially affected by the different methods of counseling. Some characteristics may be more affected by group counseling, others by individual counseling, and others by no counseling. It is, perhaps, quite safe to conclude that the observed psychometric outcomes do not provide precise knowledge as to the desirability of one counseling method over any other.

### CHAPTER IX

### SUMMARY AND IMPLICATIONS

This report is on a research project on the rehabilitative counseling efforts of the Probation Office for the United States District Court for the District of Columbia. The project consisted of two distinct phases, each involving individual or group counseling, for a period of nine months with probationers or parolees assigned to the office.

The initial intent of the project was to obtain information which would enable the Probation Office to more effectively assign clients to either individual or group counseling, as well as to allow individual probation officers to work in the treatment mode where each was more productive.

It was hypothesized that there were identifiable personality traits of clients and counselors which were associated with differential effectiveness in one particular treatment mode. It was further conjectured that an interaction between counselor personality and client personality was also a relevant and significant factor in effecting behavioral change.

Each of the two phases of the project was nine months in duration, from October to May in two consecutive years, 1967-68 and 1968-69. Probationers and parolees, under the jurisdiction of the Probation Office, were randomly assigned to one of two treatment groups in Phase I, or one of three treatment groups in Phase II. Table 14 presents a summary of the number of clients assigned to each treatment, as well as the number for whom data were analyzed.

TABLE 14
Summary of Clients Assigned to Phase I and Phase II

	P	hase I		Phase II	
	Group	Individua1	Group	Individual	Control
Clients assigned	75	87	83	65	30
Clients on whom data were analyzed	46	40	59	41	24

Paper and pencil tests designed to yield information about personality characteristics were administered pre and post the experiment to serve as criteria of behavioral change. The instruments used were

the Jesness Inventory, the Elmore Scale of Anomie, and the Sixteen Personality Factor Questionnaire, and the Gough Adjective Check List.

Additional data considered to be evidence of progress toward the kind of behavioral change regarded by the Probation Office as indicative of successful accomplishment of its goals (acceptance of and adherence to socially acceptable behavior such as stable family relationships, steady employment, absence of new offenses) were collected during and at the conclusion of each phase of the experiment to serve as additional criterion measures.

Probation officers, considered as another group of research subjects, completed the MMPI, Rokeach Scale of Dogmatism, and the Elmore Scale of Anomie. At the conclusion of the two experiments they were rated by clients on the Gough Adjective Check List.

The counseling treatments consisted of either individual or group counseling. Individual counseling was defined as an in-person contact made with probation officer on a once weekly basis, with the topics of discussion consisting of matters of concern to individual clients. Information is summarized in Table 15 below for both phases of the project.

TABLE 15
Summary of Individual Counseling Contacts for Phases I and II

···	I	A II		B II		C	I	D II	I	E	I	F
<del> </del>	I	II	I	II	I	II	I	II	I	II	I	II
<del>;</del>	<del></del>		·	<del></del>								
	_											
		· .										6 9 2 5 9 6 8 9 5 6 10 7 27 16 17 17 32 26 24 11 23 29

The group counseling treatment consisted of weekly group sessions, each of  $1\frac{1}{2}$  hours duration. Information about the groups is summarized in Table 16 for Phases I and II.

The data analysis in Phase I failed to reveal any consistent, significant differences on the dimensions selected between the clients who made positive behavioral change and those who did not. In addition, there were no significant differences when the treatment mode (i.e.,

individual or group counseling) was used as the basis of comparison. Thus the initial question of differential success of treatment mode on the basis of client configuration of personality or the question of differential success of treatment on the basis of interaction of client and counselor personality were not answerable. In fact the latter question was not pursued because of the failure of the data to reveal any differences in the two treatments.

TABLE 16
Summary of Group Counseling Contacts for Phases I and II

					<del></del>	Pron		n Of	Tice	r			
			7		В		С		D		$\mathbf{E}_{\cdot}$		$\mathbf{F}_{-}$
•		Ι	II	Ι	II	I	II	I	II	I	II	I	II
Clients on whom data	:				<del> </del>			<del></del>				· · · · · · · · · · · · · · · · · · ·	<del> </del>
were analyzed		8 `	8	3	11	7	10	12	11	8	9	10	10
Number of sessions Mean number of	2	27	29	28	30	32	28	34				27	28
sessions attended per client	1	8	17	24	19	17	21	24	18	16	13	19	22

One obvious conclusion from the analysis of the results of Phase I is that the decision to use either an individual treatment mode or group counseling needs to be based on considerations other than demonstrated superiority of one over the other.

Further extensive analysis of the data did not reveal any combination of data which could, from a practical standpoint, be used to differentially assign clients--or counselor--to a treatment mode.

Modifications were made in the research design based upon the results of the analysis of the results of Phase I. These included the establishment, for this subgroup, of the reliability of the experimental instruments used, more adequate data control, revision of the research questions and statistical design. The most important modification made was the introduction of a no treatment or control group.

It was learned that the instruments demonstrated sufficient reliability (Appendix IV, Tables A, B, C) not to be able to attribute the failure of the significant results to this factor. It was also learned that to extend the time elapsed before treatment effects are observed would probably not alter the findings since criterion data gathered approximately one year after the completion of the counseling in Phase I did not show observable differences.

The results of the intensive analysis of the data for Phase II failed to reveal any consistent significant differences between the efficacy of treatment mode on effecting behavioral change on the criterion selected. Furthermore, it was not possible to derive a set of predictors which could be used practically to assign clients to a treatment mode. This finding is of particular import when it is noted that Phase II included a group which received no counseling. Thus, the results of Phase I were confirmed. That is, there were no differences in the extent of behavioral change as a function of the treatment mode, individual or group counseling. In addition when compared with a group which received no counseling, no differences were manifest.

In summary, this study, which consisted of the assessment of behavioral change as a function of either group or individual counseling, failed to reveal any difference in the methods. Similarly, no differences were found in one of the phases when comparisons were made with a group which did not receive counseling treatment.

Intensive analysis of the data from both experiments failed to produce a predictor or set of predictors which could be effectively used to identify clientele from this subgroup which correlates with specified behavioral change.

This investigation, designed to provide answers to complex questions regarding counseling with probationers and parolees raised far more basic questions than those it purported to answer. The failure to find significant differences between treatment groups, including a no treatment condition, raises numerous questions. What was originally intended as a project which was seen as having practical implications (assistance in assignment procedures) resulted in a report which is primarily heuristic in nature. Hypotheses can be generated and/or questions of an initial nature can be raised about almost every aspect of this investigation.

The questions which seem most pertinent are questions of criteria, assessment procedures and treatment mode.

The criterion selected were those which were seen as relevant to the goals of the probation process. Essentially, behavior which typified socially accepted society adaptiveness such as employment, stable familial relationships, persistance, income, absence of arrests were selected. Each of these indices is assessed in only a gross manner and as such may mask any existent differences.

The instruments used were judged to measure certain constructs relevant to a subgroup of probationers and parolees. The extent to which these are valid constructs (i.e., anomie, delinquency proneness, etc.) is not established nor is the validity of the instruments used to measure them.

The very basic question of the appropriateness of paper and pencil tests for this purpose is relevant.

Progress of rehabilitation for offenders is typified by great variation both in philosophy and methodology. The results of this study demonstrate clearly that considerable effort needs to be expended to ascertain the effectiveness of these methods in the accomplishment of the goals of such programs. While this study and its results are not sufficient to abandon present practices, they are sufficient to raise concern that expenditure of manpower in the mental health profession needs to be continually assessed in terms of accomplishment of purported goals. It should be emphasized that the thrust of this study was not the evaluation of the treatment mode, per se. It was assumed from the outset that the treatment modes were effective in the accomplishment of goals. If this assumption had not been made, different research procedures would have been appropriate.

One of the major outcomes of this study was the demonstration of the necessity to conduct further research on the efforts in the rehabilitation of offenders and more importantly that such research can be conducted within an operating rehabilitation setting. The working arrangements between the federal probation system (specifically the Probation Office for the District Court of the District of Columbia) and a university (specifically the University of Maryland) may well serve as a model for cooperative efforts.

APPENDIX I

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### FIGURE A

### University of Maryland Project Staff

### Project Director

George L. Marx, Ph.D. (State University of Iowa, 1959), Professor of Education and Head, Department of Counseling and Personnel Services, University of Maryland.

### Associate Project Director

John F. Giblette, Ph.D. (University of Pennsylvania, 1960), Professor of Education and Chairman, Measurement and Statistics Area, University of Maryland.

### Research Associate

Jane A. Stockdale, Doctoral student, Department of Counseling and Personnel Services, University of Maryland.

### Research Assistants

Leslie C. Brinson, Doctoral student, Department of Counseling and Personnel Services, University of Maryland.

Charles C. Coleman, Doctoral student, Department of Counseling and Personnel Services, University of Maryland.

Ross D. Harris, Master's student, Department of Counseling and Personnel Services, University of Maryland.

John S. Jeffreys, Doctoral student, Department of Counseling and Personnel Services, University of Maryland.

J. Eugene Knott, Advanced graduate specialist, Department of Counseling and Personnel Services, University of Maryland.

Linda M. Nemiroff, Master's student, Department of Counseling and Personnel Services, University of Maryland.

Roger M. Parrish, Master's student, Department of Counseling and Personnel Services, University of Maryland.

Martin O. Richter, Doctoral student, Department of Counseling and Personnel Services, University of Maryland.

### Graduate Assistants

Carl S. Barham, Advanced graduate specialist, Department of Counseling and Personnel Services, University of Maryland.

Gail S. Bradbard, Doctoral student, Department of Counseling and Personnel Services, University of Maryland.

Edward W. Cassidy, Doctoral student, Department of Counseling and Personnel Services, University of Maryland.

### Group Leaders

William E. Hemple, United States Probation Officer, United States District Court for the District of Columbia.

Arnold L. Hunter, United States Probation Officer, United States District Court for the District of Columbia.

Gerald E. McCullough, United States Probation Officer, United States District Court for the District of Columbia.

James A. Lowery, United States Probation Officer, United States District Court for the District of Columbia.

John L. Sturdivant, United States Probation Officer, United States District Court for the District of Columbia.

William H. Webb, Jr., United States Probation Officer, United States District Court for the District of Columbia.

Ronald I. Weiner, United States Probation Officer, United States District Court for the District of Columbia.

### FIGURE B

Certificate of Appreciation Presented to Project Completers

### University of Maryland College of Education

This Certificate is Awarded to

in appreciation for participation in

### Rehabilitation Research Project

1967-1968



Supervisor

Director, Research Project

awarded this

day of June, 1968

	FIGURE	C			
Page 1	Client Progre	ss Form			
1050 1	i. IDENTIFYI	NG DATA			
1. NAME					
last	first	initial			•
2. FILE NUMBER					
3. DATE OF BIRTH					
4. PERIOD OF SUPERVISION					
FROM:/					
TO:/			. •		
5. PROBATION (1) OR PAROLE (2)					
	II. OFFENSES AND	OR ARRESTS			
DATE OFFENSE		_1	DISPOSITION		
		·			
	<u> </u>				
an iyan sarahan ka saya na sarah yuncayan ka			The second secon	igen yn diagol yn deilol gello yn ei engel yn y gello y gan y deilol y gan y gan y gan y gan y gan y gan y gan Mar ag gan a'r gan y gan	g yer i di Oliver oʻrbi shashasi da yar oʻrba da se esimusi saja Markati shar shari shashasi gara di saga ba oʻrbi shashasi shaqi shashasi shaqi s
Page 2				FILE NUMBER	
	III. WORK PROGRE	SS REPORT			
L. EMPLOYMENT RECORD					
DATE OCCUPATION From: To:	EMPI	OYER		·	VERIFIED
From: To:	· · · · · · · · · · · · · · · · · · ·				4
	The same of the sa				
	·			· · · · · · · · · · · · · · · · · · ·	
					·

Pag	e 3	FILE N	UMBER.		
		RE	PORT I	ERIODS	
	ter the number which applies)	1st- 12/67		3rd- 4/68	
	STATUS OF WORKER (1) Part-time; (2) Full-time; (3) Unemployed.				
3.	CLIENT'S ATTITUDE TOWARD WORK  (1) Enthusiastic; (2) Interested; (3) Routine; (4) Disinterested;  (5) Doesn't get along; (6) Some other attitude; (7) Question doesn't apply to client.				
4.	TOTAL AND TRANSPORTED TAKES AND TRANSPORTED	·			
5.	EMPLOYER'S REPORT OF CLIENT'S ATTENDANCE AT WORK (1) Rarely misses; (2) 2-3 absences per month; (3) Averages an absence per week; (4) Misses more than once a week; (5) No way of verifying; (6) Question doesn't apply.				
6.	EMPLOYER'S REPORT OF CLIENT'S PROMPTNESS IN REPORTING FOR WORK  (1) Nearly always on time; (2) Late at least once a week; (3) Seldom reports on time; (4) No way of verifying; (5) Question doesn't apply.				
7.	EMPLOYER'S VIEW OF CLIENT'S ATTITUDE TOWARD WORK  (1) Enthusiastic; (2) Interested; (3) Routine; (4) Disinterested;  (5) Doesn't get along; (6) No way to evaluate; (7) Doesn't apply.				
8.	EMPLOYER'S VIEW OF THE KINDS OF PROBLEMS CLIENT IS ENCOUNTERING  AT WORK  (1) With the work itself; (2) With supervisory personnel; (3) With other workers; (4) Doesn't seem to be encountering problems;				
	(5) Some other type of problem; (6) No way to evaluate; (7) Doesn't apply.	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		

Pag	<b>5e 4</b>	LITT D	UMBER		<del></del>
	TV TUDENAT OFFICE DEPONE				
	IV. FEDERAL OFFICERS' REPORT				
		RE	PORT P	ERIODS	
		lst-	2nd-		4th-
	ter the number which applies)	12/67	3/68	4/68	6/68
1.	NUMBER OF CLIENT-INITIATED NON-REQUIRED CONTACTS WITH				
	FEDERAL OFFICERS.				
2.	REGULARITY OF REPORTING FOR REQUIRED CONTACTS (Include all required				
	contacts - "in person", as well as written, etc.)				
	(1) Always on time; (2) Usually on time; (3) Seldom on time;				
	(4) Delinquent.				
3.	PARTICIPATION DURING REQUIRED "IN PERSON" CONTACTS				
	(1) Active-initiates topics for discussion; (2) Responds actively-				
	doesn't initiate; (3) Hostile; (4) Passive and withdrawn-waits to				
	be told.				
4.	APPEARANCE				
	(1) Very neat, clean; (2) Average; (3) Very sloppy, dirty;				
	(4) Not applicable.				
5.	ADJUSTMENT: WHAT CHANGE HAVE YOU SEEN?				
	(1) Much improvement; (2) Moderate improvement; (3) No change;				
	(4) Lost ground; (5) Headed for trouble.				
6.	WITH WHOM DOES CLIENT RESIDE?				
	(1) Both parents; (2) One parent; (3) Spouse; (4) Relative;				
	(5) Alone; (6) Other.				
7.	HOW DOES HE SEEM TO RELATE TO THOSE WITH WHOM HE RESIDES?				
	(1) Harmonious; (2) Conforming; (3) Indifferent; (4) Nonconforming;				
	(5) Hostile.				
8.	ATTITUDE TOWARD SUPERVISING OFFICER	, , , , , , , , , , , , , , , , , , , ,			
	(1) Outgoing, comfortable; (2) Indifferent; (3) Suspicious;				
	(4) Hostile.				

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MARK	Or T	HIES CHE	MGED 1	אטע פט	TMG EV	FERLME	'IN T	 	<del></del>		

# DAYS WORKED

TABLE A

Characteristics of Project Non-Completers a

	Mean	Median	Mode
Length of period of supervision (mos.) Age (yrs.)	43 32	36 28	36 23

	Number		Per Cent
	<del> </del>		<del></del>
Status			•
Probation	49		. 62
Parole	30		38
Race	30		30
Negro	71	•	85
White	13		15
Residence	1.0		13
Family	52		60
Non-family	24		68
Occupation	<b>44</b>		32
Professional, technical, managerial	10		10
Clerical & sales			13
Service	3		4
	52		68
Processing	1		1
Machine trades	2		3
Structura1	6		8
. Miscellaneous (includes unemployment)	3		4

<sup>&</sup>lt;sup>8</sup>N ranges from 70 through 84, based on data available.

TABLE B Descriptive Statistics of Test Results and Non-Test Criteria Categorized by Treatment Groups and Total Group

		Gr	oupa			Indi	vidual <sup>b</sup>			To	talc	
	P	re		ost	P	re	P	ost	P	re	· Pe	ost
Variable	$\overline{\mathbf{x}}$	S.D.	$\overline{X}$	S.D.	$\overline{\mathbf{x}}$	S.D.	X	S.D.	$\overline{\mathbf{x}}$	S.D.	$\overline{\mathbf{x}}$	S.D.
Elmore A	33.79	7.8	34.46	6.7	33.10	7.9	36.02	8.4	33.47	7.8	35.17	7.5
Elmore B	22.62	5.0	21.77	4.1	21.95	6.9	22.45	5.9	22.32	5.9	22.08	5.0
Elmore C	14.33	5.8	13.54	4.6	14.22	5.2	13.10	5.3	14.28	5.5	13.34	4.9
Elmore D	11.88	6.0	11.69	4.7	11.78	6.3	10.85	4.5	11.83	6.1	11.31	4.6
Elmore E	6.81	4.7	6.67	4.7	6.85	3.7	8.28	3.9	6.83	4.3	7.40	4.4
Elmore F	26.17	6.0	26.71	5.3	26.58	4.5	26.18	5.6	26.35	5.4	26.47	5.4
Jesness SM	22.04	6.5	23.62	6.4	22.72	7.7	22.38	8.5	22.35	7.0	23.06	7.4
Jesness VO	10.42	6.3	11.88	6.8	11.15	7.8	10.05	7.1	10.75	7.0	11.04	7.0
Jesness Im	14.33	4.1	14.83	4.6	15.22	5.0	16.05	4.7	14.74	4.5	15.39	4.8
Jesness Au	7.31	3.6	7.98	3.7	7.50	3.6	7.88	4.1	7.40	3.6	7.93	3.8
Jesness Al	8.52	4.6	9.19	4.2	8.48	5.3	8.68	4.6	8.50	4.9	8.95	4.4
Jesness Me	9.67	4.7	10.17	5.1	9.70	6.1	9.05	5.5	9.68	5.3	9.66	5.3
Jesness Wi	10.48	3.4	11.08	3.4	9.95	3.6	10.10	3.7	10.24	3.5	10.64	3.6
Jesness Sa	11.79	3.3	11.96	3.5	11.35	3.5	10.95	3.6	11.59	3.4	11.50	3.5
Jesness Re	5.65	2.3	5.38	2.5	6.00	2.9	6.28	2.7	5.81	2.6	5.78	2.7
Jesness De	13.96	3.9	13.02	3.8	14.20	3.8	14.00	3.8	14.07	3.9	13.47	3.8
16 PF A	6.27	1.7	6.08	1.6	5.95	1.8	6.05	1.7	6.12	1.7	6.07	1.6
16 PF B	5.60	2.0	5.88	1.8	5.65	1.9	5.68	1.9	5.62	2.0	5.78	1.8
16 PF C	4.73	1.9	4.48	1.6	5.00	1.9	5.15	1.6	4.83	1.9	4.78	1.6
16 PF E	3.56	2.1	3.94	1.9	3.80	2.2	4.38	2.5	3.67	2.1	4.14	2.2

 $a_{N} = 48; b_{N} = 40; c_{N} = 88.$ 

TABLE B (continued) Descriptive Statistics of Test Results and Non-Test Criteria Categorized by Treatment Groups and Total Group

			oupa			Indi	vidual <sup>b</sup>			То	tal <sup>c</sup>	
		re	_ P	ost	_ P	re	P	ost	_ P	re	P	ost
Variable	X	S.D.	X	S.D.	$\overline{\mathbf{x}}$	S.D.	X	S.D.	X	S.D.	$\overline{\mathbf{x}}$	S.D.
16 PF F	3.73	1.8	. o1	1.0	4 10		/ 50	7.0			····	
16 PF G	5.54		4.21	1.9	4.10	2.2	4.52	1.8	3.90	2.0	4.35	1,8
		1.9	5.06	1.7	5.43	2.0	5.82	1.7	5.49	1.9	5.41	1.7
16 PF H	3.96	2.1	4.35	1.8	4.72	2.1	5.20	2.0	4.31	2.2	4.09	1.9
16 PF I	7.02	2.2	7.10	2.2	7.35	2.1	6.92	2.3	7.17	2.2	7.02	2.2
16 PF L	5.75	2.1	5.88	1,7	6.00	2.0	6.10	1.7	5.86	2.1	5.98	1.7
16 PF M	5.00	1.9	5.27	1.9	5.18	1.8	5.50	1.7	5.08	1.9	5.38	1.9
16 PF N	6.35	1.9	6.50	2.0	6.48	1.7	6.65	2.1	6.41	1.8	6.57	2.1
16 PF O	6.83	1.7	6.40	1.8	5.90	2.0	5.75	1.8	6.41	1.9	6.10	1.8
16 PF Q <sub>1</sub>	5.98	1.6	5.98	1.5	5.90	1.9	5.90	1.7	5.88	1.8	5.94	1.5
16 PF Q2	6.42	2.0	6.81	1.8	5.88	2.0	6.42	2.0	6.17	2.0	6.64	
16 PF Q <sub>3</sub>	5.02	2.1	4.60	1.9	4.85	1.9	5.00	2.0				1.9
	6.85	2.0							4.94	2.0	4.78	2.0
			7.17	1.9	6.20	2.2	6.52	1.9	6.56	2.1	6.88	1.9
ACL '	9.20	14.1	15.19	13.1	12.14	11.7	16.82	15.9	9.77	12.9	15.93	14.4

 $a_{\rm N} = 48$ 

 $b_{N} = 40$   $c_{N} = 88$ 

TABLE C Descriptive Statistics of Tests Administered to Counselors<sup>a</sup>

Test	Factor	М	S.D
	A	44.2	4.9
Elmore	В	25.3	1.4
	C	9.7	2.5
	D	14.8	4.5
	E	9.3	2.0
	F.	34.5	2.7
Rational	• • • • • • • • • • • • • • • • • • •	119.3	22.0
Rokeach	?	1.3	2,3
MMPI	L	6.2	7.7
	F	2.8	1.8
	K	19.8	2.2
	ĩ	3.2	3.4
	2	18.8	4.4
	· 3	22.7	3.3
	4	15.5	4.2
	5	28.2	6.1
	5 6	10.7	3.
	7	5.3	2.6
	8	6.2	2.4
	9	16.8	2.1
	0	21.2	8.6
	A	3.8	3.2 2.9
	R	18.3	2.
	Es	56,0	1.
	Lb	9.8	2.0
	Ca	8.2	4.
	Dy	13.0	1.
	Do	19.5	2.
	Re	22.3	2.
	Pr	5.2	1.
	St	25.0	4.
	Cn	28.0	3.
	1. wlk	13.2	4.
	4. w1k	25.3	2.
	7. w1k	25.2	3.
	8. w1k	26.0	2.
	9. w1k	21.0	۵.

 $a_{N} = 6$ .

TABLE D Results of the Application of the t-test for Significance of Mean Difference Categorized by Treatment Groups for Test Scores and Non-Test Criteria

		t-ratio 0	bserved
Variable		Pre	Post
Elmore	A	 .41	.96
1,211,02.0	В	.53	.63
	C	.09	.41
	D	.07	. 83
	E	.04	1.70*
	F	.35	.45
Jesness	SM	.45	.78
	VO	.48	1.21
	Im	.91	1.22
	Au	.24	.12
	A1	.04	.54
	Me	.03	.97
	Wi	.70	1.28
	Sa	.60	1.33
	Re	.64	1.58
	De	.29	1.19
16 PF	A	.84	.09
	В	.11	.50
	C	,54	1.95*
	<b>E</b>	.52	.92
	$\mathbf{F}$	.86	. 79
	G	.28	2.11**
	$\mathbf{H}$ .	1.66*	1.81*
	I	.70	.37
	L	.56	.60
	M	.43	.55
	N	.30	.34
	0	2.36**	1.64*
	Q1	.21	.23
	Q2	1.26	.95
	Q3	.39	.94
	Q4	1.45	1.56
ACL (PO)		1.00	.52

<sup>\*</sup>Significant at P.10. \*\*Significant at P.05.

TABLE D (continued)

Results of the Application of the t-test for Significance of Mean Difference Categorized by Treatment Groups for Test Scores and Non-Test Criteria

		t-ratio 0	bserved
Variable		Pre	Post
	om den der Seneten in der den der den der	· · · · · · · · · · · · · · · · · · ·	
Length of supervision			.13
Difficulty with the law			.81
Job changes			1.22
Amount of income			.79
Days worked			1.74*
Rating change			.80

<sup>\*</sup>Significant at P<sub>.10</sub>.
\*\*Significant at P<sub>.05</sub>.

TABLE E

Descriptive Statistics of Gain Scores, Categorized by Treatment Groups:
Results of t-test for Significant Mean Differences Between Groups

		Gro		Indi	vidual	
Variable	<b>3</b>	DM.	SD <sub>DM</sub>	DM	$\mathtt{SD}_{\mathtt{DM}}$	t-ratio
E1more	A	.875	7.73	2.475	9.59	.986
	В	542	5.25	.725	7.80	.898
	С	604	6.24	-1.300	5.84	.515
	D	.250	6.39	.775	6.30	.379
	E	.167	6.01	1.825	4.52	1.320
	F	.542	6.34	475	4.42	.801
Jesness	SM	1.438	5.23	050	7.63	1.062
	ΛΟ	1.292	4.44	625	5.58	1.553
	Im	.333	4.18	.950	4.57	.536
	Au	.958	2.93	.550	3.74	.405
	A1	.708	4.12	.450	3.71	.238
	Ma	.250	3.84	925	5.03	1.011
	Wd	.146	3.31	.250	3.32	.104
	SA	.375	3.56	300	3.98	.632
	Re	271	2.49	.150	2.24	.498
	De	.917	2.96	425	2.98	.518
16 PF	A	104	1.83	025	1.27	.112
	В	.292	1.26	.075	1.42	.340
	C	104	1.98	.075	1.66	.242
	E	.354	1.93	.600	2.10	.315
	$\mathbf{F}$	.521	1.56	.375	1.56	.211
	G	521	2.05	.350	1.71	1.158
	H	188	1.77	.400	1.61	.823
	I	.167	1.87	- 450	2.19	.785
	L	.167	1.54	100	1.80	.094
	M	.250	2.12	.325	1.81	.227
	N	.167	2.83	. 250	2.48	.093
	0	.271	1.86	200	1.69	.644
	Q1	.042	1.76	125	1.36	.244
	Q2	.375	1.76	.575	1.72	.276
	Q3	542	1.90	.200	2.26	.933
	Q4	.354	1.88	. 225	1.78	.174
ACL		9.064	10.66	4.778	10.20	2.3756*

<sup>\*</sup>Significant at P.05.

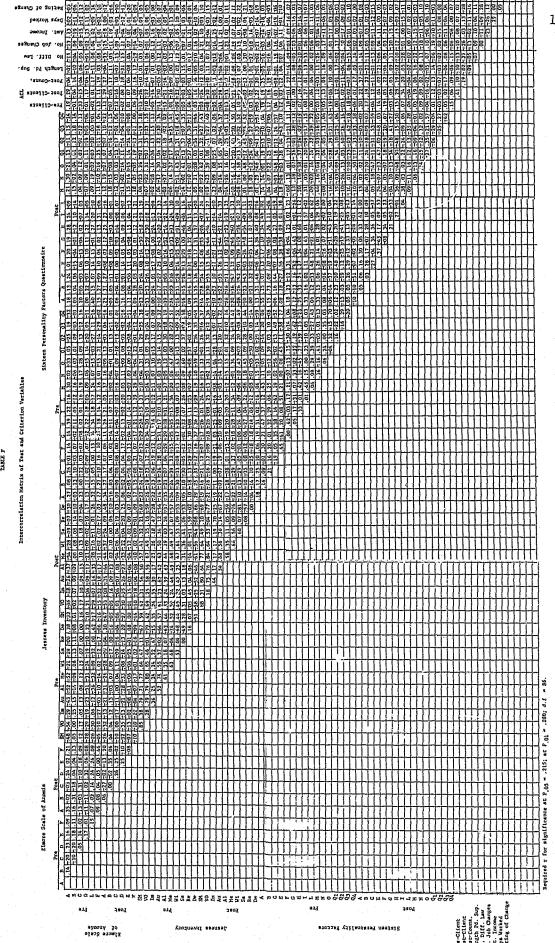


TABLE G Multiple Correlation Indices For All Variables With The Criterion Post  ${
m ACL}_{
m CL}$ 

Variable	R*	se <sub>r</sub>	$\mathbb{R}^2$	Increase in R <sup>2</sup>
Jesness Au	.30	10 77		00
16 PF J	.38	13.77	.09	.09
Elmore A	.41	13.41	.15	.06
Jesness Me	.45	13.34	.17	.02
Jesness Wi	.48	13.16	. 20	.03
16 PF Q <sub>4</sub>		13.01	.23	.03
16 PF G	.49	12.94	.24	.02
16 PF N	.51	12.89	.26	.02
Elmore C	.53	12.77	.28	.02
16 PF E	.55	12.70	.30	.02
16 PF A	.56	12.67	.31	.01
Jesness VO	.56	12.68	.32	.01
	.57	12.70	.33	.01
Jesness Al	.58	12.74	.33	.01
Jesness Sa	.58	12.77	.34	.01
16 PF Q <sub>3</sub>	.58	12.82	.34	.00
16 PF C	.59	12.87	.35	.00
Elmore D	.59	12.93	.35	.00
16 PF B	.59	12.99	.35	.00
Elmore E	.59	13.06	.35	.00
16 PF M	.60	13.14	.36	.00
Jesness SM	.60	13.23	.36	.00
16 PF Q <sub>2</sub>	.60	13.32	.36	.00
Elmore F	.60	13.41	.36	.00
Jesness Im	.60	13.50	,36	.00
16 PF Q <sub>1</sub>	.60	13.60	.36	.00
16 PF 0	.60	13.71	.36	.00
16 PF F	.60	13.82	.36	.00
Jesness Re	- 60	13.93	.36	.00
Elmore B	.60	14.04	.36	.00
Jesness De	.60	14.17	.36	.00
16 PF H	.60	14.29	.36	.00
16 PF L	.60	14.42	.36	.00

<sup>\*</sup>All R values are significant at P.01 level.

The index of relationship between the criterion and the largest single variable is .30. By the addition of nine variables the correlation coefficient is increased to .56, with a concomitant reduction in the standard error. However, after the first two variables are added, each

subsequent addition increases R by only .03 or less. The addition of more variables will also increase R, but the additions will raise the value of the standard error of R. Each variable addition, while producing statistically significant correlation indices, adds little or nothing to the explanation of the criterion variance.

TABLE H  $\label{eq:multiple} \mbox{Multiple Correlation Indices For All Variables } \mbox{With The Criterion Post } \mbox{ACL}_{CO}$ 

			;	Increase
Variable	R*	$se_R$	R <sup>2</sup>	in R <sup>2</sup>
1.C. DE A	. 00	10.00	00	00
16 PF A	.25	19.63	.06	.06
16 PF Q <sub>4</sub>	.29	19.48	.09	.03
Jesness VO	.34	19.29	.11	.03
Elmore B	.37 .40	19.18 18.98	.14 .16	.02 .03
Elmore A 16 PF M	.43		.19	.03
16 PF E	.43 .47	18.85 18.60	.19	.02
16 PF G	.48	18.52	.23	.03
Elmore F	.51	18.23	.25	.02
16 PF Q <sub>3</sub>	.52	18.26	.27	.02
16 PF B	.53	18.22	.29	.01
Jesness De	.55	18.46	.30	.02
Elmore E	.56	18.06	.32	.02
16 PF J	.58	17.92	.34	.02
Jesness SM	.59	17.85	.35	.02
16 PF Q <sub>2</sub>	.60	17.78	.36	.01
16 PF F	.61	17.80	.37	.01
Elmore C	.62	17.70	.38	.01
16 PF Q <sub>1</sub>	.62	17.76	.38	.00
Jesness Au	.62	17.84	.39	.00
16 PF H	.62	17.95	.39	.00
16 PF 0	.62	18.06	.39	.00
Jesness Al	.63	18.18	.39	.00
16 PF C	.63	18.32	39	.00
Elmore D	.63	18.46	.39	.00
Jesness Re	.63	18.60	.39	.00
Jesness Im	.63	18.72	.39	.00
16 PF N	.63	18.87	.40	.00
Elmore F	.63	19.02	.40	.00

<sup>\*</sup>All R values are significant at the P.05 level.

The minimal standard error of R is obtained after the addition of 17 variables. The value of R is increased from .25 to .62 by the additions and the explanation of the criterion variance is increased from 6 to 38 per cent. The addition of eleven other variables increases R from .62 to .63 and the explanation of the variance from .38 to .40.

TABLE I

Multiple Correlation Indices For All Variables
With The Criterion "Number of Difficulties
With The Law"

Variable	R*	se <sub>R</sub>	R <sup>2</sup>	Increase in R
16 PF J	.33	.44	.11	.11
16 PF Q <sub>4</sub>	.36	.43	.13	.02
Elmore E	.40	.43	.16	.03
Jesness Re	.42	.43	.18	.02
16 PF M	.45	.42	.20	.03
16 PF N	.47	.42	. 22	.02
16 PF Q <sub>3</sub>	.49	.42	.24	.02
16 PF E	.51	.41	.26	.02
16 PF F	.53	.41	.28	.02
16 PF A	.53	.41	. 29	.01
16 PF B	.54	.41	. 29	.01
16 PF Q <sub>1</sub>	.55	.41	.30	.01
Elmore F	.56	.41	.31	.01
16 PF G	.56	,41	.32	.01
Jesness Me	.57	.41	.33	.01
Jesness VO	.60	.41	.36	.03
16 PF O	.61	.41	.37	.01
Jesness Au	.62	.41	.38	.01
Jesness SM	.62	.41	.39	.01
16 PF C	.63	41	.39	.01
Elmore C	.63	.41	.40	.01
Jesness Al	.63	.41	.40	.00
Jesness SA	.64	.41	.41	.01
16 PF Q <sub>2</sub>	. 64	.42	.41	.00
Jesness Wi	. 64	.42	.41	.00
Elmore B	. 64	.42	.41	.00
Jesness Im	. 64	.42	.41	.00
16 PF H	. 64	.43	.41	.00
Jesness De	.64	.43	.41	.00

<sup>\*</sup>All R values are significant at the P.Ol level.

The addition of 8 variables increases the explanation of the criterion variance by approximately two per cent each. The addition of 20 other variables increases R to .64 and increases  $R^2$  to .41. Of these additional variables, Jesness VO explains an additional three per cent of the criterion variance, but the addition of this variable (along with the remainder) also is accompanied by an increase in the standard error of R.

TABLE J

Multiple Correlation Indices For All Variables With The Criterion
"Number of Job Changes"

Variable	R	se <sub>r</sub>	$\mathbb{R}^2$	Increase in R <sup>2</sup>
16 PF Q <sub>1</sub>	.17	.92	.03	.03
Jesness De	.24*	.91	.06	.03
Jesness Au	.35	.89	.12	.06
16 PF Q <sub>2</sub>	.39	.88	.15	.03
16 PF L	.42	.87	.18	.03
Elmore A	.44	.86	.19	.03
Jesness Me	.45	.86	.20	.02
16 PF N	.46	.86	.21	.01
16 PF Q₄	.47	.86	.22	.01
16 PF C	.49	.86	.24	01
16 PF G	.51	.85	.26	.02
16 PF H	.52	.85	.27	.02
Elmore E	.53	.85	28	.02
16 PF B	.54	.86	.29	.01
16 PF I	.54	.86	.30	.01
Elmore F	.55	.86	.30	.01
16 PF Q <sub>3</sub>	.55	,86	.31	.01
Jesness Re	.56	.86	.31	.00
16 PF M	.56	.87	.32	 .00
Jesness Sa	.57	.87	.32	.00
16 PF O	.57	.88	.33	.01
Elmore B	.57	.88	.33	.00
Jesness Wi	.58	.88	.33	
Jesness Vo	.58	.89	.34	.00
Jesness Al	.58	.89	.34	.00
16 PF E	.58	.90	.34	.00
Jesness Sm	.58	.91	.34	.00
16 PF A	.59	.91	.34	.00
Imore C	.59	.92	.34	.00
Elmore D	.59	.93	.35	.01
Jesness Im	.59	.94	.34	
L6 PF F	.59	.94	.35	.00

 $<sup>^{\</sup>star}$  This value and all subsequent are significant at P.05.

The single variable (16 PF  $Q_1$ ) with the highest index of relationship with the criterion was not significant. However, the addition of the next variable (Jesness De) did result in the combination of the two being significant at P  $_{05}$  level. The addition of ten other variables to this combination increased the value of R to .52 and the explanation of the criterion variance to 27 per cent. Twenty other variables increased R from .52 to .59 and increased the variance explanation from 27 to 35 per cent.

TABLE K

Multiple Correlation Indices For All Variables With The Criterion
"Amount of Income Earned"

Variable	R*		$\mathtt{SE}_{\mathbf{R}}$	R <sup>2</sup>	Increase in R <sup>2</sup>
Elmore D	.23		2931.52	.05	 .05
Jesness Re	.32		2864.94	.11	.05
16 PF E	.39		2810.45	.15	.04
16 PF A	.44		2753.43	.19	.04
Elmore B	.47		2720.18	.22	.03
Elmore A	.51		2677.97	.26	.03
Jesness Wi	.53		2651.16	.28	.02
Jesness Sa	.56		2694.93	.32	.04
Elmore C	.58		2578.97	.34	.02
Jesness Sm	.59		2568.06	.35	.01
16 PF L	,60		2558.59	.36	.01
16 PF B	.61		2553.83	.37	.01
Jesness Im	.61		2558.85	.38	.01
16 PF N	.62		2557.54	.39	.01
16 PF Q <sub>2</sub>	.63		2560.06	.40	.01
Elmore Á	.63		2563.21	.40	.01
16 PF M	.64	•	2566.83	.41	.01
16 PF Q <sub>4</sub>	. 65		2569.94	.42	.01
16 PF O	.65		2572.41	.42	.01
16 PF C	.66		2573.44	.43	.01
16 PF H	.66		2586.96	.43	.00
Jesness De	.66		2601.71	.44	.00
Jesness Au	.66		2615.68	.44	.00
Jesness Vo	.67		2627.73	.44	.00
Jesness Me	.67		2641.19	.44	.00
16 PF J	.67		2655.45	.45	.00
Elmore E	.67		2671.89	.45	.00
16 PF Q <sub>3</sub>	.67		2692.28	.45	.00
Elmore F	.67		2711.77	.45	.00
16 PF Q <sub>1</sub>	.67		2734.44	.45	.00
16 PF G	.67		2758.46	.45	.00

<sup>\*</sup>All values significant at P.05 level.

The addition of eleven variables to that with the highest index of relationship (Elmore D) with the criterion increased the coefficient from .23 to .61. The criterion variance explained was increased from 5 to 37 per cent, respectively. The addition of the remaining 19 variables increased R to .67 and  $\mathbb{R}^2$  to .45 but also increased the standard error of R.

Multiple Correlation Indices For All Variables With the Criterion
"Number of Days Worked"

TABLE L

Variable	R	SER	R <sup>2</sup>	Increase in R <sup>2</sup>
16 PF C	.19	49.29	.04	.04
16 PF A	.25*	48.87	.06	.03
16 PF Q <sub>3</sub>	.32	48.12	.10	.04
16 PF G	.39	47.15	.15	.05
Elmore C	.40	47.06	.16	.01
Elmore D	.42	46.95	.17	.01
16 PF Q <sub>1</sub>	.43	46.92	.19	.01
16 PF M	.45	46.89	.20	.01
16 PF L	.46	46.84	.21	.01
16 PF Q <sub>4</sub>	.47	46.79	.22	.01
Jesness Sm	.48	46.79	.23	.01
Jesness Au	.50	46.57	.25	.01
Jesness Me	.51	46.67	.26	.01
Jesness Vo	.51	46.79	. 26	,01
16 PF B	.52	46.91	.27 · ·	.01
Jesness Wi	.52	47.06	.27	.01
16 PF Q <sub>2</sub>	.53	47.28	.28	.00
Jesness Re	.53	47.55	.28	.00
Jesness Sa	.53	47.83	.28	.00
Elmore E	.53	48.13	.28	.00
Elmore F	.53	48.82	.29	.00
Jesness Al	.53	48.82	.29	.00
Elmore B	.53	49.19	.29	.00
Jesness Im	.53	49.57	.29	.00

<sup>\*</sup>This value and all below it are significant at P.05 level.

The relationship between the criterion and the variable with the highest R was not significant (16 PF C). However, with the addition of the second variable (16 PF A) the combination was significant at the P.05 level.

It is seen that R increases to .50 and the variance explanation to .25 by the addition of the variables. The standard error of R is decreased with each addition. The combination of all variables (twelve of them not reported in the table) results in R = .53;  $R^2 = .29$ .

TABLE M

Multiple Correlation Indices For All Variables With The Criterion
\_"Judged Progress in Counseling"

Variable	R	$\mathtt{SE}_{\mathrm{R}}$	$\mathbb{R}^2$	Increase in R <sup>2</sup>
Elmore E	.14	.67	.02	.02
Jesness Wi	.18	.67	.03	.01
Elmore B	.20	.67	.04	.01
Jesness Vo	.22	.67	.05	.01
Jesness Au	.28	.67	.08	.03
16 PF E	.31	.66	.10	.02
16 PF L	.33	,66	.11	.01
16 PF 0	.35	.66	.12	.01
16 PF I	.36	.66	.13	.01
Jesness Sm	.37	.67	.14	.01
Elmore C	.38	.67	.14	.01
16 PF Q <sub>3</sub>	.39	.67	.15	.01
Elmore F	.40	.67	.16	.01
16 PF A	.41	.67	.17	.01
Jesness Me	.42	.67	.18	.01
16 PF F	.43	.67	.18	.01
16 PF Q <sub>2</sub>	.44	.68	.19	.01
Jesness Im	.45	.68	.20	.01
Jesness Al	.45	.68	.20	.01
16 PF I	.45	.68	.20	.00
Jesness Re	.46	.68	.21	.01
16 PF G	.46	.68	.21	.00
16 PF C	.46	.69	.22	.00
16 PF Q <sub>4</sub>	.47	.69	.22	.00
Elmore D	.47	.70	.22	.00
16 PF I	.47	.70	.22	.00
16 PF Q <sub>1</sub>	.47	.71	.22	.00
16 PF N	.47	.71	.22	.00
16 PF H	.47	.72	.22	.00
Elmore A	.47	.72	.22	.00
16 PF B	.47	.73	.22	.00

None of the values of R reached significance at the  $P_{.05}$  level. The relationship observed must then be inferred to be due to chance. No further discussion of them is given here.

TABLE N  $\label{eq:Multiple Correlation Indices For All Variables With The Criterion \\ \text{"Pre ACL}_{CL}\text{"}$ 

Variable ————————————————————————————————————	R*	SER	R <sup>2</sup>	Increase in R <sup>2</sup>
Elmore C	.33	12.24	.11	11
16 PF A	.42	11.81	.18	.11
16 PF E	.45	11.74	.20	,07
16 PF Q <sub>3</sub>	.47	11.64	.22	.02 .02
Elmore F	.49	11.60	.24	.02
Jesness Me	.50	11.50	.26	.02
Jesness Au	.54	11.33	.29	.02
16 PF O	.55	11.26	.31	.02
16 PF H	.58	11.12	.33	.02
Jesness Al	.59	11.04	.35	
16 PF B	.60	11.00	.36	.02 .01
16 PF M	.61	10.98	.37	.01
Elmore A	.62	10.96	.39	.01
Jesness Im	.63	10.97	.39	.01
16 PF C	.63	10.97	.40	.01
16 PF F	.64	10.99	.41	.01
16 PF Q <sub>2</sub>	.64	10.99	.41	.01
L6 PF L	.65	10.98	.42	.01
Tesness Wi	.66	10.99	.43	.01
L6 PF G	.66	11.00	.44	.01
esness De	.67	11.03	.44	
Elmore B	.67	11.08	.45	.01 .00
esness Re	.67	11.18	.45	.00
esness Sa	.67	11.22	.45	
esness Vo	.67	11.28	.45	.00
6 PF J	.68	11.36	.46	.00
lmore C	.68	11.44	.46	
lmore D	.68	11.52	.46	.00
6 PF N	.68	11.61	.46	.00
6 PF Q <sub>1</sub>	.68	11.71	.46	.00
6 PF Q <sub>4</sub>	.68	11.81	.46	.00

<sup>\*</sup>All values are significant at the P<sub>.01</sub> level.

These criterion data were collected at the beginning of the study at approximately the same time that the variables data were collected; thus the relationships seen are, in actuality, indices of concurrent validity. Counselors described their clients by means of the Adjective Check List at the beginning of the experiment.

TABLE O Point-Biserial Correlation Coefficients ( $r_{pbi}$ ) for the Item Responses in the Elmore Scale of Anomie with the Post ACL $_{CL}$  Criterion

				·		· <del></del>	<del></del>
Item	<sup>r</sup> pbi	Item	rpbi	Item	<sup>r</sup> pbi	Item	r <sub>pbi</sub>
1	.15	21	.06	41	.12	61	.13
2	.02	22	.28**	42	.22*	62	.10
3	.03	23	.14	43	.10	63	.16
3 4	.01	24	.21	44	.10	64	.10
5	.32**	25	.17	45	.08	65	.11
6	.13	26	.11	46	.16	66	.21
7	.07	27	.22*	47	.03	67	.21
8	.27*	28	.29**	48	.03	68	.14
8 9	.02	29	.08	49	.26*	69	.08
10	.01	30	.10	50	.03	70	.15
11	.15	31	.08	51	.01	71	.08
12	.03	32	.05	52	.06	72	.14
13	.17	33	.00	53	.11		
14	.23*	34	.15	54	.06		
15	.12	35	.01	55	.09		
16	.21	36	.05	56	.12		
17	.00	37	.04	57	.10		
18	.15	38	.04	58	.21		
19	.05	39	.12	59	.04		
20	.03	40	.00	60	.05		

TABLE P

Point-Biserial Correlation Coefficients ( $r_{\rm pbi}$ ) for the Item Responses in the Jesness Inventory with the Post ACL<sub>CL</sub> Criterion

1 2 3 4	r <sub>pbi</sub> .01 .11	Item	r <sub>pbi</sub>	Item	~	Item	
2 3 4	.11				r <sub>pbi</sub>	 TLEM	r <sub>pbi</sub>
3 4	.11	41	.02	81	.11	121	.00
4		42	.19	82	.18	122	.06
	.13	43	.18	83	.10	123	.13
	.05	44	.19	84	.11	124	.10
5	.04	45	.02	85	.05	125	.10
6	.02	46	.28**	86	.10	126	.03
7	.01	47	.17	87	.05	127	.09
8	.04	48	.07	88	.11	128	.13
9	.27*	49	.07	89	.12	129	.13
10	.16	50	.14	90	.03	130	.08
11	.09	51	.15	91	.08	131	.13
12	.09	52	.20	92	.00	132	.05
13	.12	53	.15	93	.13	133	.10
14	.05	54	.00	94	.04	134	.08
15	.02	55	.05	95	.09	135	.09
16	.13	56	.12	96	.11	136	.09
17	.08	57	.14	97	.02	137	.17
18	.01	58	.28**	98	.05	138	.19
19	.22*	59	.07	99	.01	139	.06
20	.07	60	.07	100	.14	140	.09
21	.01	61	.01	101	.05	141	.07
22	.05	 62	.03	102	.01	142	.16
23	.17	63	.07	103	.18	143	.16
24	.08	64	.19	104	.01	144	.01
25	.04	65	.17	105	.12	145	.01
26	.14	66	.27*	106	.07	146	.04
27	.07	67	.05	107	.11	147	. 1.3
28	.16	68	.21	108	.09	148	.08
29	.10	69	.21	109	.23*	149	.10
30	.15	70	.00	110	.06	150	.02
31	.18	71	.21	111	.16	151	.02
32	.11	72	.10	112	.07	152	.12
33	.07	73	.17	113	.10	153	.01
34	.05	74	.31**	114	.11	154	.11
35	.17	75	.08	115	.05	155	.21
36	.10	76	.13	116	.08	· · ·	
37	.05	77	.22*	117	.04		
38	.20	78	.01	118	.02		
39	.07	79	.02	119	.06	•	
40	.29**	80	.24*	120	.04		

<sup>\*</sup>Significant at P.05 level.

\*\*Significant at P.01 level.

<sup>\*</sup>Significant at P.05 level.

\*\*Significant at P.01 level.

TABLE Q Point-Biserial Correlation Coefficients ( $r_{pbi}$ ) for the Item Responses in the 16 PF with the Post ACL<sub>CL</sub> Criterion

Ttem   r			-			<del></del>			<del></del>
2       .08       37       .23*       72       .25*       107       .11         3       .04       38       .11       73       .15       108       .20         4       .00       39       .03       74       .22*       109       .01         5       .01       40       .07       .75       .03       .110       .06         6       .06       41       .17       .76       .01       .111       .14         7       .02       42       .07       .77       .03       .112       .11         8       .23*       43       .14       .78       .00       .12       .11         8       .23*       43       .14       .78       .00       .12       .15         9       .05       .44       .13       .79       .06       .14       .02         10       .00       .45       .19       .80       .19       .115       .09         11       .16       .46       .04       .81       .04       .116       .13         12       .09       .47       .03       .82       .03       .117       .13	Item	r	Item	r	Item	r		Item	r, · .
3       .04       38       .11       73       .15       108       .20         4       .00       39       .03       74       .22*       109       .01         5       .01       40       .07       .75       .03       110       .06         6       .06       41       .17       .76       .01       111       .14         7       .02       42       .07       .77       .03       .12       .11         8       .23*       43       .14       .78       .00       .13       .15         9       .05       44       .13       .79       .06       .14       .02         10       .00       .45       .19       .80       .19       .115       .09         11       .16       .46       .04       .81       .04       .116       .13         12       .09       .47       .03       .82       .03       .117       .13         12       .09       .47       .03       .82       .03       .117       .13         13       .07       .48       .01       .83       .06       .118       .02		.05	36	.02	71	.21		106	.01
4       .00       39       .03       74       .22*       109       .01         5       .01       40       .07       75       .03       110       .06         6       .06       41       .17       .76       .01       111       .14         7       .02       42       .07       .77       .03       112       .11         8       .23*       43       .14       .78       .00       .13       .15         9       .05       44       .13       .79       .06       .14       .02         10       .00       .45       .19       80       .19       .115       .09         11       .16       .46       .04       .81       .04       .116       .13         12       .09       .47       .03       .82       .03       .117       .13         13       .07       .48       .01       .83       .06       .118       .02         14       .16       .49       .17       .84       .13       .119       .06         15       .01       .50       .04       .85       .11       .120       .12		.08	37	.23*	72	.25*		107	.11
5         .01         40         .07         75         .03         110         .06           6         .06         41         .17         76         .01         111         .14           7         .02         42         .07         .77         .03         112         .11           8         .23*         43         .14         .78         .00         113         .15           9         .05         44         .13         .79         .06         .114         .02           10         .00         .45         .19         80         .19         .115         .09           11         .16         .46         .04         .81         .04         .116         .13           12         .09         .47         .03         .82         .03         .117         .13           13         .07         .48         .01         .83         .06         .118         .02           14         .16         .49         .17         .84         .13         .119         .06           15         .01         .50         .04         .85         .11         .120         .12         .	3								
6 .06	4	.00	39	.03	74	.22*		109	.01
6 .06	5		40	,07	75	.03		110	.06
8       .23*       43       .14       78       .00       113       .15         9       .05       44       .13       79       .06       114       .02         10       .00       45       .19       80       .19       115       .09         11       .16       46       .04       81       .04       116       .13         12       .09       47       .03       82       .03       117       .13         13       .07       48       .01       83       .06       118       .02         14       .16       49       .17       84       .13       119       .06         15       .01       50       .04       85       .11       120       .12         16       .01       51       .01       86       .04       121       .01         17       .14       52       .14       87       .13       122       .20         18       .14       53       .00       88       .16       123       .08         19       .00       54       .08       89       .07       124       .12	6				76				.14
9 .05	7	.02	42	.07	77	.03		112	.11
10       .00       45       .19       80       .19       115       .09         11       .16       46       .04       81       .04       116       .13         12       .09       47       .03       82       .03       117       .13         13       .07       48       .01       83       .06       118       .02         14       .16       49       .17       84       .13       .119       .06         15       .01       50       .04       85       .11       .120       .12         16       .01       51       .01       86       .04       .121       .01         17       .14       52       .14       87       .13       .122       .20         18       .14       53       .00       88       .16       .123       .08         19       .00       .54       .08       .89       .07       .124       .12         20       .01       .55       .08       .90       .01       .125       .10         21       .02       .56       .04       .91       .16       .126       .17	8	.23*	43	. 14	78	.00		113	.15
11       .16       46       .04       81       .04       116       .13         12       .09       47       .03       82       .03       117       .13         13       .07       48       .01       83       .06       118       .02         14       .16       49       .17       84       .13       119       .06         15       .01       50       .04       85       .11       120       .12         16       .01       51       .01       86       .04       121       .01         16       .01       51       .01       86       .04       121       .01         17       .14       52       .14       87       .13       122       .20         18       .14       53       .00       88       .16       123       .08         19       .00       .54       .08       89       .07       124       .12         20       .01       .55       .08       .90       .01       .125       .10         21       .02       .56       .04       .91       .16       .126       .17	9	.05	44	.13	79	.06		114	.02
12       .09       47       .03       82       .03       117       .13         13       .07       48       .01       83       .06       118       .02         14       .16       49       .17       84       .13       119       .06         15       .01       50       .04       85       .11       120       .12         16       .01       51       .01       86       .04       121       .01         17       .14       52       .14       87       .13       122       .20         18       .14       53       .00       88       .16       123       .08         19       .00       54       .08       89       .07       124       .12         20       .01       .55       .08       .90       .01       .125       .10         21       .02       .56       .04       .91       .16       .126       .17         22       .21       .57       .10       .92       .03       .127       .03         23       .10       .58       .19       .93       .04       .02       .05 <tr< td=""><td>10</td><td></td><td></td><td></td><td>80</td><td></td><td></td><td>115</td><td>.09</td></tr<>	10				80			115	.09
13       .07       48       .01       83       .06       118       .02         14       .16       49       .17       84       .13       119       .06         15       .01       50       .04       85       .11       120       .12         16       .01       51       .01       86       .04       121       .01         17       .14       52       .14       87       .13       122       .20         18       .14       53       .00       88       .16       123       .08         19       .00       .54       .08       .89       .07       .124       .12         20       .01       .55       .08       .90       .01       .125       .10         21       .02       .56       .04       .91       .16       .126       .17         22       .21       .57       .10       .92       .03       .127       .03         23       .10       .58       .19       .93       .04       .128       .05         24       .29***       .59       .07       .94       .02       .25       .15 <t< td=""><td>11</td><td>.16</td><td>46</td><td>. 04</td><td>81</td><td>.04</td><td></td><td>116</td><td>.13</td></t<>	11	.16	46	. 04	81	.04		116	.13
14       .16       49       .17       84       .13       119       .06         15       .01       50       .04       85       .11       120       .12         16       .01       51       .01       86       .04       121       .01         17       .14       52       .14       87       .13       122       .20         18       .14       53       .00       88       .16       123       .08         19       .00       .54       .08       .89       .07       .124       .12         20       .01       .55       .08       .90       .01       .125       .10         21       .02       .56       .04       .91       .16       .126       .17         22       .21       .57       .10       .92       .03       .127       .03         23       .10       .58       .19       .93       .04       .128       .05         24       .29***       .59       .07       .94       .02       .25       .15       .60       .15       .95       .05         26       .02       .61       .02	12	.09	47	.03	82	.03		117	.13
15       .01       50       .04       85       .11       120       .12         16       .01       51       .01       86       .04       121       .01         17       .14       52       .14       87       .13       122       .20         18       .14       53       .00       88       .16       123       .08         19       .00       54       .08       89       .07       124       .12         20       .01       .55       .08       .90       .01       .125       .10         21       .02       .56       .04       .91       .16       .126       .17         22       .21       .57       .10       .92       .03       .127       .03         23       .10       .58       .19       .93       .04       .128       .05         24       .29***       .59       .07       .94       .02       .25       .15       .60       .15       .95       .05         26       .02       .61       .02       .96       .15       .11       .12       .24***       .29       .04       .04       .06	13	.07	48	.01	83	.06		118	.02
16       .01       51       .01       86       .04       121       .01         17       .14       52       .14       87       .13       122       .20         18       .14       53       .00       88       .16       123       .08         19       .00       54       .08       89       .07       124       .12         20       .01       .55       .08       .90       .01       .125       .10         21       .02       .56       .04       .91       .16       .126       .17         22       .21       .57       .10       .92       .03       .127       .03         23       .10       .58       .19       .93       .04       .128       .05         24       .29***       .59       .07       .94       .02         25       .15       .60       .15       .95       .05         26       .02       .61       .02       .96       .15         27       .09       .62       .03       .97       .11         28       .15       .63       .03       .98       .34***	14	.16	49	.17	84	.13			.06
16       .01       51       .01       86       .04       121       .01         17       .14       52       .14       87       .13       122       .20         18       .14       53       .00       88       .16       123       .08         19       .00       54       .08       89       .07       124       .12         20       .01       .55       .08       .90       .01       .125       .10         21       .02       .56       .04       .91       .16       .126       .17         22       .21       .57       .10       .92       .03       .127       .03         23       .10       .58       .19       .93       .04       .128       .05         24       .29***       .59       .07       .94       .02         25       .15       .60       .15       .95       .05         26       .02       .61       .02       .96       .15         27       .09       .62       .03       .97       .11         28       .15       .63       .03       .98       .34***	15	.01	50	.04	85	.11		120	.12
18       .14       53       .00       88       .16       123       .08         19       .00       54       .08       89       .07       124       .12         20       .01       55       .08       90       .01       125       .10         21       .02       56       .04       91       .16       126       .17         22       .21       57       .10       92       .03       127       .03         23       .10       58       .19       93       .04       128       .05         24       .29**       59       .07       94       .02       .05       .05         24       .29**       59       .07       94       .02       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .03       .04       .01       .05       .0	16	.01	51	.01	86	.04			.01
18       .14       53       .00       88       .16       123       .08         19       .00       54       .08       89       .07       124       .12         20       .01       55       .08       90       .01       125       .10         21       .02       56       .04       91       .16       126       .17         22       .21       57       .10       92       .03       127       .03         23       .10       58       .19       93       .04       128       .05         24       .29**       59       .07       94       .02       .05       .05         24       .29**       59       .07       94       .02       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .03       .04       .01       .05       .0	17	. 14	52	.14	87	.13		122	.20
20       .01       55       .08       90       .01       125       .10         21       .02       56       .04       91       .16       126       .17         22       .21       57       .10       92       .03       127       .03         23       .10       58       .19       93       .04       128       .05         24       .29**       59       .07       94       .02       .02       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .06       .03       .08       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09	18		53	.00	88	.16		123	.08
20       .01       55       .08       90       .01       125       .10         21       .02       56       .04       91       .16       126       .17         22       .21       57       .10       92       .03       127       .03         23       .10       58       .19       93       .04       128       .05         24       .29***       59       .07       94       .02       .02       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .05       .08       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09       .09		.00	54			.07			
22       .21       57       .10       92       .03       127       .03         23       .10       58       .19       93       .04       128       .05         24       .29***       59       .07       94       .02         25       .15       60       .15       .95       .05         26       .02       .61       .02       .96       .15         27       .09       .62       .03       .97       .11         28       .15       .63       .03       .98       .34***         29       .04       .64       .06       .99       .09         30       .07       .65       .10       .100       .05         31       .08       .66       .07       .101       .01         32       .24*       .67       .05       .102       .06         33       .09       .68       .02       .103       .12         34       .08       .69       .03       .104       .01	20	.01	55	.08	90	.01		125	.10
22       .21       57       .10       92       .03       127       .03         23       .10       58       .19       93       .04       128       .05         24       .29***       59       .07       94       .02         25       .15       60       .15       .95       .05         26       .02       .61       .02       .96       .15         27       .09       .62       .03       .97       .11         28       .15       .63       .03       .98       .34***         29       .04       .64       .06       .99       .09         30       .07       .65       .10       .100       .05         31       .08       .66       .07       .101       .01         32       .24*       .67       .05       .102       .06         33       .09       .68       .02       .103       .12         34       .08       .69       .03       .104       .01		.02	56			.16			
23       .10       58       .19       93       .04       128       .05         24       .29**       59       .07       94       .02         25       .15       60       .15       .95       .05         26       .02       61       .02       .96       .15         27       .09       .62       .03       .97       .11         28       .15       .63       .03       .98       .34***         29       .04       .64       .06       .99       .09         30       .07       .65       .10       .100       .05         31       .08       .66       .07       .101       .01         32       .24*       .67       .05       .102       .06         33       .09       .68       .02       .103       .12         34       .08       .69       .03       .104       .01	22	.21	57	.10	92	.03		127	.03
24       .29***       59       .07       94       .02         25       .15       60       .15       95       .05         26       .02       61       .02       96       .15         27       .09       62       .03       97       .11         28       .15       63       .03       98       .34***         29       .04       64       .06       99       .09         30       .07       65       .10       100       .05         31       .08       66       .07       101       .01         32       .24*       67       .05       102       .06         33       .09       68       .02       103       .12         34       .08       69       .03       104       .01	23	,10	58	.19		.04		128	.05
25       .15       60       .15       95       .05         26       .02       61       .02       96       .15         27       .09       62       .03       97       .11         28       .15       63       .03       98       .34***         29       .04       64       .06       99       .09         30       .07       65       .10       100       .05         31       .08       66       .07       101       .01         32       .24*       67       .05       102       .06         33       .09       68       .02       103       .12         34       .08       69       .03       104       .01	24	.29**	59	.07	94	.02			
26       .02       61       .02       96       .15         27       .09       62       .03       97       .11         28       .15       63       .03       98       .34***         29       .04       .64       .06       99       .09         30       .07       .65       .10       100       .05         31       .08       .66       .07       101       .01         32       .24*       .67       .05       102       .06         33       .09       .68       .02       103       .12         34       .08       .69       .03       104       .01		.15			95	.05			
27       .09       62       .03       97       .11         28       .15       63       .03       98       .34**         29       .04       64       .06       99       .09         30       .07       65       .10       100       .05         31       .08       66       .07       101       .01         32       .24*       67       .05       102       .06         33       .09       68       .02       103       .12         34       .08       69       .03       104       .01									
28       .15       63       .03       98       .34**         29       .04       64       .06       99       .09         30       .07       65       .10       100       .05         31       .08       66       .07       101       .01         32       .24*       67       .05       102       .06         33       .09       68       .02       103       .12         34       .08       69       .03       104       .01			62						
29     .04     64     .06     99     .09       30     .07     65     .10     100     .05       31     .08     66     .07     101     .01       32     .24*     67     .05     102     .06       33     .09     68     .02     103     .12       34     .08     .09     .03     104     .01									
30     .07     65     .10     100     .05       31     .08     66     .07     101     .01       32     .24*     67     .05     102     .06       33     .09     68     .02     103     .12       34     .08     69     .03     104     .01						.09	•		
31     .08     66     .07     101     .01       32     .24*     67     .05     102     .06       33     .09     68     .02     103     .12       34     .08     69     .03     104     .01									
32     .24*     67     .05     102     .06       33     .09     68     .02     103     .12       34     .08     69     .03     104     .01									
33 .09 68 .02 103 .12 34 .08 69 .03 104 .01									
34 .08 69 .03 104 .01									
	•		<del> </del>	· <del>-</del>		<del></del>			

TABLE R

Test Items with Significant Point-Biserial Correlation Coefficients and Per Cent of Total Group Responding to Each Choice

rder for us to do work, our boss ld tell us just what o and just how to t.	19				Disagree
work, our boss ld tell us just what o and just how to t. etting ahead today,					
t. etting ahead today,	19				
		30	9	26	16
sometimes have to us ways as well as good					
•	4	15	8	42	31
ly on being lucky					
		31	9	39	10
to give my family better things of life it seems that someboo always beat me out o	dy				
good jobs.	8	16	12	48	16
ld not be allowed to	3				
	4	3	6	41	46
oles of their own tha	ìt				
	10	27	9	40	14
	ing a good job depending on being lucky gh to be in the right time.  always wanted to to give my family better things of life it seems that somebood always beat me out or good jobs.  le of different races ald not be allowed to in the same aborhood.  people have so many bles of their own the don't care about my oles.	ing a good job depends ly on being lucky gh to be in the right e at the right time. 11  always wanted to to give my family better things of life, it seems that somebody always beat me out of good jobs. 8  le of different races ld not be allowed to in the same hborhood. 4  people have so many bles of their own that don't care about my bles. 10	ing a good job depends ly on being lucky gh to be in the right e at the right time. 11 31  always wanted to to give my family better things of life, it seems that somebody always beat me out of good jobs. 8 16  le of different races ld not be allowed to in the same hborhood. 4 3  people have so many bles of their own that don't care about my bles. 10 27	ing a good job depends ly on being lucky gh to be in the right e at the right time. 11 31 9  always wanted to to give my family better things of life, it seems that somebody always beat me out of good jobs. 8 16 12  le of different races ld not be allowed to in the same horhood. 4 3 6  people have so many bles of their own that don't care about my bles. 10 27 9  eems that with every	ing a good job depends ly on being lucky gh to be in the right e at the right time. 11 31 9 39  always wanted to to give my family better things of life, it seems that somebody always beat me out of good jobs. 8 16 12 48  le of different races ld not be allowed to in the same horhood. 4 3 6 41  people have so many bles of their own that don't care about my bles. 10 27 9 40  eems that with every

<sup>\*</sup>Significant at P.05 level.
\*\*Significant at P.01 level.

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#### TABLE R (continued)

Test Items with Significant Point-Biserial Correlation Coefficients and Per Cent of Total Group Responding to Each Choice

			·
	Elmore Scale of Anomie		
Item	Definitely Agree Agree Neutral Dis		efinitely Disagree
49.	You just can't win for losing. 15 25 8	39	13
	Jesness Inventory		
Item		True	False
9.	Most police will try to help you.	60	40
19.	I never lie.	12	88
40.	Winning a fight is about the best fun there is.	16	84
46.	My father was too busy to worry much about me or spend much time with me.	28	72
58,	I think that boys 14 years old are old enough to decide for themselves if they should smoke.	35	65
66.	It's hard for me to show people how I feel about them.	31	69
74.	It seems like people keep expecting me to get into some kind of trouble.	36	64
77.	If only I had more money, things at home would be all right.	49	51
80.	When I'm alone, I hear strange things.	12	88
109.	At night when I have nothing to do, I like to get		

out and find a little excitement.

#### TABLE R (continued)

Test Items with Significant Point-Biserial Correlation Coefficients and Per Cent of Total Group Responding to Each Choice

#### Sixteen Personality Factors Item a 8. Would you rather be an artist or a mechanic? 50 50 24. Are you always glad to fix mechanical things or would you rather sit around and talk? 65 35 32. Are you almost never jealous or are you often jealous? 75 25 37. Do you like things to be quiet or do you always like exciting things? 83 17 72. In a play, would you rather be a jet pilot or a famous writer? 39 61 74. Can people change your mind by appeals to your feelings or do your feelings not have anything to do with what you think? 65 35 98. After 3, 6, 12, 24, does 36 come next or does 48 come next? 46 54

TABLE S

Reliability Estimates and Standard Error of Measurement for the
. Three Tests Used in the Study

				El:	nore				
		A	В	C	D .	E	F	Jesness	16 PF
SB	<del>-, -, -, -, -, -, -, -, -, -, -, -, -, -</del>	.82	.74	.71	.80	.83	.76	.93	.82
KR <sub>20</sub>		.81	.61	.66	.69	.72	.56	.93	.76
KR21 SE <sub>M</sub>		.77	.58		.67 1.01	.71	.59	.95 5.74	.80 4.78

There characteristics are quite typical, perhaps somewhat higher than for most other tests, for this type of instrument. In effect, this information provides evidence that the results of the test performance appear to be quite consistent at the time of administration. Thus, the validity of the results may be assumed to be adequate for the purpose of ascertaining present status of the group in those characteristics measured by the instruments.

APPENDIX III

#### FIGURE A

Certificate of Appreciation Presented to Project Participants

## University of Maryland College of Education

This Certificate is Amarded to

in appreciation for participation in

# Rehabilitation Research Project

1968 - 1969



Supervisor

awarded this

Director, Research Project

day of May, 1969

FIGURE B

Certificate of Appreciation Presented to Probation Officers

# University of Maryland

College of Education

This Certificate is Awarded to

in appreciation for leadership in

# Rehabilitation Research Project

1967-1969

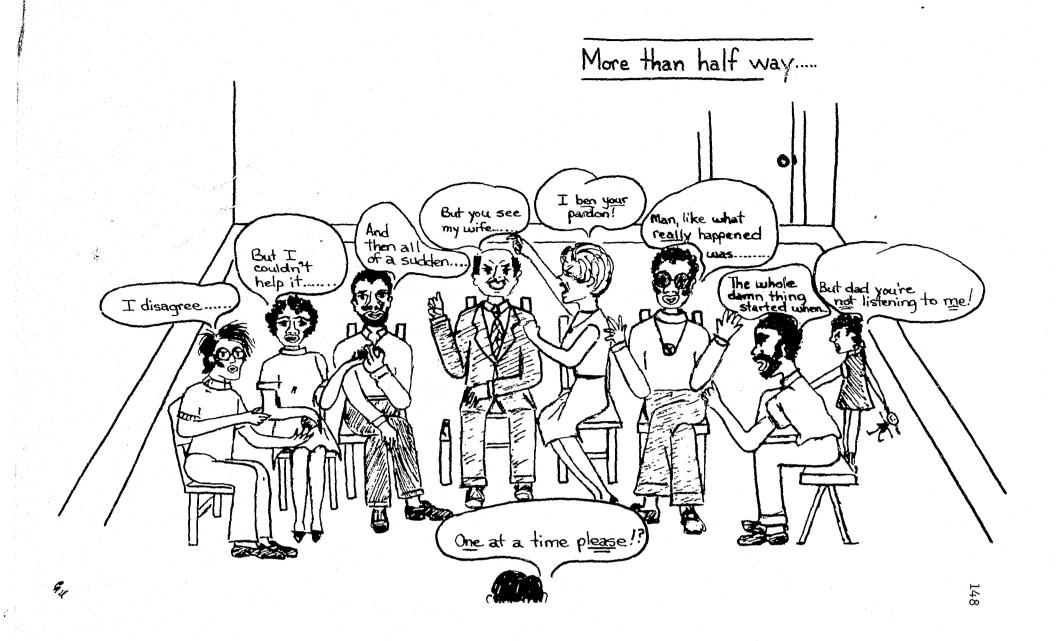
Dean, College of Education

Director, Research Project

FIGURE C

Pictoral Description of Groups' Development

147 Okay, so you goys don't like coming here that's just too bad... beginning..... In the



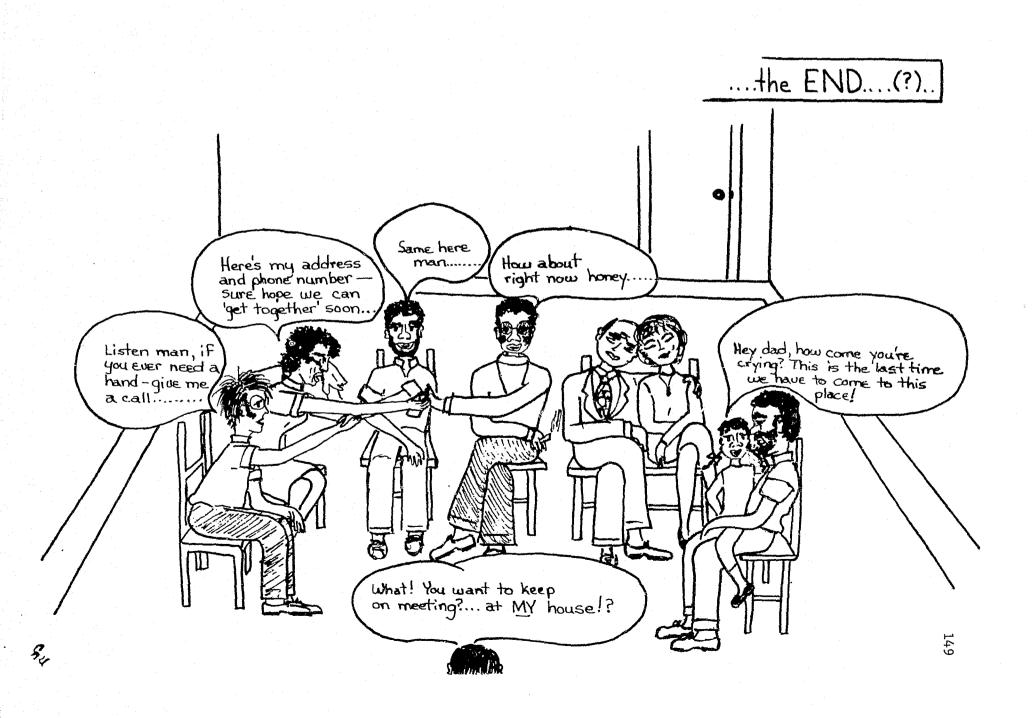


FIGURE D

Revised Client Progress Form

### CLIENT PROGRESS FORM

### REHABILITATION RESEARCH PROJECT 1968-69

### I. IDENTIFYING DATA

1. NAME	2. FILE NO.
last first initial	
3. DATE OF BIRTH//	4. WHITE (1) OR NON-WHITE (2)
5. PERIOD OF SUPERVISION FROM:/ TO:/_	6. PROBATION (1) OR
7. OFFENSE FOR WHICH SERVING CURRENT PERIOD OF SUPERVISION	PAROLE (2)
II. OFFENSES AND/OR ARRESTS SINCE B	EGINNING OF EXPERIMENT
1. DATE OFFENSE	DISPOSITION
2. TOTAL NUMBER OF DIFFICULTIES WITH LAW-DURING EXPERIM	ENT
III. EMPLOYMENT DURING	EXPERIMENT
1. EMPLOYMENT REC	ORD
DATE OCCUPATION EMPLOYER	VERIFIED FULL TIME (1) (YES OR NO) PART TIME (2)
From: To:	

				Last Name _ File Number		
		OME AND DAYS WORKEI			0.004.7	
	SEPT. OCT. NOV	J. DEC. JAN. FEI	s. MAR. APR.	MAY JUNE T	OTAL	
INCOME				<del></del>		
# DAYS WORKE	D			* <del>************************************</del>		
3. TOTAL NUMBER OF J	OB CHANGES DURING E	EXPERIMENT	<del></del>			
	IV. E	FEDERAL OFFICERS' F	EPORT			
				REPORT P		
(Enter the Number Whi	ch Applies)			t- 2nd- 0/68 2/28/69	3rd-	SUMMARY
1. NUMBER OF CLIENT- FEDERAL OFFICERS		RED CONTACTS WITH				
contacts - "in per (1) Always on time (4) Delinquent. 3. WHAT CHANGE HAVE		ritten, etc.) on time; (3) Seld	om on time;			· · · · · · · · · · · · · · · · · · ·
4. WITH WHOM DOES CL. (1) Both parents	(2) No change; IENT RESIDE? ; (2) One parent; 5) Alone; (6) Ot	(3) Spouse;				
	and the second s	ng ar kalanda puna kamul pun sahu sahu sahu sahu sahu sa kabulah ka malah mangkan kalang sahu sa kabulan kalan	والمستقد وال	n versige er de sjock om kan skriger provincie forsøkelige for de skriger beskelle skriger for skriger	للمنا على المنافعة والمنافعة والمناف	المنات والمناسودية والمناسودية والمناسة والمناسفة
	en e		ئىنىڭ ئىلىنىڭ يېزىكىنىڭ <u>ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىن</u>			

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0

(If employed)
How long have you had this job

(months)?

ρ,

How much money are you making (per month)?

(If unemployed)
How long have you been out of work (months)?

If job has changed since experiment ended, how many job changes? (Specify information in items 2, 3, 4 for each job ~ from most recent.)

FIGURE

154

H

Structured Interview Questionnaire

NAME

Length of periods of unemployment between each job (months)? If periods of unemployment between jobs, how much (months)?

DATE OF CONTACT TREATMENT (G OR I) IF UNABLE TO CONTACT, INDICATE REASON LENGTH OF PERIOD OF SUPERVISION PLACE OF CONTACT

1 or 2

Do you have a job now? (1 - yes; 2 - no)

Who are you working for?

What are you doing?

How did you get your job?

6,	a.	Have you had trouble with the law since the experiment ended? (1 - yes; 2 - no)
	<b>b</b> .	How many times?
	c.	What was the trouble?
7.	a.	Do you think the group <u>or</u> time you had with your probation officer last year helped you? (1 - yes; 2 - no)
	b.	In what way did it help you?
	c.	How could it have helped you more?
	d.	What was best about it?
	e.	What was worst about it?
8.	a.	Who was your probation officer last year?
	Ъ.	Are you still in contact with your probation officer? (1 - yes; 2 - no)
	c.	How often do you see or talk to him (per month)?
	d.	How often do you get in touch with him when you are not required to (per month)?
9.		you had it your way, what kind of probation would you e to have?
10.	a.	Did you meet anybody in the project who you are still in touch with? (1 - yes; 2 - no)
	ъ.	What kinds of things do you do together?

APPENDIX IV

TABLE A

Test-retest Reliabilities of the Sixteen Personality
Factors Questionnaire

Fact	tor.	Reliability Coefficient
A .	Reserved vs. outgoing	.71
В	Less intelligent vs. more intelligent	.61
C	Low ego strength vs. high ego strength	.37
E	Submissive vs. dominant	.70
F	Sober vs. happy-go-lucky .	.56
G	Expedient vs. conscientious	. 69
H	Shy vs. adventurous	.71
I	Tough-minded vs. tender-minded	.76
L	Trustful vs. suspicious	.67
M	Conventional vs. imaginative	.64
N	Forthright vs. shrewd	.33
0	Confident vs. insecure	.32
$Q_1$	Conservative vs. experimenting	.73
$Q_2$	Group-dependent vs. self-sufficient	.69
Q,	Lax vs. controlled	.69
Q <sub>3</sub> Q <sub>4</sub>	Relaxed vs. tense	.66

TABLE B

Test-retest Reliabilities of the Jesness Inventory

Factor		Re	eliability Co	efficient
	<del></del>		···	1
Social maladjustment			.80	
Value orientation			.81	
Immaturity			.62	
Autism			.70	
Alienation			.74	
Manifest aggression			.80	
Withdrawal			.72	
Social anxiety			.63	
Repression	4		.64	
Denial			.71	
	<del> </del>	 		· · · · · · · · · · · · · · · · · · ·

 $\label{eq:TABLE C} \mbox{Test-retest Reliabilities of the Elmore Scale of Anomie}$ 

Fac	tor		Reliability Coefficient
			<del></del>
A	Meaninglessness		.70
В	Valuelessness		.51
C	Hopelessness		.10
D	Powerlessness		.54
E	Aloneness		.10
F	Closed-mindedness	•	.42

TABLE D

Means and Standard Deviations for Pre Test Scores by
Treatment Groups and Total Group

Variable			(÷r	oup	Indivi	dual	ፐດ	tal
i	X	tro1 S.D.	X	S.D.	X	S.D.	$\overline{X}$	S.D.
	<del></del>	·			<del></del>	<del></del>	<del></del>	
ACL	1.00	0.00	8.88	11.21	9.02	8.63	7.40	9.66
Elmore A	34.83	9.16	36.66	8.21	35.88	8.36	36.05	8.41
Elmore B	22.29	5.21	22.24	4.89	22.93	4.63	22.48	4.84
Elmore C	12.21	5.23	13.85	4.78	13.27	6.32	13.34	5.41
Elmore D	11.29	5.36	13.14	4,70	12.07	4.12	12.43	4.68
Elmore E	6.83	3.73	7.78	4.31	8.54	4.54	7.85	4.29
Elmore F	26.67	3.94	26.93	5.24	26 56	5.07	26.75	4.91
Jesness Al	8.71	4.91	8.12	4.44	7.73	4.05	8.11	4.39
Jesness Au	9.13	4.50	7.73	3.43	7.54	3.32	7.94	3.64
Jesness De	12.67	3.58	13.54	3.35	14.44	2.96	13.67	3.31
Jesness Im	17.50	4.13	15.68	4.30	16.24	5.16	16.22	4.59
Jesness Ma	11.00	6.27	8.73	4.72	8.98	4.29	9.25	4.96
Jesness Re	6.88	3.01	5.93	3.09	5.73	2.86	6.05	3.00
Jesness Sa	12.29	3.69	11.59	3.63	11.34	3.31	11.65	3.53
Jesness Sm	24.88	7.67	21.53	6.96	20.78	6.40	21.93	7.03
Jesness Wd	10.54	3.02	10,44	3.23	9.56	2.85	10.17	3.07
Jesness Vo	13.50	6.99	10.08	6.18	9.61	5.74	10.59	6.32
16 PF A	5.96	1.34	5.49	1.47	5.02	1.48	5.43	1.47
16 PF B	5.92	1.86	5.71	1.79	5.34	1.92	5.63	1.85
16 PF C	4.42	1.86	4.95	1.55	5.12	1.50	4.90	1.61
16 PF E	3.17	1.81	2.51	1.68	2.70	1.49	2.70	1.65
16 PF F	4.71	2.10	4.32	1.80	4.32	1.84	4.40	1.86
16 PF G	4.92	1.84	5.66	1.77	5.24	1.46	5.38	1.70
16 PF H	4.54	1.89	4.63	1.91	4.54	1,98	4.58	1.91
16 PF I	4.38	2.10	4.10	2.02	3.85	1.81	4.07	1.96
16 PF L	3.33	2.20	2.85	1.59	3.12	1.87	3.03	1.81
16 PF M	3.83	1.76	4.05	1.72	3.88	1.55	3.95	1.66
16 PF N	4.08	1.25	3.97	1.25	4.44	1.16	4.14	1.23
16 PF O	3.38	1.66	3.37	1.68	3.00	1.69	3.25	1.68
16 PF Q <sub>1</sub>	3.88	1.94	3.86	1.46	3.83	1.69	3.86	1.62
16 PF Q <sub>2</sub>	2.88	1.87	3.27	1.98	3.24	2.15	3.19	2.01
16 PF Q3	5.13	1.78	5.44	1.34	5.12	1.47	5.27	1.47
16 PF Q <sub>4</sub>	3.41	1.79	2.58	1.99	2.53	1.93	2.73	1.95
*44								

TABLE E

Means and Standard Deviations for Criterion Variables by Treatment
Groups and Total Group

			· · · · · · · · · · · · · · · · · · ·					·
	Con	trol	Gr	oup	India	vidual	φ,	otal
Variable	$\bar{\mathbf{x}}$	S.D.	X,	S.D.	X	S.D.	X	S.D.
Post ACL <sub>CL</sub>			10.12	11.63	18.39	16.59	11.09	13.83
Post ACL <sub>PO</sub> Post Elmore A			30.98	23.31		20.77		23.05
	35.58		34.88	9.88		5.68		8.15
Post Elmore B	23.96		22.22	4.71			22.64	5.10
Post Elmore C	13.00		14.02	4.59		5.1.2	13.79	4.96
Post Elmore D	13.33		12.12			3.76	12.42	4.12
Post Elmore E	6.88		8.15			3.34	8.20	4.12
Post Elmore F	25.71		26.59		26.20	4.42	26.01	5.96
Post Jesness Al	9.88		8.07			3.73		4.35
Post Jesness Au	9.38		7.71		7.24	3.74	7.88	3.67
Post Jesness De	12.21		14.00	3.07	14.56	2.86	13.84	3.17
Post Jesness Im	16.38	4.14	15.36	4.45	15.71	4.24	15.67	4.30
Post Jesness Ma	10.58	3.87	8.98	4.38	8.90	4.57	9.27	4.36
Post Jesness Re	5.79	2.23	6.02	2.93	6.24	2.48	6.05	2.64
Post Jesness Sa	12.00	3.26	11.14	3.59	10.22	2,78		3.32
Post Jesness Sm	24.04	6.71	21.46	6.78		7,15		6.93
Post Jesness Wd	11.29	2.73	10.49	2.62		3.36		2.93
Post Jesness Vo	13.67	7.01	10.24	6.30		5.56		6.31
Post 16 PF A	5.21	1.18	4.98	1.50		1.66		1.49
Post 16 PF B	5.67	2.14	5.85	1.86		1.94		1.93
Post 16 PF C	4.00	1.59	4.58	1.53		1.42		1.55
Post 16 PF E	2.50	1.77	2.85		2.54	1.52		1.76
Post 16 PF F	4.71	2.03	4.34		4.44	1.88		1.96
Post 16 PF G	4.62	2.00	5,36	1.69		1.34		1.67
Post 16 PF H	4.62	2.04	4.39	2.03	4.71	2.15		2.06
Post 16 PF I	4.46	2.00	4.05		3.37	1.91		2.10
Post 16 PF L	3.00	1.62	3.19	1.87	3.10	1.67	3.12	1.75
Post 16 PF M	3.96	1.68		1.64			4.05	1.61
Post 16 PF N	4.00	1.22	4.03	1.22	4.12	1.33	4.06	1.24
Post 16 PF 0	3.42	1.69	3.31	1.80	2.63	1.53	3.10	1.71
Post 16 PF O.	4.42	1.61	3.92	1.52	3.63	1.48	3.92	1.54
Post 16 PF Q	3.29		3.32	2.10			3.37	
Post 16 PF $Q_3^2$	5.08	1.93	4.90	1.60	5.32			
Post 16 PF Q <sub>4</sub>		1.74	2.63	1.82	2.41	1 56	2.62	1.72
Th 24		.58		.61	1 40	.55	1,70	
Diff	.00	.00	1.50	22	1.47 07	2C	T,/U	.61
	.71	1.00	53	80	.07 51	97	.56	.22
Day W	161.08	41 64	148 51	49 66	160 63	1.1. 01.	15/ 05	.86
Contac	3.25	3 99	3 5%	ተጋ.00 ፈ 52	/ 17	5 51		
	3.23	5.77	2.54	4.55	4,1/	7.71	3.69	4.76

TABLE F

Means and Standard Deviations of Gain Scores (Post - Pre) on Test

Variables by Treatment Groups and Total Group

	Con	trol	G:	roup	Indiv	idual	_ To	tal
Variable	$\overline{x}$	S.D.	$\overline{\mathbf{X}}$	S.D.	$\overline{X}$	S.D.	X	S.D.
Elmore A	.67	9.25	-1.37	10.30	1.66	7.69	.02	9.34
Elmore B	1.67	6.57	.37	5.25	46	5.50	.35	5.61
Elmore C	.79	6.46	.57	5.22	.63	6.88	.64	6.01
Elmore D	2.04	6.18	97	6.03	.20	4.59	.00	5.69
Elmore E	.04	3.45	.56	5.52	.51	5.16	.44	5.03
Elmore F	96	6.84	42	6.02	37	6.36	51	6.25
Jesness A1	1.17	3.83	,22	3.59	22	3.75	.26	3.69
Jesness Au	.25	4.71	.15	3.52	29	2.88	.02	3.57
Jesness De	46	4.11	.56	3.05	.12	3.09	.22	3.29
Jesness Im	-1.13	3.35	46	3.98	54	4.33	61	4.04
Jesness Ma	42	5.10	.35	4.16	12	3.93	.05	4.26
Jesness Re	-1.08	2.77	.42	2.63	.51	2.88	.16	2.79
Jesness Sa	29	3.17	14	4.29	-1.05	3.95	47	3.97
Jesness Sm	83	8.51	.48	5.71	.07	5.96	.09	6.38
Jesness Wd	.75	2.75	.08	3.17	. 1,2	4.06	. 23	3.40
Jesness Vo	.17	6.17	.19	5.51	.76	4.68	.37	5.35
16 PF A	67	1.76	53	1.79	07	1.40	40	1.67
16 PF B	25	2.02	.14	1.61	.17	1.60	.07	1.69
16 PF C	42	2.06	34	1.75	.02	1.71	23	1.79
16 PF E	67	1.83	.24	1.85	17	1.52	07	1.70
16 PF F	0.00	1.50	05	1.46	.12	1.25	.02	1.39
16 PF G	- ,33	2.10	34	1.73	.37	1.73	10	1.8
16 PF H	.08	2.06		1.92	20	2.15	04	2.0
16 PF I	.08	1.53	02		42	1.66	13	17
16 PF L	.33	2.01	.17		20	1.90	05	1.8
16 PF M	.13	1.54	.12		.17	1.63	.14	1.8
16 PF N	08	1.53	.14	1.55	29	1.76	05	1.6
16 PF 0	.33	1.99	10		37	1.87	10	1.8
16 PF Q <sub>1</sub>	.54	1.29	0.00		07	1.65	.09	1.4
16 PF Q <sub>2</sub>	.42	1.64			.15	1.71	.16	1.8
16 PF Q <sub>3</sub>	04	2.44			.20	1.85	3.09	36.2
16 PF Q <sub>4</sub>	42	1.79			10	2.48	13	2.0
ACL	0.00	0.00				13.70	3.90	9.9

Correlations (P  $\leq$  10) of Predictor Variables with (Post Test Scores and Non-Test Data)

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JE 51.

Predictor Variables

TABLE H

Multiple Correlation Coefficients (R) with the Criterion

"Post ACL Scores"

	······································				
Variable		R	$\mathtt{SE}_{\mathbf{R}}$	R <sup>2</sup>	Increase in R <sup>2</sup>
· · · · · · · · · · · · · · · · · · ·				, <u>, , , , , , , , , , , , , , , , , , </u>	
Pre ACL		.68	10.20	.46	.46
Elmore C		.69	10.07	.48	.02
16 PF A		.70	9.97	.49	.02
16 PF B		.71	9.90	.51	.01
16 PF L		.72	9.81	.52	.01
Jesness Vo		.73	9.72	.53	.01
Jesness Au		.74	9.3	.54	.01
16 PF E		.74	9.56	.55	.01
16 PF C		.75	9.52	.56	.01
16 PF Q <sub>3</sub>		.76	9.46	.57	.01
16 PF M		.76	9.39	.58	.01
Jesness Wd		.77	9.34	.59	.01
16 PF N		.77	9.31	.60	.01
Jesness Ma		.77	9.30	.60	.00
Jesness Al		.78	9.27	.61	.01
Jesness Re		.78	9.26	.61	.01
Elmore E		.78	9.25	.62	.00
Jesness Sm		.79	9.25	.62	.00
Elmore F		.79	9.27	.62	.00
16 PF G		.79	9.29	.62	.00
16 PF Q <sub>4</sub>		. 79	9.30	.63	.00
Jesness De		.79	9.22	.63	.00
Jesness Sa		.79	9.33	.63	.00
16 PF H		.79	9.37	. 63	.00
16 PF I		.80	9.41	.63	.00
Elmore D		.80	9.45	.63	.00
Jesness Im		.80	9.49	.63	.00
16 PF F		.80	9.54	.63	.00
16 PF O		.80	9.59	.63	,00
16 PF Q2		.80	9.63	. 63	.00
16 PF Q1		.80	9.68	.63	.00

TABLE I

Multiple Correlation Coefficients (R) with the Criterion "ACL<sub>PO</sub> Score"

Variable	Ř	$\mathtt{SE}_{\mathbf{R}}$	R <sup>2</sup>	Increase in R <sup>2</sup>
Pre ACL	.28	22.20	.08	.08
Jesness De	.32	21.99	.11	.03
Jesness Wd	.36	21.77	.13	.03
Elmore B	.39	21.59	.15	.02
16 PF Q <sub>4</sub>	.42	21.42	.17	.02
16 PF M	.44	21.26	.19	.02
16 PF N	.46	21.07	.21	.02
Elmore F	.48	20.91	.23	.02
Jesness Sa	.50	20.87	.24	.01
16 PF O	.51	20.80	.25	.01
Elmore D	.52	20.73	.26	.01
Jesness Re	.52	20.72	.27	.01
16 PF Q <sub>1</sub>	.53	20.70	.28	.01
Elmore É	.54	20.69	.29	.01
Jesness Ma	.54	20.69	.29	.01
16 PF G	.55	20.70	.30	.01
16 PF A	.55	20.72	.30	`.01
16 PF B	.56	20.75	.31	.01
16 PF C	.56	20.76	.31	.01
Elmore C	.57	20.78	.32	.01
16 PF L	.57	20.80	.33	.01
16 PF Q <sub>3</sub>	.57	20.83	.33	.01
16 PF Sm	.58	20.91	.33	.00
Jesness Al	.58	20.87	.33	.00
Jesness Vo	.58	20.91	.34	.00
16 PF E	.58	20.99	.34	.00
Jesness Im	.58	21.08	.34 .34	.00
Jesness De	.58	21.18	.34 .34	.00
16 PF F	.58	21.28	.34	.00
16 PF Q <sub>2</sub>	.59	21.39	.34	.00

TABLE J

Multiple Correlation Coefficients (R) with the Criterion

"Global Rating of Change"

	•		·	and see	
Variable		R	$\mathtt{SE}_{\mathrm{R}}$	R <sup>2</sup>	Increase in R <sup>2</sup>
16 PF A		.24	.60	.06	.06
Jesness Ma		.32	.59	.10	.04
Elmore D		.35	.58	.12	.02
16 PF Q <sub>4</sub>		.36	.58	.13	.01
16 PF H		.39	.58	.15	.02
16 PF L		.40	.58	.16	.01
Elmore A		.41	.57	.17	.01
Jesness Vo		.42	.57	.18	.01
Jesness Im		.46	.57	.21	.03
16 PF M		.47	.56	.22	.01
16 PF F		.47	.57	.22	.01
16 PF Q3		.48	.57	.23	.01
Jesness Re		.48	.57	.23	.01
16 PF Q <sub>1</sub>		.49	.57	.24	.01
Elmore E		.49	<b>.</b> 57	.24	.01
16 PF C		.50	.57	.25	.00
16 PF Q <sub>2</sub>		.50	.57	.25	.00
Pre ACL		.50	.57	.25	.00
Jesness Sa		.51	.57	.26	.00
Jesness Wd		.51	.58	.26	.00
16 PF I		.51	.58	.26	.00
Elmore C		.51	.58	.26	.00
Elmore F		.52	.58	.27	.00
16 PF E		.52	.58	.27	.00
Jesness Al		.52	.59	.27	.00
Jesness De		.52	.59	.27	.00
16 PF G		.52	.59	.27	.00
16 PF O		.52	.59	.28	.00
16 PF N		.53	.60	.27	.00
16 PF B		.53	.60	.28	.00

TABLE K

Multiple Correlation Coefficients (R) with the Criterion

"Number of Difficulties with the Law"

Variable	R	$\mathtt{se}_{\mathtt{R}}$	R <sup>2</sup>	Increase in R <sup>2</sup>
16 PF A	10	0.1		
16 PF G	.19	.21	.04	.04
16 PF M	.24	.21	.06	.02
Jesness Au	.27	.21	.07	.01
	.29	.21	.08	.01
Jesness Ma 16 PF C	.34	.21	.12	.04
16 PF I	.37	.21	.14	.01
	.39	.20	.15	.02
Elmore F	.41	.20	.17	.01
16 PF Q <sub>4</sub>	.42	.20	.18	.01
Elmore A	.43	.20	.19	.01
Elmore D	.44	.20	.20	.01
16 PF H	.45	.20	. 20	.01
Elmore B	.46	.20	.21	۰00
Jesness Wd	.46	.20	.21	
Jesness Sm	.46	.20	.22	.01
16 PF Q <sub>1</sub>	.47	.20	.22	.00
16 PF E	.47	.21	.22	.00
Elmore C	.47	.21	.22	.00
16 PF Q <sub>2</sub>	.47	.21	.22	.00
16 PF L	.48	.21	.23	.00
Jesness Vo	.48	.21	.23	.00
Jesness Al	.48	.21	.23	.00
Jesness Sa	.48	.21	.23	.00
Jesness De	.48	.21	.23	.00

TABLE L

Multiple Correlation Coefficients (R) with the Criterion
"Number of Job Changes"

· <u></u>	 	· · · · · · · · · · · · · · · · · · ·			·
Variable	•	R	se <sub>r</sub>	R <sup>2</sup>	Increase in R
16 PF G		.19	.85	.04	.04
Pre ACL		.28	.83	.08	.04
16 PF L		.32	.82	.10	.03
Elmore F		.35	.82	.12	.02
16 PF B		.38	.81	.14	.02
Elmore D		.41	.80	.17	.03
16 PF Q <sub>3</sub>		.43	.80	.19	.01
16 PF E		.45	.79	.20	.02
Jesness De		.46	.79	.21	.01
Jesness Vo		.48	.79	.23	.02
Elmore C		.49	.78	.24	.01
16 PF Q <sub>2</sub>		.50	.78	.25	.01
Jesness <sup>2</sup> Sa		.50	.79	.25	.00
Jesness Re		.50	.79	.25	.00
Jesness Au		.51	.79	.26	.00
Jesness Al		.51	.79	.26	.00
Jesness Ma		.51	.79	.26	.00
Elmore A		.52	.80	.27	.00
16 PF Q <sub>1</sub>		.52	.80	.27	.00
16 PF M		.52	.80	.27	.00
Elmore E		.52	.81	.27	.00
Jesness Sm		.52	.81	.27	.00
16 PF O		.52	.81	.27	.00
Jesness Wd		.52	.82	.27	.00
16 PF N		.52	.82	.27	.00
16 PF C		.52	.82	.27	.00
16 PF A		.52	.83	.28	.00
16 PF I		.53	.83	. 28	.00
	 <del></del>				

TABLE M

Multiple Correlation Coefficients (R) with the Criterion

"Number of Days Worked"

Variable	R	SER	$\mathbb{R}^2$	Increase in R <sup>2</sup>
16 PF I	.28	44.83	.08	.08
Elmore C	.36	43.77	.13	.05
Jesness Im	.42	42.76	.18	.05
Elmore F	.44	42.46	.19	.02
16 PF A	.46	42.12	.21	.02
16 PF H	.49	41.63	.24	.03
Jesness Sa	.51	41.10	.26	.03
16 PF Q <sub>1</sub>	.53	40.69	.28	.02
Jesness Ma	.55	40.29	.30	.02
Elmore B	.56	40.23	.31	.01
16 PF N	.56	40.22	.32	.01
Elmore E	.57	40.22	,33	.01
Jesness Au	.58	40.12	.33	.01
16 PF Q <sub>1</sub>	.58	40.11	.34	.01
Jesness Re	.59	40.16	.35	.01
16 PF E	.59	40.13	.35	.01
16 PF L	.60	40.22	.35	.00
Jesness Wd	.60	40.31	.36	,00
Jesness De	.60	40.35	.36	.01
Jesness A1	.61	40.35	.37	.01
Jesness Sm	.62	40.26	.38	.01
16 PF F	.62	40.37	.38	.00
16 PF Q <sub>3</sub>	.62	40.48	.38	.00
16 PF B	.62	40.63	.39	.00
16 PF G	.62	40.79	.39	.00
Pre ACL	.62	40.97	.39	.00
16 PF M	.62	41.14	.39	.00
Elmore D	.62	41.34	.39	.00
Elmore A	.62	41.54	.39	.00

TABLE N

Multiple Correlation Coefficients (R) with the Criterion

"Number of Non-Required Contacts"

Variable	R	$\mathtt{SE}_{\mathbf{R}}$	R <sup>2</sup>	Increase in R <sup>2</sup>
Elmore F	.30	4.56	.09	.09
16 PF H	.35	4.50	.12	.03
16 PF A	.38	4.46	.14	.02
Jesness Re	.41	4.42	.17	.02
Elmore C	.43	4.40	.18	.02
16 PF O	. 44	4.38	.19	.01
16 PF G	.46	4.36	.21	.01
16 PF N	.47	4.33	.23	.02
Jesness Au	.49	4.32	.24	.01
Jesness Ma	.50	4.31	.25	.01
Jesness Vo	.51	4.29	.26	.01
Jesness Sm	.52	4.28	.27	.01
16 PF Q <sub>1</sub>	.53	4.27	.28	.01
Jesness A1	.54	4.27	.29	.01
Elmore B	.54	4.26	.30	.01
Jesness Im	.55	4.26	.30	.01
Jesness Wd	.56	4.26	.31	.01
16 PF C	.56	4.25	.31	.01
Elmore D	.56	4.26	.32	.00
Jesness De	.56	4.27	.32	.00
16 PF Q <sub>4</sub>	.56	4.29	.32	000
Elmore Ā	.57	4.31	.32	.00
16 PF I	.57	4.32	.32	.00
16 PF Q <sub>3</sub>	.57	4.34	.32	.00
16 PF Q2	.57	4.36	.32	.00
Pre ACL	.57	4.38	.33	.00
16 PF B	.57	4.40	.33	.00
16 PF M	.57	4.42	.33	.00

TABLE 0 Criterion Variable Means Significantly Different ( $P \le .10$ ) as Classified by Relevant Variables and Treatment x Relevant Variables

Je Je Je Je Je Je 16 16 16 16 16 Da Grade E1 E1 Je Je Je Je Je	more F sness A1 sness Au sness De sness Ma sness Sa sness Vo PF A PF E PF G PF L y W more A more C more F sness A1	.056 .038 .001 .009 .014 .023 .005 .025 .020 .084 .053 .008 .033	Treatment x Age  Treatment x Grade	Jesness A1  Jesness Re 16 PF E 16 PF G	.086 .091
Je Je Je Je Je Je 16 16 16 16 Da Grade E1 E1 Je Je Je Je Je	sness Au sness De sness Ma sness Sa sness Vo PF A PF E PF G PF L y W more A more C more F sness A1	.001 .009 .014 .023 .005 .025 .020 .084 .053 .008 .033	Treatment $_{\mathbf{X}}$	Jesness Re 16 PF E	.086
Je Je Je Je Je 16 16 16 Da Grade E1 E1 Je Je Je Je Je Je	sness De sness Ma sness Sa sness Vo PF A PF E PF G PF L y W more A more C more F sness A1	.009 .014 .023 .005 .025 .020 .084 .053 .008 .033		16 PF E	.091
Je Je Je Je 16 16 16 Da Grade E1 E1 Je Je Je Je Je Je Je	sness Ma sness Sa sness Vo PF A PF E PF G PF L y W more A more C more F sness A1	.014 .023 .005 .025 .020 .084 .053 .008 .033		16 PF E	.091
Je Je 16 16 16 16 Da Grade E1 E1 Je Je Je Je Je Je 16 16	sness Sa sness Vo PF A PF E PF G PF L y W more A more C more F sness A1	.023 .005 .025 .020 .084 .053 .008 .033 .004 .069 .030		16 PF E	.091
Je Je 16 16 16 16 Da Grade El E1 Je Je Je Je Je Je Je	sness Sm sness Vo PF A PF E PF G PF L y W more A more C more F sness A1	.005 .025 .020 .084 .053 .008 .033 .004 .069 .030		16 PF E	.091
Je 16 16 16 16 Da Grade E1 E1 Je Je Je Je Je 16 16	sness Vo PF A PF E PF G PF L y W more A more C more F sness A1	.025 .020 .084 .053 .008 .033 .004 .069 .030		16 PF E	.091
16 16 16 16 Da Grade E1 E1 Je Je Je Je Je 16 16	PF A PF E PF G PF L y W more A more C more F sness A1	.020 .084 .053 .008 .033 .004 .069 .030		16 PF E	.091
16 16 16 Da Grade E1 E1 Je Je Je Je Je 16 16	PF E PF G PF L y W more A more C more F sness A1	.084 .053 .008 .033 .004 .069 .030		16 PF E	.091
16 16 Da Grade E1 E1 Je Je Je Je Je 16 16	PF G PF L y W more A more C more F sness A1	.053 .008 .033 .004 .069 .030 .023		16 PF E	.091
16 Da Grade E1 E1 Je Je Je Je Je 16 16	PF L y W more A more C more F sness A1	.053 .008 .033 .004 .069 .030 .023		16 PF E	.091
16 Da Grade E1 E1 Je Je Je Je Je 16 16	PF L y W more A more C more F sness A1	.008 .033 .004 .069 .030 .023		16 PF E	.091
Da Grade E1 E1 Je Je Je Je Je 16 16	y W more A more C more F sness Al	.033 .004 .069 .030 .023		16 PF E	.091
E1 E1 Je Je Je 16 16	more C more F sness Al	.069 .030 .023		16 PF E	.091
E1 Je Je Je Je 16 16	more F sness Al	.030	Grade	16 PF E	.091
Je Je Je Je 16 16	sness Al	.023		16 PF E	
Je Je Je Je 16 16				16 PF G	001
Je Je Je 16 16	D.			10 11 U	.031
Je Je Je 16 16	sness Re	.005		16 PF M	.077
Je Je 16 16	sness Sa	.011			
Je 16 16 16	sness Sm	.038			
16 16 16	sness Vo	.015			
16 16	PF B	.001			
16	PF H	.064			
	PF M	.004			
0.0	ntac	.068			
		,,,,			
Occupation AC	$L_{PO}$	.093	Treatment x		
	more A	.058	Occupation	Jesness Al	.011
	PF B	.070	00000	Jesness Au	.069
	PF H	.079		Jesness De	.016
	y W	.001		Jesness Ma	.046
,	· J · 11			Jesness Sm	.059
				Jesness Vo	.010
				Job Ch	.051

TABLE P

Gain Score Means Significantly Different (P ≤ .10) as Classified by Relevant Variables and Treatment x Relevant Variables

	Variable	P		Variable	P		
Age	Elmore A	.007	Treatment				
	Elmore C	.012	<b>x</b> Age	Elmore F	.059		
	Elmore F Jesness Sa	.033 .078		Jesness Im Jesness Ma	.094		
	Jesness Vo	.092		16 PF C	.075		
	16 PF 0 16 PF Q <sub>3</sub>	.079 .022					
Grade	Elmore E	.005	Treatment				
	Jesness Sm	.001	x Grade	Jesness Au Jesness Im	.053		
				16 PF A	.022		
				16 PF E 16 PF M 16 PF O	.089 .033 .019		
Occupation	16 PF A	.090	Treatment x				
	16 PF I	.030	Occupation	Elmore C	.003		
	16 PF Q <sub>1</sub>	.073		Jesness Re 16 PF C	.099 .024		

# END