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An Attempt to Find Predictor Variables Which Will Discriminate Between Those Patients Who Seek Aftercare Treatment and Those Who Do Not Seek Aftercare Treatment Upon Discharge From a Psychiatric Ward

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AN ABSTRACT OF THE THESIS OF Nena V. Johnstone, William D. Lynch, Philip M. Baldwin, and John C. Kemp for the Master of Social Work presented May 14, 1971.

Title: An Attempt to Find Predictor Variables Which Will Discriminate Between Those Patients Who Seek Aftercare Treatment and Those Who Do Not Seek Aftercare Treatment Upon Discharge From a Psychiatric Ward.

APPROVED BY MEMBERS OF THE THESIS COMMITTEE:

June Dunn, Chairman

Dr. Thomas C. Burgess

This is an exploratory follow-up study of the clientele of the Psychiatric Crisis Unit, a short-term, crisis-oriented inpatient psychiatric ward. The main objective of the research was to test the following null hypothesis: there are no significant differences between those individuals who attempt to gain aftercare treatment as opposed to those individuals who do not following discharge from the Crisis Unit.

A sample of fifty-one voluntary patients who consented to participate in the study was used in testing this hypothesis. Each subject completed the Minnesota Multiphasic Personality Inventory (M.M.P.I.) and a sociological questionnaire while in the Crisis Unit, and a follow-up questionnaire was administered via telephone or personal contact

approximately one month after discharge. The follow-up information was used to determine whether the subject fell into the "aftercare" or "no-aftercare" group. Data collection lasted from July 1, 1970 to December 15, 1970. The data revealed that there were significant differences between the groups and, thus, the null hypothesis was rejected.

The ten M.M.P.I. scales revealed no significant differences between the groups on the individual scales. However, when examined collectively, the aftercare group scored higher than the no-aftercare group on all scales except Self-Sufficiency (which is scored in the opposite direction, corroborating the tendency in the other scales). A discriminant function correctly classified seventy-three percent of the subjects. These results indicate that the aftercare subjects probably viewed themselves as "needing" more help.

The significant predictor variables found included prior familial and personal experiences similar to those bringing the subject to the Unit, employment status, age, diagnostic designation, length of hospitalization, referral planning, and self-ratings on a mood scale which was administered upon discharge from the Crisis Unit. These variables were obtained with less effort than the psychological test data.

It was found that the aftercare group (compared to the other group) was younger, had a higher rate of unemployment, and had a higher rate of familial and prior personal experiences. They were also diagnosed more frequently as psychotic, with depression ranking second, and rated themselves lower on the mood scale scores. However, the difference between the before and after mood scale scores revealed that these subjects felt they had "gained" more than the no-aftercare subjects.

The no-aftercare group was diagnosed more frequently as depressed, with behavior/character disorders ranking second. They tended to rate themselves higher on the mood scale scores. However, the differences between the before and after mood scale scores revealed that they had not "progressed" as much as the aftercare subjects.

Although not statistically significant, it was found that the aftercare subjects were hospitalized two days longer than the subjects of the no-aftercare group. More significant is the fact that the aftercare group had a higher rate of rehospitalization than the no-aftercare group.

Data collected concerning the referral process revealed that aftercare subjects were more frequently referred for treatment than were subjects of the no-aftercare group.

It was speculated that those subjects who perceived themselves and/or were perceived as being "sicker" would seek further help after discharge from the Crisis Unit. The findings also suggested that not all patients need or perceived themselves as needing further help.

AN ATTEMPT TO FIND PREDICTOR VARIABLES WHICH WILL DISCRIMINATE
BETWEEN THOSE PATIENTS WHO SEEK AFTERCARE TREATMENT
AND THOSE WHO DO NOT SEEK AFTERCARE TREATMENT
UPON DISCHARGE FROM A PSYCHIATRIC WARD

by

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A thesis submitted in partial fulfillment of the
requirements for the degree of

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TO THE OFFICE OF GRADUATE STUDIES:

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CHAPTER I

INTRODUCTION

This thesis is a descriptive, exploratory follow-up study using the clientele of the Psychiatric Crisis Unit housed in the Multnomah County Hospital. The specific objective of the research was to compare: (1) people who seek continued aftercare treatment upon discharge from the Psychiatric Crisis Unit; and (2) those people who did not seek aftercare treatment upon discharge. The term "aftercare" is used in this thesis to denote those subjects who initiated contact for continued "care" or "treatment," following discharge from the Crisis Unit, for the types of problems identified while the patient was in the Crisis Unit. The "no-aftercare" group is composed of those subjects who do not seek or continue further "care" or "treatment" after leaving the Crisis Unit. Several sociological, psychological and demographic factors were anticipated as being likely to discriminate between those who will seek further treatment and those who will not.

Through the years the trend in Social Welfare programs--Mental Health, Corrections, Public Welfare, Family Counseling, Public Health, and other public and private agencies concerned with the amelioration of social problems--has been toward short-term Crisis Intervention as a treatment modality. More and more professional people--social workers, psychologists, psychiatrists, and others concerned about situational adjustment--recognize the necessity for immediate treatment to attack

the needs created by accelerated caseloads of people suffering from mental illness and/or personal adaption difficulties. Current trends that lend credence to the Crisis Intervention approach include alienation of young and old, dehumanization and loss of dignity as evident in poverty, housing and racism, the rising crime rate and drug abuse, and, in particular, the inadequacy of the Social Welfare field to meet the needs of people seeking or needing help. This is exemplified by the long waiting list of service agencies, lack of professional manpower in proportion to caseloads, and cost of professional services such as long-term hospitalizations and private therapy.

As social workers our primary concern is man interacting within his environment, the ongoing process of man's individual growth and social functioning. The movement toward Crisis Intervention as a problem solving approach led the researchers to focus attention on what happens to people after being discharged from a Crisis Intervention setting. It was felt that following discharge from short-term crisis-oriented hospitalization, a one-month outpatient follow-up study would help provide continued focus on present adaptive tasks and also provide information concerning referrals for longer term outpatient treatment where appropriate.

This follow-up study involved evaluation of the characteristics of patients by studying psycho-social data gathered from individuals during hospitalization and via a telephone contact or personal interview approximately one month after discharge. It is important to note that the purpose of this study was not to evaluate the effectiveness of Crisis Intervention and its treatment techniques, but to gain a better perspective about the patients' continuing needs by gathering information from

patients during and after hospitalization.

It would seem that better understanding of those patients who follow through on referral planning might lead to earlier discharge for certain patients and, conversely, understanding those patients who do not follow through on the clinic's referral process might suggest new procedures. The study might also provide information about the type of patient who makes use of the Crisis Unit and help Crisis Unit personnel, as well as community persons, to refine their thinking about what types of patients use aftercare. Generally it was hoped that the data gathered from this research would indicate if there is a need to include follow-up as an integral part of the clinic's program.

There has been little attention given to follow-up by the medical staff personnel at the Psychiatric Crisis Unit, due to the fact that this is an inpatient medical setting, which by definition of the Crisis Intervention function does not provide aftercare treatment. The interest in a follow-up study developed out of the assumption that the helpfulness of Crisis Intervention will open the door to more productive client involvement in ongoing treatment.¹ Previous research conducted on the Unit did not deal with the concept of aftercare.²

Originally the aim of the research was to consider the need for a comprehensive follow-up referral program at the Psychiatric Crisis Unit. Certain constraints prevented attainment of this: the difficulty of following up a very mobile and transient patient population, the

¹Howard J. Parad, "Preventive Casework: Problems and Implications," Crisis Intervention: Selected Readings, ed. by Howard J. Parad (New York: Family Services Association of America, 1965), pp. 288-298.

²Previous research concerned a suicide study and "The Crisis Unit One Year in Review" presented at the Psychiatric Grand Rounds May 28, 1970.

difficulty of administering measurement instruments, and the limited resources--time, money, and manpower. It was decided, therefore, that a descriptive, exploratory study would be conducted first and could serve a useful function by opening new vistas and laying groundwork for further research.

In this thesis, pertinent data concerning follow-up studies, research, and programs related to Crisis Intervention in the field of mental health are reviewed in a synopsis of the literature. Also, there is a description of the research setting, the problem being studied, and the objectives of this thesis. The method of data collection, analysis and interpretation of the data, and the reliability and validity of our measurement tools and samples are critically examined. The methodology employed to pursue our research combines a three-fold measurement procedure including the use of (1) Minnesota Multiphasic Personality Inventory (M.M.P.I.), (2) a special questionnaire (see Appendix A), and (3) a follow-up telephone call or personal interview with the patient approximately one month after discharge (see Appendix B). Lastly, we discuss recommendations in terms of agency policy and research design.

CHAPTER II

HISTORY

With the experiences of World War II and the Korean War, American expediency came to the forefront, and a new method of treatment of mental illness evolved from situational need. As a result of the unique situation of war, plus the pressure of military necessity growing out of large numbers of psychiatric casualties, great strides were made in the understanding and treatment of mental illness. Certain indicators were found to be of particular relevance to the concept of a "crisis-oriented" therapy. Immediate short-term therapy indicated a higher probability of successful recovery than reliance on traditional psychiatric treatment methods of long-term institutional care. It became evident that prolonged delay between the occurrence of symptoms and the initiation of therapy tended to fixate the decompensatory pattern, making it much more resistant to therapy. Similarly, the removal of a patient from the combat zone to an interior zone seemed to encourage the unconscious maintainance of symptoms in order to prevent a return to combat. The discovery had particular relevance for the development of a "crisis-oriented" treatment, for if battle casualties could be treated successfully through intensive short-term involvement, then returned to combat, why could not "social casualties" be treated on an intensive short-term basis and successfully returned to function within the community? Thus, Crisis Intervention made its debut.

A crisis is a situation that comes about when an individual or a family is threatened by hazardous circumstances and/or the stress on an

instinctual need, resulting in vulnerability or conflict, so that current coping mechanisms are not able to handle the situation.³ Although the terms "crisis" and "stress" are often used interchangeably, stress tends to have a negative connotation or a pathogenic potential, while crisis is regarded as having a growth potential. Crises seem to fall into three major categories: (1) Developmental Crisis, (2) Crisis of Role Transition, and (3) Accidental Crisis. Thus, crisis is a problem in the present life situation of an individual or group, usually represented by a threat, a loss or a challenge.⁴ Research alludes to the fact that a crisis is not an illness, but rather an upset in a steady state which arises when obstacles hinder important life goals, and when commonly used coping mechanisms⁵ are not able to attain these goals satisfactorily. The sense of identity of those in crisis often becomes diffused, and such individuals are easily influenced by outside sources. Crisis states usually last from one to six weeks with phases including the period of impact, period of recoil, and the post-traumatic period.⁶ A Harvard Research team has concluded that the outcome of a crisis is not predetermined, and whether an individual will emerge from a crisis stronger

³Lydia Rapoport, "The State of Crisis: Some Theoretical Considerations," Crisis Intervention: Selected Readings, ed. by Howard J. Parad (New York: Family Services Association of America, 1965), pp. 25-26.

⁴Lydia Rapoport, "Crisis Oriented Short-Term Casework," Social Service Review, XLI (March, 1967), pp. 31-43.

⁵Coping mechanisms are those aspects of ego functioning designed to sustain psychic equilibrium by regulating and controlling the intensity of anxiety-producing perceptions of real or fantasied external dangers that involve loss or threat of loss.

⁶Parad, op. cit., p. 293.

or weaker is most often determined by the type of help he gets during the trouble rather than the type of hazard he faces or what kind of personality he has.⁷

Crisis Intervention Theory

Crisis Intervention theory focuses on the personal-social situation that is a psychological illness. This theory has evolved from an increased attention to the ego and its decomposition in the face of external stress. It focuses on the individual's coping mechanisms and sustainment of the ego rather than insight development and understanding of the unconscious conflicts. To be effective, Crisis Intervention proponents have discarded personality reconstruction in favor of the resolution of the crisis and its symptoms in order to further reintegration and recompensation.⁸ In general, Crisis Intervention theory indicates that when an individual successfully handles a crisis situation he gains in maturity, as he often discovers new ways of problem solving that may persist and enhance his ability to handle further crises. The goal, then, of Crisis Intervention theory is one of making the individual become aware of alternate courses in the resolution of his predicament and is oriented toward problem solving rather than treatment of an illness. Thus, the preventive components of short-term intervention seem important.⁹ There are basically two kinds of prevention: (1) primary prevention, which is modifying living conditions in such a way as to prevent disorder; and (2)

⁷Gerald Caplan, An Approach to Community Mental Health (New York: Grune and Stratton, 1961), p. 293.

⁸Grace L. Duckworth, "A Project in Crisis Intervention," Social Casework, XLVIII, (April 1967), pp. 227-231.

⁹Parad, op. cit., p. 285.

secondary prevention in which early diagnosis of the disorder, plus supervision of prompt and effective treatment will prevent the development of more severe symptoms and complications. This avoids having an individual "pushed further into the role of being a patient by institutional and social factors which often seem to operate within state hospital systems or long-term treatment wards."¹⁰ The focus of Crisis Intervention is on an acute situational reaction, which is characterized by a temporary but usually intense emotional disequilibrium. If unrelieved, the situational reaction can lead to serious personality disorders which affect not only the individuals immediately involved, but also on a much larger circle of significant others, thus having important interpersonal dimensions.¹¹ Thus, Crisis Intervention rationally directed and purposefully focused at a strategic time has been shown to be very effective.

Crisis Intervention Treatment

Since Crisis Intervention treatment discourages long-term involvement, it holds dependency to a minimum and encourages the assumption of responsibility as well as keeping treatment oriented to a particular goal. This design is used to minimize implications that the patient is helpless and maximize those factors promoting autonomous functioning. This is done because dependency "is seen as a symptom of crisis rather than inclusively a symptom of a basic psychiatric disorder."¹² It is,

¹⁰Gilbert Weisman, et. al., "Three-day Hospitalization: A Model for Intensive Intervention," Archives of General Psychiatry, XXI (November, 1969), p. 620.

¹¹Gerald Caplan, Principles of Preventive Psychiatry (New York: Basic Book, Inc., 1964), p. 30

¹²Weisman, op. cit., p. 621.

therefore, not a brief version of long-term psychotherapy, but, rather, a unique type of treatment especially appropriate in critical situations. Primary concern is given over to attempting to enable the individual to see and rationally contemplate alternative courses that are open to him in resolving his conflicts. Thus, treatment should be focused on the present situation and on the precipitating threats as well as striving to enlarge the client's sense of autonomy and mastery over the event. The goal of Crisis Intervention treatment then involves helping the patient develop sufficient adaptive capabilities to again be able to cope with problems including intra-psychic and interpersonal conflict, as well as many environmental stresses. Adaptive measures such as making arrangements for treatment subsequent to discharge encourages growth that will hopefully bring about a change from a dependent to a more autonomous mode of behaving and thinking.

Portland Psychiatric Crisis Unit

The Psychiatric Crisis Unit came into existence in May of 1968 through the efforts of Dr. Dwayne Denny and Dr. George Saslow. Due to the tremendous growth in the number of psychiatric patients admitted to various Multnomah County medical facilities, it was a little disputed fact that the community at large needed some special facility to absorb this great influx of patients ill-suited to any other type of hospital care. In the months preceding the opening of the Psychiatric Crisis Unit, Dr. Denny, representing Multnomah County, researched the only other crisis unit of this type on the West Coast in Los Angeles, California. He incorporated the findings of the Los Angeles experience into the present conception of a crisis unit for the Portland municipality.

Funding was achieved through the Multnomah County General Fund.

The Multnomah County Psychiatric Crisis Unit is part of Multnomah County Hospital. Essentially, the significant individuals involved with the operations of the unit are Dr. Saslow, Dean of Psychiatry at the Medical School; Dr. Pauly, Head of the Psychiatric Services including Ward 5A, a long-term inpatient facility located in the Medical School Hospital; and the current psychiatric resident, who works directly on the ward. The Psychiatric Crisis Unit is located on a lower level of the northwest wing at Multnomah County Hospital. The physical facilities include a twenty bed capacity, with facilities for specific treatment modalities, such as shock therapy, group therapy, and recreational therapy. The ward is self-contained, including its own kitchen facilities and a day room.

The Psychiatric Crisis Unit receives all of its admissions through the emergency room of Multnomah County Hospital, where patients are initially screened by a psychiatric resident on rotation at the Multnomah County Hospital from the Psychiatric Service Unit of the University of Oregon Medical School. This resident decides the patients' disposition. Approximately one-quarter of those psychiatric patients entering the emergency room are transferred to the Crisis Unit. When screening indicates the need for Crisis Intervention the patient is asked to admit himself voluntarily. The Psychiatric Crisis Unit is also used as a holding place for individuals awaiting court commitment. Approximately one-third of the patients are court-hold, and two-thirds are self-referrals.¹³ The most commonly used diagnostic classifications are

¹³This information was obtained in an interview with Dr. Johnson, Chief Resident of the Crisis Unit.

neurosis, schizophrenia, drug dependency, alcohol dependency, psychosis, situational stress reactions, organic brain syndrome, seizure disorder, affective disorder, and therapeutic abortion. Approximately seventy-three percent of the patients fall into the first four categories.¹⁴

The staff of the Psychiatric Crisis Unit is comprised of three rotating teams: Alpha, Omega and Ombi. The actual treatment teams are composed of psychiatric nurses, residents, technicians, aides, social workers and occupational therapists. The Ombi team is oriented toward consultation rather than direct treatment, and is available for the needs of the other two teams. There is a high staff-to-patient ratio allowing staff to maintain ready and constant availability. This ratio is necessary for the intense interaction which must take place with the patients and their families for maximum effectiveness during the short-term hospitalization. The responsibility for the patient's treatment, while he is hospitalized, is shared by the multi-disciplinary team. This approach is designed to decrease the dependency upon the doctor as a single deified figure.

Treatment in the Crisis Unit serves a dual purpose. First, it is considered therapeutic for the patient to be physically removed from the stress situation, and secondly, he is in a supportive environment purposely oriented toward helping achieve sufficient strength to cope with his situation when discharged. Much emphasis is placed on the patient's being self-reliant, assuming responsibility for his life, and promoting autonomous functioning. Since patients generally tend to feel overwhelmed and helpless when admitted, self-reliance is

¹⁴This finding was presented at a Psychiatric Grand Rounds Presentation, May 28, 1970, University of Oregon Medical School.

promoted by patient participation in decision making and minimizing institutional restriction. Dependency needs are met by the interest and concern generated by the staff; however, staff members avoid doing things that the patients are felt to be capable of doing by themselves. Group treatment is the primary mode of therapy. The Unit has found audio-video tapes to be of value diagnostically and therapeutically.

When the patient enters the Unit he undergoes a short interview which is videotaped and shown to the entire staff to demonstrate the behavior that was present at the time of admittance. Occasionally the tape is used to show the patient himself how his behavior will be perceived by others, and in this respect the tape is a valuable therapeutic tool. Treatment in general is focused upon resolving recent problems which the patient has found overwhelming. Thus, the patient moves from the past in dealing with what was upsetting him to the future and how he is going to handle it.

Since its conception in May of 1968, the Psychiatric Crisis Unit has filled a vital community need. The original objectives of the Unit are as follows:¹⁵

- A. Crisis Intervention Approach
 - 1. Immediate response
 - 2. Short-term admissions
 - 3. Limited and realistic treatment goals
 - 4. Specific problems and approach
 - 5. "Open-systems" approach
 - 6. Multiple treatment modalities
- B. Community Psychiatry Approach
 - 1. Internal psychiatric needs
 - 2. Psychiatric facility for lower socio-economic patients
 - 3. Court commitment holds for Multnomah County

¹⁵Taken from a Psychiatric Grand Rounds Presentation, May 28, 1970, University of Oregon Medical School.

4. Acute psychiatric facility for community agencies
5. Beginning of Community Psychiatry Program

C. Training Needs of the Department of Psychiatry

1. Additional training resource for psychiatric residents
2. Exposure of medical and nursing students to comprehensive patient care
3. Pertinent training for non-psychiatric residents
4. Training of para-medical professionals
5. Model for acute psychiatric unit in General Hospital

D. Evaluation and Research

1. Ongoing evaluation of effectiveness
2. Follow-up studies

CHAPTER III

REVIEW OF LITERATURE

In recent years innovations in psychiatric treatment methods have increased the variety of community programs used in treating patients and decreased the emphasis on the more traditional long-term institutional treatment practices. As a result of this movement, there is a great need to develop a body of knowledge regarding the post-hospital experience of mental patients.

Aftercare is seen as a means of assisting the mental patient in his adjustment in the community after hospitalization. Attention to aftercare in the United States began in 1955 when it became evident that changes were necessary to reverse the increased number of patients residing in mental hospitals. Important in the development of this phenomenon was the discovery and extensive use of psycho-pharmaceutical drugs, increased staff-to-patient ratios in hospitals, as well as augmented community services such as outpatient clinics, psychiatric crisis units in general hospitals, and day care centers. Thus, these programs were planned with the basic assumption that continuity of service is desirable when a patient leaves the hospital.

Numerous studies in recent years show a patient's ability to adjust in the community after being hospitalized is related almost fully to the treatment and support available in the community rather

than the type or quality of treatment received during hospitalization.¹⁶ In other studies an adequate aftercare plan has also been found to be as important as hospitalization.¹⁷ Studies by MacLeod and Tinnin,¹⁸ as well as Jacobson, et. al.,¹⁹ point out that not all patients use aftercare services following involvement in short-term therapy. Patients in an acute crisis situation are less likely to use aftercare, as Lamb points out, than are patients with chronic characterological pathology who are usually in need of ongoing care.²⁰

Follow-up studies are the means by which aftercare is viewed and are not unusual in mental illness research; however, most follow-up studies have been used to evaluate a certain treatment modality and determine its effectiveness. According to Staudt and Zubin,²¹ the early 20th century showed an increased interest in evaluating the effects of mental illness. They point out that the majority of the studies consisted of following up discharged patients over a period of several years after their release to determine their ultimate disposition. Other

¹⁶Richard H. Lamb, "Chronic Psychiatric Patients in the Day Hospital," Archives of General Psychiatry, XVII (November, 1967), p. 621.

¹⁷Lamb, loc. cit.

¹⁸John A. MacLeod and Lewis W. Tinnin, "Special Service Project," Archives of General Psychiatry, XV (January, 1966), pp. 190-197.

¹⁹G. F. Jacobson, et. al., "The Scope and Practice of an Early-Access Brief Treatment in a Psychiatric Center," American Journal of Psychiatry, XXI (June, 1965), pp. 1176-1182.

²⁰Lamb, loc. cit.

²¹V. M. Staudt and J. A. Zubin, "Biometric Evaluation of the Somatotherapies in Schizophrenia," The Psychological Bulletin, LIV (February, 1957), pp. 171-196.

follow-up studies are concerned with the effectiveness of aftercare services, effects of environmental factors and psychiatric disorders. In summary, it seems the majority of follow-up studies are concerned with measuring the differences in the subjects before and after treatment. Both of these areas have proved extremely difficult to measure because of the inability to adequately measure and describe patient treatment or improvement, and the many past and current environmental influences upon the therapy.

A comprehensive review of the existing literature revealed that there were no studies that deal with defining predictor variables that describe specifically those who will or will not seek aftercare following Crisis Intervention. There are, however, follow-up studies which deal with the development of predictor variables, using psychological, sociological and demographic information for predicting such factors as length of hospitalization, stayers and non-stayers, and effectiveness of treatment. Several scales and indexes have been developed to predict the length of hospitalization. Meeker²² and Anker²³ each separately developed a scale based on the Minnesota Multiphasic Personality Inventory. Johnston and McNeal²⁴ also developed a predictive index based on demographic factors

²²F. O. Meeker, An Exploratory Study of Specific and General Personality Dimensions Related to Length of Hospitalization Among Psychiatric Patients, An Unpublished Masters Thesis, University of California (1958).

²³J. M. Anker, "Chronicity of Neuro-Psychiatric Hospitalization: A Predictive Scale," Journal of Consulting Psychology, XXV (April, 1961), 425-432.

²⁴R. Johnston and B. F. McNeal, "Combined M.M.P.I. and Demographic in Predicting Length of Neuropsychiatric Hospital Stay," Journal of Consulting Psychology, XXVIII (January, 1964), 64-70.

as well as M.M.P.I. data. Lindemann, et. al.,²⁵ and Daniel, et. al.,²⁶ used demographic data collected from routinely recorded information to develop a scale to predict the length of hospitalization. Attempts have also been made to develop predictive indicators for the effectiveness of treatment. Carney, et. al.,²⁷ found items indicative of success to be length of stay, diagnosis of phobic anxiety, age 20-39, living with spouse and admission for deconditioning. Cunningham, et. al.,²⁸ associated success with youth, unmarried, long-term hospitalization and meaningful involvement in vocational training. King, et. al.,²⁹ found the "one most striking predictor" of success was the absence of psychosis at the index admission. Other attempts have been made to find factors which will predict who will stay in therapy. Rubenstein and Lorr³⁰ developed an index of education, occupation and vocabulary which differentiated between those who left before five sessions and those who remained for at least twenty-six.

²⁵J. E. Lindemann, et. al., "The Use of Demographic Characteristics in Predicting Length of Neuropsychiatric Hospital Stay," Journal of Consulting Psychology, XXIII (January, 1959), 85-89.

²⁶Wayne W. Daniel, et. al., "The Use of Demographic Characteristics in Predicting Length of Stay in a State Mental Hospital," American Journal of Public Health, LVIII (May, 1968), 938-947.

²⁷M.W.P. Carney, et. al., "Psychiatric Day Hospital and Community," The Lancet, I (June, 1970), 1218-1220.

²⁸M. K. Cunningham, et. al., "Community Placement of Released Mental Patients: A Five Year Study," Social Work, XIV (January, 1969), 54-61.

²⁹G. F. King, et. al., "A Therapeutic Approach to Schizophrenics of Extreme Pathology: An Operant - Interpersonal Method," Journal of Abnormal Social Psychology, LXI (February, 1960), 276-286.

³⁰E. A. Rubenstein and M. Lorr, "Self and Peer Personality Ratings of Psychotherapists," Journal of Clinical Psychology, XIII (March, 1957), 295-298.

Stieper and Wiener³¹ found, using the M.M.P.I., demographic variables (age, sex, education) and family history, that the best predictor for remaining beyond the fourth session was that his (patient's) mother was a housewife. Frank, et. al.,³² found that those diagnosed as having anxiety or depressive reactions remained in treatment significantly longer than others.

Variables common to the above mentioned reports were used in this study to determine if any would have some predictive value in determining who will and who will not seek aftercare services. There were also three other studies upon which this research was based because they dealt with Crisis Intervention techniques. The first, "Three Day Hospitalization,"³³ was a descriptive study of Crisis Intervention patients relying mainly on demographic and sociological data gathered from patients. From this study the demographic variables were gathered for the present research study. The second study, "Crisis Hospitalization Within a Psychiatric Emergency Service,"³⁴ used a follow-up study employing demographic and sociological variables to assess the effectiveness of Crisis Intervention techniques. Of particular interest to this study was the similar use of demographic variables and "other" variables such as diagnosis, length of

³¹D. R. Stieper and D. N. Wiener, "The Problem of Interminability in Outpatient Psychotherapy," Journal of Consulting Psychology, XXIII (February, 1959), 237-242.

³²J. D. Frank, et. al., "Why Patients Leave Psychotherapy," Archives of Neurological Psychiatry, LXXVII (February, 1957), 283-299.

³³Weisman, op. cit., pp. 621-629.

³⁴Mark W. Rhine and Peter Mayerson, "Crisis Hospitalization Within a Psychiatric Emergency Service," American Journal of Psychiatry, CXXVII (April, 1971), 122-129.

hospitalization, transfer to long term treatment and previous similar experiences. The third study, "Avoiding Mental Hospital Admission: A Follow-up Study,"³⁵ also used a follow-up technique involving three hundred patients to assess the effectiveness of Crisis Intervention. The follow-up process involved much more in terms of data gathering than this study as the researchers used an interview, two scales of adaptation (SAI and PES) and a crisis management schedule six months after discharge.

The exploratory nature of these studies suggests the need for further study in the area of Crisis Intervention follow-up. Also, because of the disagreement concerning those factors which can be considered as predictors, it was decided to use a sufficiently large number of variables against the criteria with the hope that some would hit the "target." This was done because none of the studies concerned with Crisis Intervention label or hypothesize as to possible predictor variables in relation to who will seek aftercare treatment. Thus, all possible predictors, based on prior predictive follow-up studies, were included to insure that all potentially important variables were studied. It follows that a few variables would prove significant by chance fluctuation alone, and therefore it is imperative that a cross validation of the findings be made.

This study is concerned with developing "predictor variables" rather than evaluating the effectiveness of treatment. "Follow-up" is used in this thesis to distinguish between two groups in the sample rather than to evaluate a particular treatment modality. This thesis is meant to examine

³⁵Donald G. Langsley, et. al., "Avoiding Mental Hospital Admission: A Follow-up Study," American Journal of Psychiatry, CXXVII (April, 1971), 129-130.

the hypothesis that it would be possible to predict what patients would avail themselves of aftercare services.

CHAPTER IV

OBJECTIVES

This study was designed with the following objectives in mind:

(1) to test the following null hypothesis: there are no significant differences between those individuals who attempt to gain aftercare treatment and those who do not attempt to gain aftercare treatment (aftercare in this study is defined as self-initiated contact for continued treatment, following discharge from the Crisis Unit, for the types of problems identified while the patient was in the Crisis Unit); and (2) to give the Psychiatric Crisis Unit at Multnomah County Hospital some objective data from which to study its program as well as to attempt to refine and add to the knowledge of the Crisis Unit staff about its current patient population.

To meet these objectives attempts were made to identify specific psychological, sociological, and demographic factors which may be common to the group of patients who seek aftercare treatment after they leave the Crisis Unit as opposed to the group of patients who do not seek aftercare treatment.

Factors such as age, sex, race, socio-economic status, referral planning and raw scores on psychological test scales were considered. These findings may also provide information which will enable Crisis Unit personnel to refine their thinking about what types of patients use aftercare services and whether the Unit should include aftercare as an integral part of its program.

CHAPTER V

METHODOLOGY

Procedure

The procedure used for the collection of data in this study involved two shifts of two researchers each shift, for three hours, four days a week. Originally, two researchers attended the problem and approach meetings to obtain the names of new voluntary patients for use as potential subjects in this study. However, it was found that the names of new voluntary patients were just as accessible by referring to a roster located in the nurses' station. This saved the researchers valuable time and manpower which could be used in testing instead of attending these meetings which were primarily geared to discussing individual patient problems. Thus, the researchers obtained the names of new voluntary patients from the roster, which gave the necessary information that differentiated the voluntary patient from the court-hold and therapeutic abortion patients. The team members were also consulted as to the patient's status and the ability to participate in the study. Each voluntary patient was approached by one of the four researchers who introduced himself as a graduate student from the School of Social Work at Portland State University and asked the patient if he would be interested in listening to a proposed research study. If the patient answered yes, the researcher explained in general terms what the study involved: (1) it is a study about the operations of the Crisis Unit in rendering services to the patient; and

(2) it was further explained that the study required taking the M.M.P.I., filling out a special questionnaire, and one month following patient discharge answering some further questions by telephone or personal contact. No attempt was made at this time to explain to the patient the type of information that would be requested of him in the one-month follow-up interview. This was done to minimize any effect the study itself might have on determining the actions taken by the individual with regard to aftercare after discharge.

After explaining these general areas of study, the patient was asked if he would be interested in participating in this study. If the patient consented to being a participant, he was first given the M.M.P.I. This was given to each subject to be completed within two days. If it was not completed in this time the individual was asked if he planned on finishing it; if not, the M.M.P.I. was taken and the subject released from his commitment to this study. If, however, the subject wished further time to complete the test, this was granted. However, the researchers found that very often this procedure was cumbersome and slow. Therefore, the researchers approached Dr. Denny and requested a block of time twice a week in which they could conduct group testing of the M.M.P.I. This was done to accelerate completion of the M.M.P.I. and allow more opportunity to gather a larger sample. The researchers found this approach to be somewhat better as the participants felt greater pressure to complete the test while being monitored. However, this approach was difficult as far as manpower was concerned in that these time periods began to conflict with other school commitments, and the Psychiatric Crisis Unit began altering its schedule so that the patients were less accessible at these times. The researchers also attempted to secure additional

manpower from the Medical Psychology Department, but this request was not acted upon. Noting the above difficulties, the researchers returned to depending on the patient to be motivated to finish on his own; the only difference being the researchers gave the patient the M.M.P.I. and instructed him that they would collect the test at a mutually agreed upon time.

The special questionnaire was administered as close to the patient's discharge date as possible.

The follow-up was made by personal contact or telephone interview one month later. At this time information was gathered by asking the subject to answer certain questions about aftercare since leaving the Psychiatric Crisis Unit.

Sample Section

Approximately two-hundred subjects contacted at the Psychiatric Crisis Unit agreed to participate while fifty subjects declined to participate in the research project. Of those who consented, seventy-one partially or fully completed the necessary information. The sample used to test the null hypothesis of this study consisted of fifty-one voluntary Crisis Unit patients who consented to participate in the study and for whom complete data was available. Each subject in the sample completed the M.M.P.I., a sociological questionnaire and a follow-up interview. The information gathered from these instruments enabled the researchers to separate the subjects into two groups: those who sought aftercare treatment ($n=33$) and those who did not ($n=18$). The aftercare subject was defined as one who has initiated contact with a helping agency and carried through with continued treatment either by being on a waiting list or having seen someone at least twice. The no-aftercare subject was

defined as one who has not initiated or made only one contact for continued treatment upon leaving the Crisis Unit.

Patients using only the physical facilities of the Unit such as court-hold patients and those having therapeutic abortions were excluded as part of the sample. In most cases they were not considered by the Crisis Unit to be a part of the treatment program. The Psychiatric Crisis Unit as a rule does not offer treatment services or referral and follow-up planning for these patients.

Caution must be exercised, as in any study, in making any broad generalizations from the results. The reason for this is that every precaution could not be taken to avoid bias in the sample. Possible response bias may have occurred since this sample consists only of patients who were willing to participate and who completed the necessary information. There is an exclusion from the sample of those who agreed to participate but only partially completed the information. Therefore, the researchers attempted to describe this group in order to recognize possible limitations in the representativeness of the sample. This group has been designated as the "lost" group. Out of this group ten completed both M.M.P.I. and the sociological questionnaire, while nine additional subjects completed the M.M.P.I. only, and one completed the questionnaire only. Since the primary concern of this research was to determine the differences between the aftercare and no-aftercare groups, there was no attempt to compare the lost group with these other two groups.

Other possible limitations which could influence the representativeness of the sample and eventually lead to a response bias were: (1) there were appreciable differences between the fifty-one subjects in our sample and the more than two-hundred subjects the researchers contacted but who

did not take part in the study; (2) the sample was random time, in other words, the researchers gathered as many subjects as possible in a limited period of time (five months); (3) the data was gathered during the summer and fall months, July 1, 1970, through November 1, 1970, (it is possible the sample could vary during other seasons); and (4) follow-up information was obtained as close to one month after each patient's discharge as possible or between August 1 and December 15, 1970.

A review of the sample (see Appendix C) shows a predominantly white population with twice as many females as males. On a differentiated marital status scale--married, single, divorced, separated, and widowed--the majority of the subjects fell into either the single or married category. Basically, it seemed the sample was made up of young subjects falling in the age range of fifteen to thirty, having attained at least a high school education or some higher education. It was noted that the largest religious category was Protestant. The subjects came from a lower-middle class socio-economic background, and over half were unemployed. They usually lived in private homes and with relatives prior to and after their stay in the Crisis Unit. When asked about similar experiences in family and prior personal experiences such as those which brought them to the Crisis Unit, it was found that as many individuals and their families had had similar experiences as those who had not. On a mood scale ranging from zero to one hundred, with zero representing the worst you could have felt and one hundred representing the best you could have felt, the average score was eighteen upon entering the Crisis Unit and sixty-nine upon leaving the Crisis Unit. Using the Crisis Unit's diagnostic categories, it was found that psychosis ranked the highest (thirty-two percent), followed by depression, which was twenty-four percent of the sample. The

average length of stay in the Crisis Unit for both groups combined was seven days. It was noted that twenty-eight percent were transferred to long-term treatment directly from the Crisis Unit, while one-third of the total sample was rehospitalized after leaving the Psychiatric Crisis Unit. Specific follow-up information cannot be generalized here but will be covered in the analysis of each group. Also, the "lost" group will be described later.

Testing Instruments

All subjects were administered the Minnesota Multiphasic Personality Inventory and a special questionnaire while at the Psychiatric Crisis Unit, either individually or in small groups. The researchers attempted to administer the Minnesota Multiphasic Personality Inventory as closely as possible to each patient's arrival at the Psychiatric Crisis Unit and the special questionnaire as closely as possible to his discharge date. A follow-up questionnaire was administered to the subjects approximately one month after discharge from the Psychiatric Crisis Unit.

Extreme care was taken by the researchers during all testing to be sure that the subjects understood the nature of their contract with the researchers, the basic concept of this study and directions as to how to complete the M.M.P.I. and questionnaire.

The Minnesota Multiphasic Personality Inventory was selected because it measures several important phases of personality. The M.M.P.I. has been developed to differentiate between those who do and do not have emotional and/or adjustment problems in a wide variety of settings and can thus act as an excellent predictor and screening device.³⁶ For the

³⁶Oscar Krisen Buros, The Fifth Mental Measurements Yearbook, (New Jersey: The Gryphon Press, 1959) pp. 158-168.

purpose of this study we selected ten scales. It was felt that the following scales, individually and/or collectively, would be important in determining whether or not the individual would seek further help.

Scale 1: Ego-strength - Ego-strength, when high, implies ability to deal with the environmental pressures facing one, the motivational pressures prompting one to various conflicting actions, and the environmental pressures acting to disorganize and disrupt the usual patterns of behavior. It means sufficient control to deal with others; to gain their acceptance and create favorable impressions upon them. It means using available skills and abilities to full advantage. It means the person can work within the cultural, social, and personal limits of ethics and self restraint. Low ego-strength implies deficiencies of self-restraint, environmental mastery or cognitive awareness that limit the person's ability to deal with stressors, unfamiliar problems, or hardships.³⁷

Scale 2: Maladjustment - "This scale is composed of all items that appear in common on three or more of the basic clinical scales. To the extent that all clinical measures in this profile are sensitive to the degree of illness, these particular items are most heavily saturated with the common source of variance in the M.M.P.I. profile."³⁸

"The rationale that follows is that if any one item appeared on another of the scales, it might be related to some general dimension that underlay the scales on which it appears."³⁹

³⁷G. W. Dahlstrom and G. S. Welsch, An M.M.P.I. Handbook (Minneapolis: University of Minnesota Press, 1960), p. 356.

³⁸Ibid., p. 282.

³⁹G. W. Dahlstrom and G. S. Welsh, Basic Readings in M.M.P.I. (Minneapolis: University of Minnesota Press, 1956), p. 365.

Scale 3: Degree of Panic - This scale was used to measure response conformity. High scorers are characterized as moody, changeable, dissatisfied, opinionated, talkative, restless, hysterical; while low scorers are sensitive, calm, dependable, honest, simple, and moderate.⁴⁰

Scale 4: Depression - Depression is the second scale that was developed primarily to empirically measure..."The degree in depth, of the clinical symptom pattern of depression."⁴¹ It is described generally as: a pessimistic outlook on life and the future generated by a lack of interest, a feeling of apathy; a feeling of hopelessness and worthlessness manifested in the rejection of all happiness and personal worth; a feeling of being incapable of doing satisfactory work and the inability to control oneself; a retarding of thought and action to the point of denying basic impulses; and, often, frustrations and discouragements leading to contemplation of death and/or suicide.⁴²

Scale 5: Denial of Symptoms - The content of the items in this scale are centered on statements concerning poor interpersonal relations, feelings of hostility, and feelings of inferiority. The items were scored on the basis of the client's denial of the statement's validity towards himself.⁴³

Scale 6: Dependency - No information available; selected because the name of the scale sounded appropriate.

⁴⁰Robert C. Carson, An Introduction to M.M.P.I. Interpretation (Duke University: Duke University Press, 1960), pp. 1-21.

⁴¹Dahlstrom and Welch (1960), op. cit. p. 55.

⁴²Carson, loc. cit.

⁴³Jerome Fisher and Kenneth B. Little, "The New Experimental Scales of the M.M.P.I.," Journal of Consulting Psychology, XXII (August, 1968).

Scale 7: Intellectual Efficiency - This is the maximum possession of intellectual capacities for each individual. "High scorers are characterized by dependability, intellectual clarity, persistence, and planfulness; all these are features that contribute to greater achievement..."⁴⁴

Scale 8: Degree of Panic or "K" Scale - The "K" scale is used to measure personal defensiveness, guardedness, or inhibition of personal effects and troubles.⁴⁵ High scores indicate a person who is unable to deal with any suggestion that he is insecure, that he has difficulties in broad relationships, or that he is not in control of his life. He is usually intolerant in accepting the non-conformist behavior. He is very concerned about his own involvement, but is insightless concerning his own effects on others. However, in a clinical situation he would be very hesitant to reveal himself, but does, however, endeavor to make a good impression. On the other hand, a low score on this scale would indicate a person who has caustic manners, is suspicious of other's motivation, and exaggerates the ills of the world.⁴⁶ The "K" scale was developed "to reflect more than test-taking attitudes; it can be indicative of a life-style which is a stable interpersonal characteristic related to a person's social attitudes towards tolerance and acceptance."⁴⁷

Scale 9: Self-sufficiency - Self-sufficiency or certainty refers to the degree of assertiveness concerning how the person feels and displays

⁴⁴Dahlstrom and Welch, (1960), op. cit., p. 268.

⁴⁵Ibid., p. 50.

⁴⁶Carson, loc. cit.

⁴⁷Carlos A. Cuadra and Charles F. Reed, An Introduction to the M.M.P.I., A Presentation Given at Clinical Psychiatric Service Veterans Administration Hospital, Downey, Illinois (1954), pp. 1-26.

his capacity for meeting a situation. The essential problem is to what degree this is a generalized tendency.⁴⁸

Scale 10: Socio-economic Status - This scale is based on individual achievement, not inherited status.

The above scales which identify personality factors were used to explore: (1) if there is a significant difference between the scores on each scale for those individuals who seek further treatment as opposed to those who do not; and (2) if there is a significant difference between the collective scores received on all scales of those individuals who seek further treatment as opposed to those who do not seek further treatment.

It was also thought that several questions seemed to be important in attempting to differentiate those individuals who seek further help from those who do not. The researchers, therefore, designed a special questionnaire for this study consisting of twenty-two items covering demographic, social, economic and emotional factors (see Appendix A).

Demographic information was used to: (1) identify and describe the patient population as to age, sex, race, marital status, occupation, level of education, etc; (2) identify those demographic factors which may be significant in determining a difference between the two groups; and (3) determine the patients socio-economic status based on a technique employed by Myrianthopoulos and French.⁴⁹

The social information was used to: (1) determine if the individual

⁴⁸W. N. Wolf, "Certainty Generality and Relation to Manifest Anxiety," Journal of Abnormal Social Psychology, L (January, 1950), 60.

⁴⁹Ntinos C. Myrianthopoulos, Ph.D., and Katherine S. French, Ph.D., "An Application of the U.S. Bureau of the Census Socio-economic Index to a Large, Diversified Patient Population," Social Science and Medicine, II (1968), 283-299.

or anyone in his immediate family had had any similar experiences to the ones he is presently experiencing; and (2) identify the average socio-economic status and the type of housing.⁵⁰

A mood scale from zero to one hundred was also included in the questionnaire with zero being the worst you have ever felt and one hundred being the best; the questionnaire was given upon discharge. (The individual was asked to rate himself as to how he felt upon admission to the Crisis Unit as well as at the time of discharge.) This scale was used to determine how the individual perceived his own emotional well-being upon leaving the Crisis Unit in relation to how he felt upon entering the Crisis Unit.

The follow-up interview consisted of six items. These were questions used to find: (1) the nature of the referral, if any, from the Crisis Unit; (2) the amount of personal involvement in making a follow-up plan; (3) whether or not the individual actually continued in some type of treatment after leaving the Crisis Unit; and (4) with whom he was living during the time of the interview. This last area of interest was explored to see if any significant environmental changes had taken place since discharge.

⁵⁰This information was supplied by Dr. Ira Pauly, Director of the Psychiatric Services.

CHAPTER VI

ANALYSIS OF DATA

The basic hypothesis of this thesis was that there would be psychological, sociological and demographic variables which could be used to discriminate between those individuals who sought aftercare treatment as opposed to those who did not seek aftercare treatment after leaving the Psychiatric Crisis Unit.

Subsequent to gathering data from seventy-one patients, it was found that there were three distinct groups: aftercare, no-aftercare and lost. Out of the total population of seventy-one subjects, twenty individuals, the lost group, failed to complete some portion of the total necessary information, and it was felt important to describe this group. The sample used to test the hypothesis consisted of the fifty-one subjects comprising the aftercare and no-aftercare groups.

The aftercare group was predominantly female (twenty-two females and eleven males) and white. On a differentiated marital status scale--married, single, divorced, separated, and widowed--a larger percentage of the subjects were distributed between the single and married categories with a smaller percentage in the separated and divorced categories. They were primarily between the ages of twenty-one and twenty-five; forty per cent⁵¹ had a high school education and sixty percent were unemployed. Over

⁵¹Percentages cited are the largest and/or most significant in that particular variable.

half the aftercare subjects were either Protestant or showed no religious preference. More than half this group lived in private homes and close to one-third lived in apartments. Of the individuals involved, over fifty percent of the subjects and their families had had prior experiences similar to the ones that brought them to the Crisis Unit. The largest diagnostic designation in this group was psychosis (forty percent), and the average length of stay at the Crisis Unit was eight days.

On the mood scale the average aftercare group score was nine upon entering the Crisis Unit and sixty-five upon leaving.

Follow-up information on the aftercare group revealed that with the majority of patients (sixty-one percent) there was agreement between the patient and the Crisis Unit that a referral had been made, and in nine percent there was agreement that no referral had been made. An even larger number of the patients (seventy percent) personally made plans for treatment while at the Crisis Unit, while all subjects contacted a helping service in person after leaving the Crisis Unit. Ninety-seven percent were continuing with treatment approximately one month after discharge from the Crisis Unit.⁵² At the time the follow-up information was gathered, it was found that sixty-seven percent of the subjects were continuing in treatment at a public agency. Thirty percent of the patients were transferred, on a voluntary basis, from the Crisis Unit directly to long-term treatment, while forty-two percent were rehospitalized after leaving the Crisis Unit. These subjects, when contacted one month after discharge, met the requirements for the aftercare group in that they had made at least two visits to a helping agency before being rehospitalized.

⁵²See footnote 2, page 8.

A majority of the subjects (over sixty percent) lived with relatives both prior to and after leaving the Crisis Unit.

The no-aftercare group was predominantly female (twelve females and six males) and white, with thirty-nine percent of the subjects having had at least a high school education. There was no significant difference between those who were employed and those who were unemployed. On the differentiated marital status scale close to one-half of the subjects were married (forty-five percent), while the other half of the subjects were either single (twenty-eight percent) or divorced (twenty-two percent). The modal age range was between forty-one and forty-five. Over fifty percent of this group were Protestant and twenty-three percent showed no religious preference.

More than sixty percent lived in private homes, either rented or owned. Forty-four percent of the patients had not had prior experiences similar to the one that had brought them to the Crisis Unit, while twenty-eight percent had had similar prior experiences, and twenty-eight percent did not respond. It was also noted that seventy-eight percent stated that their families had not had similar experiences. The predominant diagnostic designation was depression (thirty-nine percent) with psychosis and behavior/character disorders showing the next greatest frequency of seventeen percent each. The average length of stay at the Crisis Unit was six days. The average mood scale score was twenty-four upon entering the Crisis Unit and seventy-six upon leaving.

Follow-up data on the no-aftercare group revealed that there was agreement that a referral had been made in only thirty-three percent of the cases, and in fifty percent of the cases there was agreement that no referral was made. Seventy-eight percent of the subjects did not person-

ally make plans for treatment while at the Crisis Unit. Sixty-seven percent did not contact a helping service after leaving, but of those that did contact a helping service none continued with any type of treatment for more than one visit. Out of this group twenty-two percent were transferred, involuntarily, to long-term treatment directly from the Crisis Unit, while only seventeen percent were rehospitalized after leaving the Crisis Unit. These subjects, when contacted one month after discharge, did not meet the requirements for being placed in the aftercare group in that they had not made more than one visit to a helping agency before being rehospitalized.

Most of the patients (over seventy percent) lived with relatives prior to coming to the Crisis Unit; however, only fifty-six percent lived with relatives after leaving the Crisis Unit.

Similarities

The aftercare group and no-aftercare group were both predominantly female, white, and had high school educations or above (see Figure 1 page 47). It was also found that both groups tended to live with relatives before entering the Psychiatric Crisis Unit. The socio-economic score for both groups was essentially the same, 4.97 for the aftercare group and 4.75 for the no-aftercare group.⁵³

Differences

Marital status and age differed between the two groups in that a larger percentage of the no-aftercare group was married, older, and

⁵³These scores were based on Occupation, Education, and Annual Income using Ntinos C. Myrianthopoulos, Ph.D. and Katherine S. French, Ph.D. "An Application of the U. S. Bureau of the Census Socioeconomic Index to a Large, Diversified Patient Population." Soc. Sci. and Med., 1968, Vol 2, pp. 283-299, the Pergamon Press, Great Britain.

seventy-three percent lived in private homes; while the aftercare group had an equal distribution between those single and married on the differentiated marital status scale and tended to be younger. Fifty-two percent lived in private homes and twenty-seven percent lived in apartments (for marital status, age, and housing differentiation see Figures 2, 3, and 4, respectively).

In the aftercare group there were thirty-three percent Protestant, and twenty-four percent showed no religious preference; while in the no-aftercare group, over half were Protestant (fifty-six percent), with twenty-two percent not responding (see Figure 5). A larger percentage (over sixty percent) of the aftercare group were unemployed as compared to thirty-nine percent unemployed in the no aftercare group.

There was a notable difference between the aftercare group and the no-aftercare group in that seventy-eight percent of the no-aftercare group families had not had similar prior experiences, while fifty-two percent of the aftercare group families had had similar prior experiences (see Table I).

TABLE I
SIMILAR EXPERIENCES IN THE FAMILIES OF THE
AFTERCARE AND NO-AFTERCARE GROUPS

	<u>Aftercare Group</u>	<u>No-Aftercare Group</u>	<u>Total</u>
YES	17 (52%)	4 (22%)	21
NO	11 (33%)	14 (78%)	25
NO RESPONSE	5 (15%)	0	5
	<hr/>	<hr/>	<hr/>
	33 (100%)	18 (100%)	51

A greater percentage in the aftercare group had had prior similar

personal experiences than those in the no-aftercare group. (see Table II.).

TABLE II
PRIOR PERSONAL EXPERIENCES IN THE AFTERCARE
AND NO-AFTERCARE GROUPS

	<u>Aftercare Group</u>	<u>No-Aftercare Group</u>	<u>Total</u>
YES	16 (49%)	5 (28%)	21
NO	10 (30%)	8 (44%)	18
NO RESPONSE	7 (21%)	5 (28%)	12
	<hr/>	<hr/>	<hr/>
	33 (100%)	18 (100%)	51

The two groups differed diagnostically with the aftercare group having thirty-nine percent psychosis and fifteen percent depression, and the no-aftercare group having seventeen percent psychosis, thirty-nine percent depression, and seventeen percent with behavior/character disorders (see Figure 6.). Due to the Crisis Unit's orientation to short-term treatment, it was interesting to note, although not statistically significant,⁵⁴ that the average length of stay for the no-aftercare group was six days while that for the aftercare group was eight days, a difference of two days. The mood scale was administered to the subjects upon discharge and was used as a subjective measure of how the patient felt upon entering and leaving the Crisis Unit. It was found that the aftercare group rated themselves much lower than the no-aftercare group upon entering and leaving; however, the aftercare group perceived themselves as having improved their mood by a greater amount as measured by the difference between the before and after scores. (see Table III.).

⁵⁴ $t = 1.64$ ($p > .10$).

TABLE III
MOOD SCALE: AVERAGE SELF-RATINGS BEFORE
AND AFTER TREATMENT

	<u>Aftercare Group</u>	<u>No-Aftercare Group</u>
BEFORE	8.80	25.90
AFTER	64.50	72.10
DIFFERENCES	55.70	46.20

In sixty-one percent of the aftercare group and thirty-three percent of the no-aftercare group, both the patient and the Crisis Unit perceived a referral as having been made; therefore, it can be seen that in seventy percent of the aftercare group and eighty-three percent of the no-aftercare group there was a clear agreement between the patients and the Crisis Unit as to future plans for the patients. However, in thirty percent of the aftercare group and seventeen percent of the no-aftercare group, the Crisis Unit and the patients did not agree on future plans. Nine percent of the patients in the aftercare group perceived no referral being made when the Crisis Unit stated that one had been made. In twenty-one percent of the aftercare group, the patients perceived that a referral had been made when the Crisis Unit stated that it had not. In seventeen percent of the no-aftercare group the patients perceived a referral as having been made when the Crisis Unit stated that it had not. (see Table IV).

Before a patient is discharged from the Crisis Unit he is asked to become an active participant in any future referral plans if the Crisis Unit considers it necessary. Seventy percent of the aftercare group and twenty-two percent of the no-aftercare group personally made referral plans (see Table V).

TABLE IV

PATIENT-CRISIS UNIT PERCEPTIONS OF
REFERRAL PROCESS

	<u>Aftercare Group</u>	<u>No-Aftercare Group</u>	<u>Total</u>
BOTH SAY "YES"	20 (61%)	6 (33%)	26
BOTH SAY "NO"	3 (9%)	9 (50%)	12
CU SAYS "YES"	3 (9%)	0	3
PATIENT SAYS "NO"	7 (21%)	3 (17%)	10
CU SAYS "NO"			
PATIENT SAYS "YES"			
	33 (100%)	18 (100%)	51
<hr/>			
CLEAR REFERRAL EITHER "YES" OR "NO"	23 (70%)	15 (83%)	38
UNCLEAR REFERRAL PATIENT-CRISIS UNIT DISAGREE	10 (30%)	3 (17%)	13
	33 (100%)	18 (100%)	51 (100%)

TABLE V

DID YOU PERSONALLY MAKE PLANS FOR
AFTERCARE TREATMENT?

	<u>Aftercare Group</u>	<u>No-Aftercare Group</u>	<u>Total</u>
YES	23 (70%)	4 (22%)	27
NO	9 (27%)	14 (78%)	23
UNCLEAR	1 (3%)	0	1
NO RESPONSE	0	0	0
	33 (100%)	18 (100%)	51 (100%)

The variable used to differentiate the two groups was whether or not the subject continued with further treatment for the types of

problems that had brought him to the Crisis Unit. It was found that ninety-seven percent of the aftercare subjects and eleven percent of the no-aftercare subjects said they were continuing with further treatment.⁵⁵

Forty-three percent of the aftercare group and seventeen percent of the no-aftercare group were rehospitalized within one month after dis-

TABLE VI
REHOSPITALIZATION AND TRANSFER TO LONG-TERM
TREATMENT OF THE AFTERCARE AND
NO-AFTERCARE GROUPS

	<u>Rehospitalization</u>			
	<u>Yes</u>	<u>No</u>		<u>Total</u>
AFTERCARE	14 (42.5%)	19 (57.5%)		33 (100%)
NO-AFTERCARE	3 (17%)	15 (83%)		18 (100%)
	<u>Transfer to Long-term Treatment</u>			
	<u>Yes</u>	<u>No</u>	<u>No Response</u>	<u>Total</u>
AFTERCARE	10 (30%)	23 (70%)	0	33 (100%)
NO-AFTERCARE	4 (22%)	13 (72%)	1 (6%)	18 (100%)

⁵⁵In the aftercare group, one subject, when contacted one month after discharge from the Crisis Unit, was no longer in treatment; however, he met the requirements for the aftercare group. The subject had made at least two aftercare visits to a helping agency. In the no-aftercare group, two subjects said they were continuing with treatment. However, on closer examination, it was found that one subject was committed to a state mental institution over one month after discharge and was not continuing with any treatment when contacted. The other no-aftercare subject had a private family psychiatrist but was not utilizing this service upon the one-month follow-up interview. Therefore, these two subjects did not meet the aftercare group criteria even though they perceived themselves as continuing with further treatment.

charge from the Crisis Unit. Those subjects that were rehospitalized in the aftercare group had continued with some form of treatment before being rehospitalized, whereas those subjects in the no-aftercare group had not. Thirty percent of the aftercare group voluntarily committed themselves to a long-term treatment service, while twenty-two percent of the no-aftercare group were court committed (see Table VI.).

The purpose of this research was to use the M.M.P.I. scales only as a means of determining significant psychological differences between the aftercare group and the no-aftercare group. It was hoped that any significant differences would help in discriminating between those patients who would seek further help as opposed to those who would not (see Table VII).

TABLE VII
MEAN SCORES ON M.M.P.I. SCALES FOR THE AFTERCARE
AND NO-AFTERCARE GROUPS

	1	2	3	4	5	6	7	8	9	10
AFTERCARE GROUP	36.79	16.21	15.55	29.39	12.24	34.85	23.36	8.85	12.33	55.21
NO- AFTERCARE GROUP	36.00	14.11	11.55	26.89	11.50	30.17	23.39	7.00	15.50	53.11

1. ego strength, 2. maladjustment, 3. degree of panic, 4. depression, 5. denial of symptoms, 6. dependency, 7. intellectual efficiency, 8. social alienation, 9. self-sufficiency, 10. socio-economic status.

Using a discriminant analysis on the ten M.M.P.I. scales, it was found that there were no significant differences between the aftercare group and the no-aftercare group on the individual scales (see Table VII). However, when the scales are examined collectively, there was a trend in

a predictable direction. On all the scales except the Self-Sufficiency scale the aftercare group scored higher than the no-aftercare group. The no-aftercare group scored lower in all categories except Self-Sufficiency, where they scored higher than the aftercare group. These results would seem to indicate that the aftercare group tended to view themselves as "needing" more help. The Self-Sufficiency scores in both the aftercare and no-aftercare groups would further support this trend. This trend is more clearly seen using a discriminant function (see Appendix D) which showed that seventy-three percent of the subjects were placed in the proper group (see Table VIII).

TABLE VIII

CLASSIFICATION UTILIZING A DISCRIMINANT FUNCTION
ON M.M.P.I. DATA FROM THE AFTERCARE
AND NO-AFTERCARE GROUPS

	<u>No-Aftercare Group</u>	<u>Aftercare Group</u>	<u>Total</u>
No-Aftercare Group	12	6	18
Aftercare Group	8	25	33

When the discriminant function was used, twelve out of the eighteen no-aftercare subjects were correctly placed in the no-aftercare group, and twenty-five out of the thirty-three aftercare subjects were correctly placed in the aftercare group. Therefore, thirty-seven out of fifty-one (seventy-three percent) subjects were correctly placed.

Those twenty individuals who only partially completed the necessary information comprised the lost group. It was considered important that this group be described, for they may represent a portion of the Crisis Unit's population that may not be represented in the sample used in this study. Since the information on this group was only par-

tially completed there was a high "no-response" category, thus the data must be viewed with caution.

The lost group was predominantly female (thirteen females and seven males) and white, with forty-five percent of the group being single. In eighty percent of the cases the ages ranged between fifteen and thirty, with the modal age range being between twenty-six and thirty. Twenty percent had a high school education, with another twenty percent having a higher education; however, thirty percent of this group did not respond on this question. There was also a high no-response on the question concerning religion (fifty-five percent).

Forty percent were unemployed and twenty-five percent were employed, with thirty percent giving no response. The majority (forty-five percent) of the lost group lived in apartments, with twenty-five percent giving no response. Of the individuals involved, forty percent had no similar familial experiences, and thirty percent did not respond. The diagnostic designation was twenty-five percent psychosis, twenty percent drug addiction, and fifteen percent depression. On the mood scale, the average score was twenty-eight upon entering the Crisis Unit and sixty-four upon leaving. The average length of stay at the Crisis Unit for this group was six days. The lost group was found to be in a socio-economic status level characterized by an annual income of between \$4,000 and \$5,000. They had at least a high school education, and, if they were employed, they would be either domestic or other service workers.

The intention of this study was not to compare the lost group with the aftercare and no-aftercare groups. However, it was felt that since nineteen out of the twenty subjects in the lost group fully completed the M.M.P.I. it would be interesting to compare these three groups, as a

tangential issue, on M.M.P.I. mean scores. It should also be noted, in order to give the M.M.P.I. mean scores relevance, since no norms were used, the only way the group could be described on a psychological basis was to compare and contrast the significant individual differences or trends between this group and the aftercare and no-aftercare groups.

Comparing the lost group to the aftercare group and the no-aftercare group on the M.M.P.I. scales, it was found that there was no significant difference between the individual scales among the three groups. However, examining the scales collectively, there seems to be a trend that shows that the lost group was most like the aftercare group (see Table IX).

TABLE IX

MEAN SCORES ON M.M.P.I. SCALES FOR THE LOST,
AFTERCARE, AND NO-AFTERCARE GROUPS

	1	2	3	4	5	6	7	8	9	10
NO-AFTERCARE GROUP	36.00	14.11	11.55	26.88	11.50	30.16	23.38	7.80	15.50	53.11
AFTERCARE GROUP	36.79	16.21	15.55	29.39	12.24	34.85	23.36	8.85	12.33	55.21
LOST GROUP	34.75	16.55	14.40	29.45	11.90	33.65	23.35	8.50	13.25	52.70

FIGURE 1

FIGURE 2

MARITAL STATUS

FIGURE 3

FIGURE 4

HOUSING PRIOR TO
ENTERING CRISIS UNIT

FIGURE 5

FIGURE 6

DIAGNOSIS

CHAPTER VII

DISCUSSION

In research, especially exploratory research which may be continued by other researchers, it is important to examine and re-evaluate the research design, its limitations and unexpected and extraneous factors. In a follow-up study, methodological problems are as important as the follow-up itself.

Many M.M.P.I.'s were not completed for the following reasons: patients left before finishing; patients were not emotionally or mentally stable enough to attempt to start and/or complete it; some changed their minds about participating in the study; the M.M.P.I. is a long test; it was easily lost or misplaced; there were a limited number of booklets; a number of individuals kept the test booklet an extended period of time, putting in question the validity of the test; and a number of patients were unwilling to take the M.M.P.I. because they had recently taken it.

Administration of M.M.P.I.

In an attempt to find the most efficient means of administering the M.M.P.I., three different approaches were used during the course of our research. These approaches were tried in the following order: (1) non-time individual testing; (2) time-limited and supervised group testing; and (3) time-limited individual testing. The latter method was found to be most effective for our study.

Questionnaire

Several of the questionnaires were lost; this proved to be the main difficulty with the use of this instrument.

In retrospect, the researchers see little relevance in the question concerning the place of birth and would have inserted instead a question concerning where a person was presently residing. Another meaningful question the researchers could have included would involve the patient's perception of whether or not he needed help. Alienation factors were eliminated from the analysis due to lack of computer time. The validity of the mood scale was in question because the subjects were asked to rate themselves in retrospect.

Follow-up Difficulties

Although each individual patient had committed himself to the complete study, increased resistance seemed to be encountered in patients when they were followed up. Because of the difficulty in locating the sample subjects, some were contacted over one month after leaving the Crisis Unit. Many subjects left no forwarding addresses when they moved. In brief, follow-up difficulty occurred because the sample population, for the most part, was extremely mobile and transient.

As in any study "selective forgetting" cannot be ignored as a possible limitation in response to certain questions. Defenses such as repression and denial may make it difficult for the patient to remember certain parts of his experiences at the Crisis Unit in retrospect.

Environmental Factors Influencing the Collection of Data

Environmental factors--fluctuating times for group meetings, frequent change of the Unit's schedule, the emotional status of the

patients, occupational therapy, visiting hours, and staff meetings--limited the amount of data collected.

Inefficiencies and Limitations in Research

During the course of the research there were changes in objectives, design and hypothesis. At times there was a general lack of organization and coordination in efficient gathering of data because: (1) There was a lack of manpower and time necessary to have a larger sample; (2) the researchers could not cover the Crisis Unit seven days a week and lost a number of patients because they were not asked to participate in the study; (3) the researchers also thought that the shorter form of the M.M.P.I., though not as valid as the longer test, might have increased the number of tests completed and would have resulted in a larger sample; (4) many of the difficulties encountered in research such as this occurred because the researchers were not sufficiently prepared for the bureaucratic red tape they encountered; and (5) the study may have been overambitious--a smaller task could have been handled more adequately.

Assets of the Study

A major asset to this study was the motivation and cohesiveness of the group members involved in this research. The researchers considered the questionnaire a strong point, in that it covered much meaningful information and was easily filled out. The personal involvement with each patient in setting up a contract was of key importance in this study. Another important factor in gathering data was the cooperation received from the Crisis Unit staff. The above mentioned points helped in the completion of all necessary information.

Speculation and Theory

Comparing the aftercare and no-aftercare groups on each of the possible predictor variables, we might speculate as to a possible behavior pattern which seemed to present itself from the data. This may not be the only pattern possible and alternative considerations, which may be contradictory, should not be rejected. Some behavior pattern speculations follow.

It might be suggested that the Crisis Unit perceives the aftercare subject, who falls mainly within the diagnostic category of psychosis, as being less able to cope and more in need of help as compared to the no-aftercare subjects who fall mainly within the diagnostic category of depression. This may be further substantiated by the mood scale scores, or by the way each subject views himself. From these scores it seems the aftercare subject perceives himself, in retrospect, as starting out at a lower point at the time of "crisis" and also rates himself lower upon leaving, (after treatment) than the no-aftercare subject does in both respects. Thus, the aftercare subject perceives himself as starting out and leaving the Crisis Unit at a lower level than the no-aftercare subject. The amount of difference between the before and after scores on the mood scale for the aftercare subject may reflect, as does his diagnosis, his own perception of himself as needing more help. It may also be that when the subject received "help" he perceived himself as getting better since the amount of improvement in his mood was greater than that of those in the no-aftercare group. This help may have tended to reinforce his "help-seeking response." That is, a person seeks help when he feels he needs it.

One factor that may affect the subject's treatment program and, thus, indirectly affect his self-perception is the Crisis Unit's diagnosis of the patient. This may or may not reinforce his degree of "sickness perception."

Two additional factors that might affect the subject's perception of his situation are prior family or personal experiences similar to the ones that brought the subject to the Crisis Unit. In the aftercare group it was found that both of these factors had a higher incidence than in the no-aftercare group. Since the aftercare subject and his family generally had both experienced situations similar to the ones that brought the subject to the Crisis Unit, it might be inferred that these experiences had reinforced his present perception of needing more help than those in the no-aftercare group. It would be useful to conduct follow-up research on what these experiences mean to the subject.

Another area that may have been affected by these prior experiences, both familial and personal, is the subject's "help-seeking response." That is to say, the aftercare subject may have learned from his family or from personal experience that as a result of seeking help he will feel better. Other possible considerations that must be taken into account include: (1) the number of prior incidents may have made it apparent to the subject that he needed further help and provided him with information about how to get it; and (2) another agency or "significant other" may have prompted him to seek further help. In the no-aftercare group, however, it can be seen that fewer subjects had had prior personal experiences or had seen them in their families. From

this it might be speculated that the no-aftercare subject had not learned the "help-seeking response", thus, making it less likely for him to seek outside help. Since this may have been the first experience for the no-aftercare subject or his family, there may also be four alternative considerations. First, as mentioned above, the no-aftercare subject may not know where or how to seek help. Second, since this is generally the first experience, he or his family may view this as stigmatizing, thus denying that any problem exists for fear of being ostracized by the community. Thirdly, the presenting crisis may have been resolved and the subject does not see himself as needing further help. Fourthly, the subject may not have liked the way he was treated at the Crisis Unit or other helping agencies and generalized such an experience to all other helping services.

The length of hospitalization may be affected by the above mentioned variables--diagnosis, mood scale, and similar familial and personal prior experiences--in such a way that those who are perceived by the Crisis Unit and by the subjects themselves as needing more help will, in fact, obtain more help. This is more clearly indicated by the difference in the average length of stay in the Crisis Unit for the two groups; the aftercare group staying on an average of eight days, while the no-aftercare group stayed on an average of six days. Though this is not statistically significant, the researchers felt that a two-day difference between the two groups within this type of an intensive care setting could possibly be viewed as important.

It was noted that the aftercare subject was younger and had a higher rate of unemployment, while the no-aftercare subject was older

and had a higher rate of employment. The question then arises as to how age and employment status may influence a subject to seek further treatment or not to seek further treatment. Or even further, is there a causal relationship? The aftercare subject may perceive himself as unable to hold down a job, and this may result in a low self-image or negative self-perception. Also, because the aftercare group may be less able to cope as compared to the no-aftercare group, they may be less able to cope with reality situations, less motivated, and have less interpersonal skills.

Recently, attitudes have been more open toward seeking treatment for mental illness. This may be reflected in this study in terms of the age variable. Those older individuals who did not seek aftercare treatment may value privacy, self-reliance, independence ("rugged individualism"), and view seeking professional help for emotional problems as an invasion of privacy, a sign of weakness and dependency. They may fear possible social stigma and connotations of being "crazy". Such feelings may have their origins in the misconceptions stemming from the myths associated with mental illness and psychiatry. Another consideration for older individuals not seeking further treatment may involve their being more "settled," and the increased stability⁵⁶ and maturity supposedly associated with age. Also, employed persons may have less time and freedom to spend time in out-patient therapy because of conflict with job hours. The younger aftercare group are less affected by the myths associated with mental illness. They are less threatened by

⁵⁶Stability here implies "roots," family ties, and long-term commitments (house, marriage, raising family, etc.).

seeking further help. This may be a developmental issue with the younger person being open to change.

That the Crisis Unit and aftercare subjects seemed to perceive the need for continued treatment was substantiated by the referral data. That is to say, the majority of the aftercare subjects perceived that a referral had been made. In the no-aftercare group, however, one-half of the subjects correctly perceived that no referral was made. That is, it might be assumed that the Crisis Unit and these no-aftercare subjects perceived no need for continuance of treatment. Again, we might speculate that the aftercare subject was perceived and perceived himself as needing further help, and will tend to follow through with continued help. Therefore, it might be speculated that the "help-seeking response," which has been reinforced through previous similar learning experiences, is re-established in this present crisis. In the no-aftercare group, since the subject was perceived and perceived himself as not needing further treatment, he tended not to seek continued treatment. Concerning the no-aftercare subject, it might be inferred that even though the subject correctly perceived that a referral had or had not been made, the subject may not have been perceived or perceived himself as needing further treatment. This may be due to several factors: (1) he may not know where or how to seek further help; (2) the crisis may have been resolved; and (3) the higher rate of employment and older age may act as stabilizing factors.

However, it must be pointed out that in a small percentage of the aftercare and no-aftercare groups, the referral procedure seemed confusing or unclear. Over twice as many subjects in the aftercare group

perceived the Crisis Unit as thinking they needed further help as opposed to the no-aftercare group. This is illustrated by the Crisis Unit stating that no referral had been made, while the subject said he perceived the Crisis Unit as making a referral. This would further substantiate the assumption that those who have learned the "help-seeking response," regardless of whether they are referred or not, will seek continued help. The data shows that regardless of whether the referral was clear or unclear to the patient, the aftercare subject still sought further treatment.

The referral data raises three interesting questions. First, why are the majority of the subjects in the aftercare group referred while half of the no-aftercare subjects are not referred? Secondly, why do those subjects in the aftercare group who are not referred or perceived no referral still seek further treatment, while those subjects in the no-aftercare group who are referred or perceived themselves as referred do not seek aftercare services? Thirdly, what is the reason for the disparity between the subjects and the Crisis Unit as to whether or not a referral had been made?

In our opinion, a significantly higher rate of rehospitalization of the aftercare subjects, as opposed to the no-aftercare subjects, might further suggest that the aftercare group was perceived accurately as needing further help--both by themselves, in that they sought further help, and by the Crisis Unit in making a referral. The no-aftercare group was also perceived accurately both by themselves and the Crisis Unit as not needing further treatment as demonstrated by their generally not obtaining further treatment and their lower rate of rehospitalization.

The M.M.P.I. scores seem to be in accord with the above mentioned data in that those who viewed themselves as needing more help, as depicted by the collective scores, tended to seek further help. In this case, it was the aftercare group that scored higher on each of the scales except one (Self-sufficiency Scale in which scoring goes in opposite direction, this corroborating the tendency in the other scales).

The aftercare group seems to be suffering from more chronic behavioral problems, as suggested by the higher rate of familial and prior personal experiences, diagnosis, and self-perception; whereas, the no-aftercare group seems to be suffering from a more "here-and-now" type of problem, as suggested by diagnosis, self-perception, and past history.

In brief, it seems that those who perceive themselves as in need of help and see others as perceiving them as needing further help, act upon this perception. In accordance with this study, the person who perceives a need for help will seek further help.

In conclusion, the above speculation and generalizations are about one pattern that could be interpreted from the data. Before such a speculation can be affirmed or accepted, more research is necessary on the above mentioned variables and their relationship to aftercare. In this study the demographic and social variables appear to wield the most influence.

Recommendations

(1) Perform an item analysis on the ten M.M.P.I. scales used in this study in order to determine those items that discriminate between the aftercare and no-aftercare groups; this would be a preliminary step in developing a new scale which will provide a better means of

predicting follow-up behavior.

(2) Is there a significant difference between the M.M.P.I. variables and the sociological, demographic and other variables as predictive measures of follow-up behavior?

(3) Is the lost group more like the aftercare group as M.M.P.I. data suggests, and further, what happens to this group after they leave the Crisis Unit?

(4) What happened to the approximately two-hundred people who agreed to participate in the study but did not? Are these people significantly different from those in the sample populations?

(5) Further investigation is needed in determining the environmental differences between the aftercare and no-aftercare groups in trying to determine whether the type of setting they returned to has any effect on whether or not they will seek aftercare treatment.

(6) Test the following hypotheses:

(a) there is a significant difference between the aftercare and the no-aftercare group in terms of the diagnosis;

(b) there is a significant difference between the aftercare and the no-aftercare group in terms of age;

(c) there is a significant difference between the aftercare and the no-aftercare groups in terms of family history;

(d) there is a significant difference between the aftercare and the no-aftercare groups in terms of similar personal experiences;

(e) there is a significant difference between the aftercare and the no-aftercare groups in terms of employment;

(f) there is a significant difference between the aftercare and no-aftercare groups in terms of mood scale scores;

(g) there is a significant difference between the aftercare and no-aftercare groups in terms of the length of hospitalization;

(h) there is a significant difference between the aftercare and no-aftercare groups in terms of referral process;

(i) there is a significant difference between the aftercare and the no-aftercare groups in terms of the rate of rehospitalization.

CHAPTER VIII

SUMMARY

The aim of this exploratory research was to test the following null hypothesis: there are no significant differences between those individuals who attempt to gain aftercare treatment as opposed to those who do not attempt to gain aftercare treatment. A psychological trend and sociological differences were found between the aftercare and no aftercare group making a rejection of the null hypothesis appropriate.

The major sociological variables indicating differences between the two groups were prior familial and personal experiences similar to the the ones that brought the subject to the Crisis Unit, and employment status. One demographic variable, age, and other variables such as psychiatric diagnostic category, mood scale, length of hospitalization, and referral planning were also found to be possible predictors of the criterion variable.

It is worth noting that the above mentioned variables were found in this study to discriminate between the two groups more clearly than the psychological data and could be obtained with less effort.

Using the demographic, sociological, and other variables, it was found that the aftercare group was younger, had a higher rate of unemployment, and had a greater frequency of prior personal and familial experiences similar to the ones that brought them to the Crisis Unit. They were more frequently diagnosed as psychotic, with depression ranking second. They

rated themselves lower on the mood scale upon entering and upon leaving the Crisis Unit, but perceived themselves as having improved their mood more than the no-aftercare group as measured by the differences between the before and after scores.

In contrast to the aftercare group, the no aftercare group was found to be older, with a higher rate of employment and a lower frequency of familial and personal experiences similar to the ones that brought them to the Crisis Unit. They were diagnosed more frequently as being depressed, with psychosis and behavior/character disorder ranking equally as the second most frequent diagnosis. On the mood scale, the no-aftercare group rated themselves higher than the aftercare group upon entering and upon leaving the Crisis Unit, but they did not perceive themselves as having improved their mood as much as the aftercare group as measured by the difference between the before and after mood scale scores.

In the aftercare group there was not a significant difference in the percentage between those who were rehospitalized and those who were not, while in the no-aftercare group a significantly larger percentage were not rehospitalized. It seems important to compare those who were rehospitalized between each group. When this is done it can be seen that the aftercare group had a much higher rate of rehospitalization than did the no-aftercare group.

An important point in the referral process is that in spite of the fact that half of the no-aftercare group were referred or perceived a referral, they did not seek treatment after leaving the Crisis Unit. In the case of the aftercare group, approximately one-third were either not

referred, or ~~their~~ was a disparity as to whether or not a referral had actually been made; yet, they still sought treatment after leaving.

In summary, the aftercare group, compared to the no-aftercare group, was "sicker," was more frequently referred for aftercare treatment, had fewer external responsibilities, and were more responsive to treatment. They were also diagnosed more frequently as psychotic, hospitalized at the Crisis Unit longer than the no-aftercare group, and had a high rate of rehospitalization.

The no-aftercare group, compared to the aftercare group, was "healthier," was less frequently referred for aftercare treatment, had more external responsibilities, and were less responsive to treatment. They were also diagnosed more frequently as depressed, hospitalized at the Crisis Unit a shorter period of time than the aftercare group, and had a lower rate of rehospitalization.

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APPENDIX A

QUESTIONNAIRE

Hospitalized at PCU
 From _____
 To _____
 Total _____

Age _____ Race _____ Sex _____ Place of Birth _____

Religion _____ Occupation _____

Average Monthly Family Income _____

Circle One of the Following:

Marital Status: Married Single Widowed Separated Divorced

Years of Education: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Please Specify Other Types of Training: _____

If married, how much education has your spouse had?

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

If married, is your spouse employed? Yes No

If yes, please specify occupation _____

Are you presently employed? Yes No

Give general areas of previous employment _____

Please indicate your type of housing:

a. Private home--Rented Owned

b. Apartment

c. Rented Room

d. Other (please specify) _____

Have you ever served in the armed forces? Yes No

a. Branch of service _____

b. Highest rank or rating _____

c. Type of discharge _____

Has anyone in your immediate family had experiences similar to the ones you are having now?

Have you ever had previous experiences similar to the one that brought you to the Crisis Unit? Yes No

If yes, please specify:

- a. How many similar experiences _____
- b. Action taken in seeking help _____

Do you agree or disagree with the following statements: (Please indicate "yes" or "no" after each statement.)

- a. Today I would be better off if I had never been born.
- b. I tend to feel that parents do what is best for their children.
- c. I feel no one cares about me.

If you have a personal problem, who would you talk to?

- a. Parents
- b. Grandparents
- c. Brother or sister
- d. Spouse
- e. Friend my age and sex
- f. Friend my age and opposite sex
- g. Adults outside the family
- h. No one
- i. Other (please specify) _____

Number the following in order of importance to you--most important first and least important last.

- ___ Material Possessions (i.e. car, TV, etc.)
- ___ Recreation
- ___ Close Friends
- ___ Mother
- ___ Father
- ___ Grandparents
- ___ Brothers and sisters
- ___ Spouse
- ___ Other (please specify) _____

Considering a mood scale from 0 to 100, with 0 being the worst you ever felt and 100 being the best, where would you place yourself on this scale?

- a. Immediately before admission to the Crisis Unit? _____
- b. Today? _____

APPENDIX B

FOLLOW-UP INTERVIEW

1. Did the Crisis Unit suggest you get continued help?
2. Did you personally make plans for follow-up treatment?
3. Have you contacted the agency since leaving the Crisis Unit?

How:

Phone
Written
Personal Contact

4. Are you continuing with any treatment for the problems you had while in the Crisis Unit?

If so:

Where

When

5. Have you been rehospitalized in the last month for a similar problem?
6. Who were you living with prior to entering the Crisis Unit?

Who did you live with after leaving the Crisis Unit?

Who are you living with now?

APPENDIX C

DETAILED DEMOGRAPHIC, SOCIOLOGICAL AND
FOLLOW-UP INFORMATION

Variable	N=33 Aftercare		N=18 No-Aftercare		N=51 I		N=20 Lost		N=71 I	
	N	%	N	%	N		N	%	N	
Sex:										
Male	11	33.0	6	33.4	17		7	35.0	24	
Female	22	67.0	12	66.6	34		13	65.0	47	
Race:										
White	31	94.0	18	100.0	49		17	85.0	66	
Black	1	3.0	0		1		0		1	
Mex.-Amer.	1	3.0	0		1		2	10.0	3	
Indian	0		0		0		1	5.0	1	
Marital Status:										
Single	12	36.3	5	27.8	17		9	45.0	26	
Married	12	36.3	8	44.5	20		3	15.0	23	
Separated	4	12.1	0		4		2	10.0	6	
Divorced	5	15.3	4	22.3	9		3	15.0	12	
Widowed	0		0		0		0		0	
No Response	0		1	5.6	1		3	15.0	4	
Age:										
1-14	0		1	5.6	1		0		1	
15-20	6	18.0	2	11.2	8		4	20.0	12	
21-25	15	46.0	2	11.2	17		5	25.0	22	
26-30	3	9.0	1	5.6	4		7	35.0	11	
31-35	2	6.0	3	16.7	5		1	5.0	6	
36-40	5	15.0	0		5		0		5	
41-45	0		6	33.4	6		0		6	
46-50	1	3.0	1	5.6	2		0		2	
51 and above	1	3.0	2	11.2	3		0		3	
No Response	0		0		0		3	15.0	3	
Educ. Level										
1-6	0		0		0		0		0	
7-8	1	3.0	2	11.2	3		0		3	
9	3	9.0	1	5.6	4		2	10.0	6	
10	2	6.0	2	11.2	4		0		4	
11-12	13	40.0	7	38.7	20		4	20.0	24	
13-14	6	18.0	5	27.7	11		4	20.0	15	
15-16	6	18.0	1	5.6	7		2	10.0	9	
Advanced Degree	1	3.0	0		1		1	5.0	2	
Vocational	0		0		0		0		0	
No Response	1	3.0	0		1		7	35.0	8	
Soc.-Econ. Status	4.97		4.75				3.96			
Length of Hospitalization	7.94		6.28				6.10			

Variable	N=33 Aftercare		N=18 No-Aftercare		N=51 T+	N=20 Lost		N=71 T
Religion:	N	%	N	%	N	N	%	N
Protestant	11	33.2	10	55.6	21	7	5.0	22
Catholic	6	18.2	1	5.6	7	3	15.0	10
Jewish	0	0	0	0	0	1	5.0	1
Other	4	12.1	1	5.6	5	1	5.0	6
None	8	24.2	2	11.2	10	3	15.0	13
No Response	4	12.2	4	22.5	8	11	55.0	19
Employ. Status:								
Employed	9	27.1	6	33.4	15	5	25.0	20
Unemployed	20	60.5	7	38.9	27	8	40.0	35
Housewife	3	9.1	1	5.6	4	0		4
Student	0	0	1	5.6	1	1	5.0	2
No Response	1	3.0	3	16.7	4	6	30.0	10
Housing Prior to PCU:								
Rented House	7	21.2	5	27.8	12	2	10.0	14
Owned House	10	30.4	8	44.5	18	1	5.0	19
Rented Room	3	9.1	2	11.2	5	2	10.0	7
Apartment	9	27.1	2	11.2	11	9	45.0	20
Other	2	6.1	1	5.6	3	1	5.0	4
No Response	1	6.1	0	0	1	5	25.0	6
Similar Exper. in Family:								
Yes	17	51.5	4	22.3	21	4	20.0	25
No	11	33.3	14	78.0	25	8	40.0	33
No Response	5	15.4	0	0	5	8	40.0	13
Diagnosis:								
Drug Addiction	2	6.1	1	5.6	3	4	20.0	7
Situational								
Stress	3	9.1	1	5.6	4	1	5.0	5
Psychosis	13	39.4	3	16.7	16	5	25.0	21
Neurosis	3	9.1	2	11.2	5	2	10.0	7
Behav. or								
Char. Disorder	4	12.2	3	16.7	7	2	10.0	9
Org. Brain								
Syndrome	0	0	0	0	0	0	0	0
Depression	5	15.4	7	38.9	12	3	15.0	15
Other	2	6.1	1	5.6	3	2	10.0	5
No Response	1	3.0	0	0	0	1	5.0	2

Variable	N=33		N=18		N=51	N=20		N=71
	Aftercare		No-Aftercare		T	Lost		T
Prior Exp.:	N	%	N	%	N	N	%	N
Yes	16	48.5	5	27.8	21	11	55.0	32
No	10	30.0	8	44.5	18	3	15.0	21
No Response	7	21.2	5	27.8	12	6	30.0	18
Referral from PCU:								
Both say <u>yes</u>	20	60.5	6	33.4	26			
PCU - <u>yes</u> -								
Patient - <u>no</u> -	3	9.1	0	0	3			
PCU - <u>no</u> -								
Patient - <u>yes</u>	7	21.2	3	16.7	10			
Both say <u>no</u>	3	9.1	9	50.0	12			
Did you make Plans for Treatment?								
Yes	23	69.8	4	22.3	27			
No	9	27.0	14	78.0	23			
Unclear	1	3.0	0	0	1			
Have you contacted Helping Service?								
Yes	28	85.0	6	33.4	34			
No	4	12.1	12	66.6	16			
No Response	1	3.0	0	0	1			
How did you contact Helping Agency?								
Phone	2	6.0	0	0	2			
Written	0		0	0	0			
Personal	19	58.0	5	27.8	24			
Phone and Personal	5	15.0	0	0	5			
All	1	3.0	0	0	1			
No Response	6	18.0	13	72.2	19			
Are you cont. with trt. for probs.								
Yes	32	97.0	2	11.2	34			
No	1	3.0	15	83.5	16			
No Response	0	0	1	5.6	1			

Variable	N=33		N=18		N=51	N=20		N=71
	Aftercare		No-Aftercare		T	Lost		T
	N	%	N	%	N	N	%	N
Where?								
Public	22	67.0	1	5.6	23			
Private	9	27.0	1	5.6	10			
Both	1	3.0	0	0	1			
No Response	1		16	89.0	17			
When?								
Regular	29	88.0	1	5.6	30			
Irregular	3	9.1	1	5.6	4			
Waiting List	0	0	0	0	0			
No Response	1	3.0	16	89.0	17			
Rehospitalization:								
Yes	14	42.5	3	16.7	17			
No	19	57.5	15	83.5	34			
Where Re-hospitalized?								
Public	13	37.5	3	16.7	16			
Private	1	3.0	0	0	1			
Other	0	0	0	0	0			
No Response	19	57.5	15	83.5	34			
Live with Prior to PCU?								
Alone	5	15.4	2	11.2	7			
Relative	21	63.8	13	72.2	34			
Friends	5	15.4	1	5.6	6			
Other (comb.)	2	6.0	2	11.2	4			
Live with Now?								
Alone	1	3.0	3	16.7	4			
Relative	22	66.7	10	55.6	32			
Friends	5	15.4	1	5.6	6			
Other (comb.)	5	15.4	4	22.3	9			
Transferred to Long-Term Treatment?								
Yes	10	30.2	4	22.3	14			
No	23	69.8	13	72.2	36			
No Resp.	0	0	1	5.6	1			

APPENDIX D

RESULTS OF DISCRIMINANT
ANALYSIS ON M.M.P.I. DATA

Identification of means is as follows:

1. Ego Strength
2. Maladjustment
3. Degree of Panic
4. Depression
5. Denial of Symptoms
6. Dependency
7. Intellectual Efficiency
8. Social Alienation
9. Self-Sufficiency
10. Socio-Economic Status

I. Aftercare and No-Aftercare groups

Common Means:

1	2	3	4	5	6	7	8	9	10
36.51	15.47	14.14	28.51	11.98	33.20	23.37	8.20	13.45	54.47

Generalized Mahalanobis D-square = 16.50

Discriminant function 1 (no-aftercare) Constant - 102.63

Coefficients

1	2	3	4	5	6	7	8	9	10
.77	.59	.96	.49	.15	1.49	1.86	1.05	1.64	.08

Discriminant Function 2 (aftercare) Constant - 111.14

Coefficients

1	2	3	4	5	6	7	8	9	10
.79	.58	1.08	.47	.38	1.51	1.93	1.19	2.52	.13

II. Aftercare, No-Aftercare and "Lost" groups

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Common Means:

1	2	3	4	5	6	7	8	9	10
36.01	15.77	14.21	28.77	11.96	33.32	23.37	8.28	13.39	53.97

Generalized Mahalanobis D-square = 30.22

Discriminant Function 1 (no-aftercare) Constant -91.46

Coefficients

1	2	3	4	5	6	7	8	9	10
.96	.79	.44	.62	.33	1.13	1.57	1.13	1.99	.05

Discriminant Function 2 (aftercare) Constant -100.23

Coefficients

1	2	3	4	5	6	7	8	9	10
1.02	.85	.56	.58	.52	1.17	1.75	1.17	1.82	.05

Discriminant Function 3 ("Lost") Constant -97.15

Coefficients

1	2	3	4	5	6	7	8	9	10
.98	.86	.50	.61	.45	1.15	1.78	1.17	1.90	.01