A STUDY OF VARIABLES FROM THE HOUSTON ALCOHOLISM REHABILITATION PROJECT RELATING TO ACCEPTANCE OF ALCOHOLICS INTO A VOCATIONAL REHABILITATION PROGRAM

A Thesis

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the Faculty of the Institute of Contemporary Corrections and the Behavioral Sciences

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In Partial Fulfillment
of the Requirements for the Degree

Master of Arts

by

Pat G. Stapler

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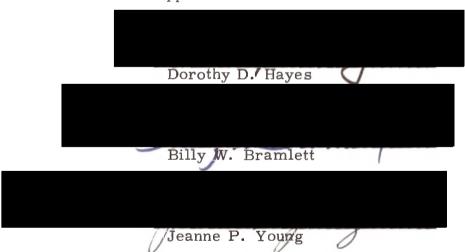
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ABSTRACT

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Purpose

The purpose of this study was to examine the differences in specific demographic, social, and psychometric factors that existed between those diagnosed alcoholics who were not accepted and those who were accepted for vocational rehabilitation services. The findings of this study are directed toward use by the vocational rehabilitation counselors working in the field of alcoholism. This project was funded through a Social and Rehabilitation Service innovation grant beginning September 1, 1966 and ending June 30, 1969.

Methods

The primary sources of data were obtained from 540 applicants during the rehabilitation period at the Houston Alcoholism Rehabilitation Project. A social history, general medical, psychiatric and vocation evaluation was recorded. A battery of psychological tests—the Minnesota Multiphasic Personality Inventory, Edwards Personal Preference Schedule, and the Peabody Verbal I.Q.—were administered. The secondary sources of information included studies of similar multidisciplinary projects, agency statistics, articles, books, reports, abstracts, journals, and records. The data were analyzed by relating main background, social history, intelligence and personality factors.

Statistical techniques used were chi square, multiple correlation, and regression analysis. Forty-three variables were used in the study. Multiple correlation was used on 34 variables with a subsequent multiple regression to determine the significant variables. Nine of the forty-three variables tabulated by chi square significantly differentiated the accepted from the not accepted clients.

Findings

- 1. The data reveal that the results of this study were unique in that HARP referrals were comprised of a cross-section of individuals. Since no screening measures were used for control or experimental groups plus no restriction as to age, sex, socio-economic status and occupation levels, the HARProject was not entirely similar to any previous multidisciplinary research studies.
- 2. Significant differences existed in the baseline characteristics--age, education and occupation. The accepted group tended to be from the middle age group 30 to 49, education was in the class intervals of 8-11, 12, and 13-15 years, and occupation was usually white collar or skilled worker. The not accepted tended, as a group, to be in the twenties or in the 60 to 69 age group, had less than an eighth grade education or had received a college degree, and was primarily an unskilled laborer or occasionally a professional.
- 3. Two social factors differentiated the accepted vocational rehabilitation client from the not accepted vocational rehabilitation client. The accepted client was more likely to have previously received group psychotherapy and/or individual psychotherapy, while the not accepted client had not received individual psychotherapy and/or group psychotherapy.

4. The accepted applicants had higher verbal I.Q.'s, were more aggressive than the not accepted. However, the accepted applicant had less need to help others than the not accepted.

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CHAPTER I

INTRODUCTION

Theoretical Formulation

According to the American Medical Association,

Alcoholism is an illness characterized by preoccupation with alcohol and loss of control over its consumption such as to lead usually to intoxication if drinking is begun; by chronicity; by progression; and by tendency toward relapse. It is typically associated with physical disability and impaired emotional, occupational, and/or social adjustment as a direct consequence of persistent and excessive use. ¹

No one can say with certainty how many alcoholics there are in Texas. The most frequently quoted estimates for the United States range from four million to nine million. These figures would place the number of alcoholics in Texas (proportionate to population) at approximately 300,000. Many authorities regard this as a very conservative figure. It has been estimated that each alcoholic victimizes four to five persons with whom he or she lives in close contact (usually parents, spouses, children). The U.S. Public Health Service states that alcoholism is the third most serious health problem in the country, preceded only by mental illness and heart disease.

Alcoholism constitutes a critical employment handicap, the

¹Texas Commission on Alcoholism, 808 Sam Houston Office Bldg., Austin, Texas (unpublished article).

²Ibid.

³Ibid.

severity of which increases with the progression of the illness. This problem is compounded by the fact that far too few persons—whether employers, spouses, the general public, or the alcoholics themselves—recognize alcoholics or recognize alcoholism as an illness. Most alcoholics go untreated. In 1971, 2,714 were treated in the state mental hospitals, but this figure is less than one per cent of the estimated total alcoholics in the state. An estimated 10,000 recovered alcoholics are in Texas groups of Alcoholics Anonymous. Many alcoholics have received treatment of various kinds from physicians, psychologists, clergymen, and social workers. Nevertheless, the Texas Commission on Alcoholism estimates that 90 per cent of the alcoholics in Texas have never received treatment by any available resource.

The literature indicates many theories are concerned with the etiology of alcoholism. One hypothesis encompassing many areas of conflict for the alcoholic is role theory. This theory adequately describes the alcoholic's problem of functioning in the various social roles. Considerable evidence indicates role unfulfillment is due to parental inadequacy. The residual effects of this parental inadequacy has a marked carryover into all the required social roles of the alcoholic, i.e., child, breadwinner, parent, etc. ³

Learning theory implies that people learn because responses are followed either by reward or punishment. This theory reveals that for

¹Texas Commission on Alcoholism, 808 Sam Houston Office Bldg., Austin, Texas (unpublished article).

 $^{^{2}}$ Ibid.

³Parsons, Talcott, <u>The Structure of Social Action</u> (Glencoe, Ill.: The Free Press, 1949), p. 53.

an individual to learn he must want something, he must notice something, he must do something. An individual learns to repeat acts that have been accompanied by drive reduction (as drinking when thirsty). Consequently, he learns to avoid acts that have been accompanied by punishment (as touching a hot stove). The use of alcohol is a source of two important types of rewards. The physiological changes produced by alcohol induce feeling states which may be experienced by the individual as intensely pleasurable. This pleasurable state thereby acts as a positive reinforcer. After a few drinks a person may feel warm, excited, assertive, loquacious or sexually stimulated. Alcohol also provides temporary relief for unpleasant or punitive stimuli as anxiety, guilt or tension. An individual learns he can avoid these feelings of discomfort or aversion stimuli by the use of alcohol. The responses to the use of alcohol are reinforced each time the individual experiences relief or pleasure, thereby, this act is strengthened. Eventually, the individual may use alcohol to avoid every problem, large and small, and then he is considered a problem drinker or alcoholic. The individual may continue to drink even when his behavior brings him into conflict with his employer, his family, and his friends. Frequently, when this occurs Alcoholics Anonymous will be called. 1

Alcoholics Anonymous, a traditionally known treatment with its theoretical framework, must not be overlooked as a contribution to understanding the alcoholic. While there is no formal A.A. definition of alcoholism, a description is frequently used by the Alcoholics Anonymous World Services, Inc. This description is "a physical compulsion,"

¹Franks, C. M. "Conditioning and Conditioned Aversion Therapies in the Treatment of Alcoholics," <u>International Journal of Addictions</u>, 1:61-98, 1966.

coupled with a mental obsession. "1 Alcoholics Anonymous is not a formal organization as such, yet it does provide guidance through its "Twelve Steps" for the individual and the "Twelve Traditions" which provide guidance for the groups.

Role theory, learning theory, and Alcoholics Anonymous aid in understanding alcoholism, but do not individually provide total understanding. However, these theories do imply alcoholism is an illness and can be treated by utilizing professional disciplines. Furthermore, as a disease entity alcoholism theoretically should conform to certain prognostic indicators such as demographic, social, psychometric factors in a manner comparable to other behavior disorders. To date, however, not enough reliable diagnostic instruments are available to the professional group working in the field of alcoholism.

Purpose

The purpose of the study is to examine certain factors of selected diagnosed alcoholics referred to the Houston Alcoholism Rehabilitation Project. This project began on September 1, 1966 and was completed June 30, 1969 after 34 months of operation. Briefly stated, this was an innovative program which involved a multidisciplined approach in the treatment and rehabilitation of alcoholics by utilizing various professional groups within two primary state agencies. During the operation of this project 1,107 alcoholics were referred for services.

Inc., Chapter V, pp. 59-60, New York, 1955.

¹Texas Commission on Alcoholism, 808 Sam Houston Office Building, Austin, Texas (unpublished article).

p. 8. 2 Alcoholics Anonymous World Service, Inc., New York, 1953,
3 "Alcoholics Anonymous," Alcoholics Anonymous World Services

Of this number only 12 per cent were considered rehabilitated at the end of the project period. However, of those applicants not rehabilitated 58 per cent dropped out of the program early and could not be located; 25 per cent refused services; and 4 per cent were not accepted on the basis that they had no handicap. The remaining one per cent were still active in the project after it was officially completed.

The sample used in this specific study consists of 540 alcoholic clients who completed the diagnostic or screening phase. This number was dichotomized; 289 clients who did not follow through to "acceptance" and 251 clients who stayed with the program until they were officially accepted for vocational rehabilitation services. This dichotomized sample was cross tabulated by seventeen baseline social and demographic characteristics and eleven questionnaire items. Additionally, these two samples were compared by resulting scores from administering the Minnesota Multiphasic Personality Inventory, the Edwards Personal Preference Schedule, and the Peabody Verbal I.Q. test.

The above factors were statistically evaluated using ratios, proportions, and percentages to compare and distinguish between the two groups. The findings of the above factors are directed toward use by vocational rehabilitation counselors working in the field of alcoholism.

For the purpose of this study the following tenet was assumed:

If a person has experienced steady employment satisfaction, as well as, social and personal relationships for a substantial length of time, he has indicated the capability of exerting some degree of self discipline.

Hypotheses

Working hypothesis. -- The 251 clients who stayed with the program until they were officially accepted by Vocational Rehabilitation, and received a more comprehensive treatment program will probably have a more favorable social history and study data will indicate they have more stability in their personal and social relationships than the 289 clients who did not continue with the program.

Statistical hypothesis. --For the 540 clients who completed the diagnostic phase of the program, the baseline characteristics, ten social factors, and the three psychological tests (MMPI, Peabody, EPPS) results of study data will reflect a statistically significant difference between clients who did and clients who did not complete the diagnostic phase.

Null hypothesis. --Of the 289 clients who did not complete the program, and the 251 clients who did continue with the program the baseline characteristics, the eleven social factors, and the psychological tests will reveal no significant difference; therefore, no adequate prognostic indicator will be revealed from this study.

Basic Questions

- 1. Do the results of this study differ from findings of other interdisciplinary projects for the treatment and rehabilitation of alcoholic applicants?
- 2. Are the 251 accepted alcoholic applicants for Vocational Rehabilitation services similar to the 289 unaccepted alcoholic applicants when cross tabulated by the baseline characteristics?

situation that most rehabilitation counselors in the field encounter in the course of their endeavors. None of the studies in the literature provided adequate theories or guidelines that could serve as predictors as to which alcoholic would respond to rehabilitation. This study should provide such predictors, if in fact any criteria can be defined. It is the belief of this writer that the need for research might reveal some factors in the alcoholic in terms of his motivation to stay with the rehabilitative process from the initial intake, diagnostic and on through to the receipt of rehabilitation services.

Definition of Terms¹

Accepted. -- "An individual who has been certified as meeting the three basic eligibility requirements is accepted for vocational rehabilitation services." 2

Eligible. --An individual who meets the three basic criteria which are (1) presence of a physical or mental disability, (2) there exists a substantial handicap to employment, and (3) there is reasonable expectation that vocational rehabilitation services may aid this individual in obtaining gainful employment.

Not accepted. --For the purpose of this study an applicant was considered not accepted if he did not follow through the diagnostic phase of the Houston Alcoholism Rehabilitation Project to acceptance.

¹Texas Rehabilitation Commission, <u>The Policy Manual</u>, 02-4, pp. 1-14, 1972.

²<u>Ibid.</u>, p. 10.

³Ibid., p. 1.

⁴Ibid., pp. ix-x.

Referral. -- According to the Texas Rehabilitation Commission,

A referral is defined as any individual who has applied to or has been referred to the Texas Rehabilitation Commission by letter, telephone, direct contact, or by any other means, and for whom the following minimum information has been furnished: (1) Name and address, (2) Disability, (3) Age and sex, (4) Date of referral, and (5) Source of referral. 1

Applicant. -- "Applicants are placed in status 02 as soon as the Counselor has a document signed by the individual requesting vocational rehabilitation services."

<u>Client</u>. --This term refers to an individual who has made application for Vocational Rehabilitation Services or is used when referred for vocational rehabilitation. The term "client" will be referred to in the study as applicant or referral. ³

Methods and Procedure

Population. -- The population from which the sample was drawn included all patients referred to the Houston Alcoholism Rehabilitation Project from September 1, 1966 through June 30, 1969. The population consisted of 1,107 professed and diagnosed alcoholic clients referred to the project by other agencies, private physicians, A.A., community resources, or walk-ins. Of this number, 12 per cent were considered rehabilitated at the end of the project period; 25 per cent refused services; 58 per cent did not respond to follow up letters; four per cent were not accepted on the basis that they had no vocational handicap. The remaining one per cent were still active in the project when it was

¹Texas Rehabilitation Commission, The Policy Manual, p. viii.

 $^{^2}$ Ibid.

 $^{^3}$ Ibid.

- 3. How do the eleven social factors differentiate the 251 accepted alcoholic applicants and the 289 unaccepted alcoholic applicants for Vocational Rehabilitation services?
- 4. Do the results of the three psychological tests--MMPI, EPPS, and the Peabody Verbal I.Q.--show significant differences between the 251 accepted and the 289 unaccepted alcoholic applicants?

Need for Research

Extensive research of the literature pertaining to rehabilitation of the victims of alcohol reveals voluminous published reports, yet they do not seem to provide the rehabilitation counselor with many useful prognostic guidelines. 1 Most of the studies describe particular segments of the alcoholic population. Many profiles of the individual alcoholic are presented but very few studies evaluate the results of different rehabilitation approaches. All of these related studies have some control factors, in terms of referral sources or elaborate screening processes, which would be expected to predetermine final results. In other words, studies were well designed and controlled, yet the rehabilitation counselor was left with no finite criteria to apply to persons coming to him for help. In the State of Texas, the rehabilitation counselor is required to evaluate closely and attempt to help every person who comes to his office, whether he is referred by agencies, individuals, or simply enters by himself. Therefore, not using experimental control methods in this study at intake appears to make the data highly significant as it more closely approximates the actual

 $^{^{1}}$ Smithsonian Science Information Exchange, journals, abstracts, Medlar.

completed. These were volunteer participants. No screening or selection criteria, and no set number limitations were prescribed.

The study sample consisted of 540 alcoholic clients who completed the diagnostic or screening phase. They were dichotomized according to those who could not endure to "acceptance" (289) and clients who continued with the program until official acceptance for vocational rehabilitation services (251).

Collection of data. --Data for the research were obtained from applicants during the rehabilitation period at the Houston Alcoholism Rehabilitation Project through interviewing, testing, examination and observation. A social history was recorded on all admissions to the project. A general medical, psychiatric, and vocation evaluation was recorded and placed in the clinical case folder. A battery of psychological tests was administered; the test results included in the study are as follows: MMPI, EPPS, and Peabody. Data on acceptance for services, and rehabilitation outcome were obtained from the closed case records of the Texas Rehabilitation Commission Houston office.

Analysis of data. --Data analysis was accomplished through the cooperation of Sam Houston State University. Coding for machine data processing was done at the Houston office of Texas Rehabilitation Commission by the investigator. The primary statistical analysis was provided by the computer center of the Sam Houston State University in Huntsville, Texas. Statistical analyses of the data consisted of relating the main background, social history, intake, intelligence, and personality factors from referral to acceptance. Then tests of significance were computed on these tabulations. Statistical techniques

included the chi-square as well as multiple correlation and regression analysis. The dependent variables of this study were accepted or not accepted clients, as defined by the Texas Rehabilitation Commission policy. Hereafter the individuals applying to HARP for treatment and services will be referred to as applicant, referral, and/or client.

CHAPTER II

BACKGROUND

According to recent accounts, the illness of alcoholism is ranked as one of the three major national health problems, together with cancer and heart diseases. The latest national estimate of the number of active alcoholics is nine million. According to a recent survey, at least 90,000 alcoholics are in the Harris County area. The effects of alcoholism and the associated medical complications are not confined to the individual alcoholic. Many other persons inevitably become involved such as members of the family, employers, friends, law enforcement officers and any other individuals who have contact with the alcoholic. It is a problem which is characterized by continued, uncontrolled intake of alcoholic beverages resulting in a compulsion which leaves the individual unable to control the amount consumed. Because of this compulsion and the medical complications, recent judicial decisions, medical surveys and the local police policies now tend to treat the alcoholic as a medical problem. This treatment implies proper medical, psychological, and rehabilitative efforts. Alcoholism can be diagnosed by any physician. This procedure would benefit all alcoholics according to Jorge Valles, M.D., Director of the Alcoholism Unit at the Veterans Hospital, Houston, Texas.

Some authorities have suggested that alcoholism be diagnosed

¹Texas Commission on Alcoholism, 808 Sam Houston Office Bldg., Austin, Texas (unpublished article).

as "three diseases." The three diagnoses describe the types of alcoholism. The affected areas of functioning in the alcoholic's life are physical, emotional, vocational and social. The complexities in these areas indicate much work is required for total rehabilitation of an alcoholic attempting to return to the community.

The Texas Rehabilitation Commission (formerly the Division of Vocational Rehabilitation of the Texas Education Agency) is the state agency of the Social and Rehabilitation Services of the United States Department of Health, Education, and Welfare. The Texas Rehabilitation Commission, hereafter designated as TRC, began in 1925 but did not accept alcoholics until 1966. Even then, the diagnosis of alcoholism was not sufficient for acceptance without an accompanying diagnosis of a psychoneurotic disorder such as depressive reaction, severe anxiety, or similar condition. Other disabling disorders were accepted by the agency which also could make the alcoholic client eligible for services. With the inception of the Houston Alcoholics' Rehabilitation Program in 1966, the above criteria for eligibility were used throughout the three-year grant supported project. However, the rehabilitation counselors found through experience in working exclusively with the multiple needs of the alcoholic to the point that the diagnosis of alcoholism was sufficient for acceptance. The Houston Alcoholics' Rehabilitation Program, hereafter designated HARP, was conducted at Texas Research Institute of Mental Sciences. The objective of the program was to rehabilitate individuals handicapped by alcoholism in a

¹Rimmer, J., Reich, T. and Winokur, G. "Alcoholism v. Diagnosis and Clinical Variation Among Alcoholics," <u>Quarterly Journal Study Alcoholism</u>, 33:656-666, 1972.

multidisciplinary atmosphere. All services were utilized in order to render the alcoholic client vocationally able to return to the community. The services provided to aid the client in returning to his total community setting were medical, psychiatric, social, psychological, and pastoral counseling. The three-year grant program which was supported by national and state funds, began in September 1966 and was completed in June 1969. Case records from this program show that many clients did not continue with the program to acceptance. Therefore, a number of questions arose concerning what, if any, factors were correlated with accepted versus not accepted individuals. Could predictors of outcome be found by systematic study of these data?

Review of the Literature

The literature contains reports of many projects concerned with alcoholism. Abstracts of over 200 such reports were reviewed for the current study. However, very few projects, and therefore very little of the literature involved a vocational rehabilitation agency. Of all the references, only four projects were found to be even slightly related to vocational rehabilitation. The differences and similarities between these projects and HARP will be compared in this section, together with an attempt to answer the first basic question posed in Chapter I: Do the results of this study differ from findings of other interdisciplinary projects for treatment and rehabilitation of alcoholic applicants? The Project was a three-year interdisciplinary research and demonstration project for the treatment of alcoholism. The specific aim was to test

¹Bailey, M.B. Unpublished final report, National Council on Alcoholism, New York, January, 1963.

the effectiveness of including vocational counseling in a group psychotherapy program. However, very little use was made of the New York State Vocational Rehabilitation Commission. Nevertheless, the major finding was the marked improvement in work performance and attitude of those patients who received vocational counseling. With respect to the significant variables established for the HARP project, when compared with the New York project, sufficient differences were found to indicate these were, by design, two different approaches.

The first difference noted was that all referrals were closely screened initially, while in HARP the referrals were not screened. Regarding the age variable, the accepted as well as the not accepted applicants in the New York project averaged 40 years of age. In the HARP project the average age was higher in both groups. The accepted group averaged 43 years of age whereas the not accepted group averaged 45.3 years of age.

When the educational levels of the New York group were examined, it was apparent that the clients were much more highly educated than those in HARP. In the New York project 57.7 per cent of the accepted applicants had "some college or more" compared with 29.38 per cent of the accepted HARP clients who had some or more college. The not accepted applicants in the New York project also were more highly educated as 35.6 per cent had some or more college compared with 27.99 per cent of the not accepted clients in HARP.

The next variable to be compared was I.Q. Applicants in the New York project had an average I.Q. of 108 with a range of 71 to 137 on the Otis Employment Test. One-third of these applicants scored in the superior and very superior classifications. For the HARP group,

the average I.Q. was 111 with a range of 59 to 138; 37.35 per cent were within the superior and very superior categories. This percentage appears somewhat remarkable considering the close screening and higher socioeconomic level of the New York applicants.

The variables nurturance and aggression could not be compared as this information was not available from the New York project. However, the occupational levels of the two groups were compared. The New York applicants apparently were closely screened for occupation inasmuch as 64.6 per cent of the accepted group were white collar workers and 35.4 per cent of these were professional, semiprofessional and managerial. This finding is a significant difference from clients in the Houston study where 33.06 per cent were white collar workers with 12.79 per cent of these in the professional or managerial classifications.

The variables, individual and group psychotherapy cannot be compared with available data as these were identified separately in the HARP and were combined in the New York study. Also, the applicants in the New York project were closely screened and, therefore, constituted a much different type of client in terms of socioeconomic status than participants in the HARP.

Another project which approached treatment and rehabilitation similarly to the HARP was the Salvation Army program in San Francisco. The San Francisco Mens' Social Service Center was awarded a five year research and demonstration grant by the Office of Vocational Rehabilitation Administration. The project officially began in 1961 and the findings were presented by Lawrence Katz, Ph.D., Project

Director. ¹ The primary aim of the project was to demonstrate the effectiveness of a religiously motivated and oriented therapeutic environment in the rehabilitation and improved employability of men suffering from alcoholism. The physical setting was not clinical, such as that of HARP. The San Francisco project was conducted in the Salvation Army Mens' Social Service Center. The approach was interdisciplinary inasmuch as the staff included a chaplain who functioned as project supervisor, two full time vocational rehabilitation counselors, part time psychotherapeutic and psychiatric consultants, a part time nurse, and workshop supervisory staff.

The first outstanding difference between the Mens' Social Service Center project and HARP was that only male alcoholics could be accepted, whereas male and female alcoholics were accepted in HARP. Except for this one restriction regarding sex, the intake policy resembled the HARP intake inasmuch as individuals were not screened and no controlled or experimental groups were organized. However, a review of variables indicated that clients from this project had significantly lower socioeconomic status than clients in HARP. Clients in the San Francisco program were primarily between the ages 36 to 55 years which was similar to the ages of HARP clients.

Although ages were comparable, the San Francisco subjects as a general rule were not as well educated as were the HARP clients. In addition, most of the participants in the San Francisco project were either skilled laborers or unskilled occupationally, whereas a high

¹Katz, Lawrence, Unpublished final report, Mens' Social Services Center, San Francisco, California, April, 1966.

percentage of the HARP clients were in the white collar group. Because of the nature of the San Francisco study the other significant variables cannot be contrasted.

While the New York applicants were much higher socioeconomically, the San Francisco group was much lower socioeconomically than were HARP clients. Nevertheless, the results of the San Francisco program indicated prior successful work history and socialization contributed significantly to final favorable outcome.

The least similar project reviewed was conducted by the Chicago Alcoholic Treatment Center. However, because of the small number of similar projects in the literature, it will receive brief mention. This study was an outreach program in which the client was contacted on the street by a rescue team composed of rehabilitated alcoholics and plain clothed police officers. The client was contacted while in a toxic state, diagnosed, and referred for treatment. The only variable which can be compared is occupation. Less than 20 per cent of those in the Chicago project, which still is in operation, were skilled workers.

Most of the patients were the very hard core, skid row type of alcoholic. Some of the HARP clients also could be placed in that category but the numbers are so small comparisons are not meaningful.

The fourth and last project reviewed was the Florida Project on Vocational Rehabilitation of Treated Alcoholics. This study was a research project funded by the State of Florida and the material studied encompassed a period from June 1957 to July 1961. The State of Florida entered the field of treating alcoholism in 1953 but the joint cooperative efforts of vocational rehabilitation were not officially

initiated until 1957. The findings during the four year period 1957 to 1961 were used for comparison. The Florida project parallels the Houston project more consistently than any other program reviewed in this study. The major difference between the two was the Florida system of referring the alcoholic from the treatment center to the vocational rehabilitation counselor in the patient's home city or town. Patients were treated at the Avon Park Treatment Center and screened by a vocational rehabilitation counselor assigned to the Center. Initial vocational rehabilitation information was obtained and forwarded to the counselor nearest the patient's residence at the time of discharge from the Center. This project included an extensive study of "referrals and nonreferrals. " These terms are comparable to the accepted and nonaccepted categories used in HARP. Complete data were available for 795 admissions in the Florida study. Of the total group, 72 per cent were male and 28 per cent were female. This percentage is similar to the sex ratio in the HARP group where approximately 75 per cent of the total 540 population was male and 25 per cent female. The mean age of the Florida group was 45 years at intake. This finding also was the approximate mean age of the HARP group. The mean number of school year completed by the Florida subjects was 11.2. As is shown in Table IV, this educational level is comparable to the educational level of the HARP population. The mean I.Q. of the HARP group was 111 based on the Peabody Verbal I.Q. Test. In the Florida project the mean I.Q. was 104 based on the Army Revised Beta.

In comparing the referral and nonreferral groups in the Florida study, the most striking differences were related to vocational factors.

This variable also showed the highest coefficient of contingency in the

HARP study (Table II). Also significant, but with lower correlations, were psychological, psychiatric, social, and medical variables. However, none of the variables for the Florida project would be considered statistically significant if the probability value were restricted to \$\leftsigma 05\$. In HARP, using the .05 level, seven variables were statistically significant. The two projects were very similar in treatment, multidisciplinary approach, and intake procedures but the similarities stopped there, inasmuch as the results and analyses of the Florida and Houston projects were not focused on the same variables.

Vocational Rehabilitation Services

The services of TRC are offered to those individuals who are vocationally handicapped by a physical or mental disability. These services are extensive and flexible and are provided according to the specific needs of the individual. In keeping with the TRC policy, an individual must receive a diagnostic evaluation including a general medical examination for possible physical handicaps augmented by specialists' examinations if recommended by the examining physician. Also, a psychological or psychiatric narrative report may be requested depending upon the alleged or suspected disability. Vocational tests are sometimes required if training is indicated. Training is provided in vocational training facilities, technical schools, or as on-the-job apprenticeships. In addition, financial assistance while in training, transportation, books, tools and supplies required for the client to achieve his rehabilitation plans are provided as needed.

The TRC activities are designed to equalize employment opportunities for the handicapped. The persons assisted may be handicapped

because of accident, disease, or congenital deformity resulting in physical or mental impairment which constitutes a barrier to employment. The services to be rendered are determined by diagnostic information assembled and evaluated by the Counselor. The assessment and evaluation of the client's status is discussed professionally with the client. The client is a very important participant in the ultimate discussion of what services are required to reduce, remove, or arrest his disability. Also, the client participates in discussions as to which services are vocationally oriented to assure he becomes self-sustaining with a marketable skill or trade.

Description of Project

Prior to September 1966 the TRC did not accept clients for rehabilitation on the basis of alcoholism as the sole disabling condition. However, the staff of the Commission was considering the problem of providing adequate services for this large disability group. In September 1966 HARP was initiated. The objective of this program was to vocationally rehabilitate individuals handicapped by alcoholism, using new techniques which would coordinate TRC services with therapeutically oriented assistance--medical, psychiatric, social, psychological, and pastoral treatment methods. TRC obtained a Social and Rehabilitation Service innovation grant and initiated the project which was housed in Texas Research Institute of Mental Sciences facilities. After 34 months of operation from September 1, 1966 through June 30, 1969, a total of 1,107 persons had been referred from various sources. Of the 1,107 referrals, 540 completed the full diagnostic evaluation.

TRC administered the project and ensured that it was conducted

in accordance with the appropriate policies, regulations, and guidelines of both TRC and Texas Research Institute of Mental Sciences, hereafter designated TRIMS. However, policy decisions regarding the medical treatment of an individual were the responsibility of the Medical Director, a staff member of TRIMS.

The 540 alcoholics who completed the diagnostic evaluation received a general medical examination, the Peabody Picture Vocabulary Test, the Minnesota Multiphasic Personality Inventory, the Self-rating Depression Scale, and the Internal-External Locus of Control. Various intake procedures were tried briefly, and the group intake method evolved as being most satisfactory. Referrals were not screened, nor were referral sources limited. The group intake method enabled the alcoholic to complete his entire diagnostic evaluation on the day of intake. Prior to departure on intake day, the alcoholic was assigned to an individual caseworker and a TRC counselor. Usually, an appointment was made for the next interview with one of the two.

Four teams, each comprised of one TRC counselor and two caseworkers were established to promote a coordinated rehabilitation program for the alcoholic. Within the teams, the members decided among themselves which one would provide the primary therapeutic service and when specific vocational services would be initiated.

The full range of vocational rehabilitation services were made available to those alcoholics who were eligible. The criteria for eligibility for TRC services were: (1) Finding of mental or physical disability; (2) Existence of a substantial handicap to employment because of the disability; and (3) Reasonable expectation that services rendered would enable the individual to engage in a gainful occupation.

Because all of these three criteria were policy and had to be evidenced, particularly the third criterion, a phased method for processing the alcoholics was employed. The phases were:

Phase I. --For approximately 30 days the assigned caseworker and the TRC counselor worked with a new referral to gain an impression of the client's needs and dynamics. All required diagnostic materials were completed and made available to the staff. It should be noted here that the majority of 289 "not accepted" dropped out at this phase.

Phase II. --This phase was initiated approximately 30 days after the new referral remained active. A treatment planning conference was held to review the staff observations and diagnostic findings. Additions, changes or future treatment plans were recommended.

Phase III. -- This phase consisted of the recommended period of treatment and rehabilitation.

Phase IV. -- When the workers involved agreed that maximum services had been provided, planning for termination was undertaken.

Each patient was informed of in-patient services, Medication Clinic, group therapy (orientation for new referrals) and the Casework Clinic which was conducted in the evenings for alcoholics who worked and needed one-to-one counseling. The in-patient services were limited to ten in the TRIMS facility.

Medications Clinic. -- Establishment of this facility had an overall positive effect on the program. Alcoholics who tended to abuse drugs, as they did alcohol, were more easily detected. Consequently, the abuse of prescribed medications could be handled directly by the psychiatrist in charge of the clinic.

Orientation Group. -- This technique was initiated to acquaint the

referral with the general problems experienced by alcoholics, expose the patient to group therapy, and also reassure him that a program of services would be available following the orientation of Phase I.

Casework Clinic. -- The purpose of the Casework Clinic was to provide a treatment modality based on brief supportive therapy. This facility was staffed by part time social workers engaged specifically to counsel in the clinic. Frequently HARP staff members would assist because of increased numbers of alcoholics requesting this service. The clinic operated two evenings a week which made counseling accessible to those clients working.

The HARP staff included a full time psychiatrist who was responsible for directing a Medications Clinic, participating in planning treatment for new referrals, conducting some of the group therapy sessions, as well as directing an alcoholism clinic in the Ben Taub General Hospital. This Hospital is a component of the Harris County Hospital District which serves the indigent population of Houston and Harris County. A full time psychologist provided psychological counseling to referrals and collected certain data pertinent to coordination of this multidisciplinary project. A full time clinical-pastoral counselor supervised pastoral counselors in training as well as functioning as a therapist in group sessions and on a one-to-one basis. A minister was employed full-time to organize and supervise training for HARP personnel. Staff training was provided by inviting experienced professional staff members from other institutions and organizations as lecturers. The four TRC counselors provided vocational rehabilitation services designated by policy to those patients who were eligible.

The four social caseworkers provided counseling as determined

by the team concept with the TRC counselors. All the TRC counselors, social caseworkers and pastoral counselors functioned as group therapists, co-therapists, and caseworkers in the night Casework Clinic whenever the situation demanded the additional professional assistance.

CHAPTER III

ANALYSIS OF DATA

The purpose of this study was to identify differences between individuals accepted for the vocational rehabilitation program and those who were not. Multiple correlation analysis was conducted to determine which factors were significantly related, using acceptance or rejection from the program as criteria. The results of that analysis are shown in Table I.

The overall correlation between the 34 independent variables and the criteria (acceptance or rejection) is .45. To determine whether a correlation that high could occur by chance, an analysis of variance was conducted which yielded an F score of 3.40. This score indicates that the probability of such relationships occurring by chance is 0.0001, meaning that the probability that the predictors are not related to the criteria is less than < .0001. Subsequent analyses were performed to determine which of the predictors was significantly related to the criteria. An item analysis was performed in which multiple regression was repeated each time, eliminating one of the variables (predictors) and observing the change in the overall correlation. The asterisks on Table I indicate factors shown to be significantage, education, verbal I.Q., nurturance, and aggression.

Nine variables were analyzed using the chi-square method to determine significance of the difference. The three shown to be significant were occupation, individual psychotherapy, and group therapy,

TABLE I MULTIPLE CORRELATION ANALYSIS

	Variables	Correlation	RC*	F	P
2	Age	0.12	0.013	14.58	0.00037*
3	Education	0.30	0.015	16.41	0.00020*
4	Previous Hosp. A.	0.05	0.019	1.41	0.28528
5	No. Hosp. Psych.	0.14	0.096	2.91	0.8375
6	No Arrests Drunk	0.05	0.001	0.22	0.64182
7	How Long Heavy Drink	0.10	0.004	1.43	0.22945
8	Longest Sobriety Pd.	0.16	0.031	2.87	0.08711
9	How Long Since Last D.	0.12	0.014	0.55	0.53841
10	Peabody Verbal I.Q.	0.25	0.004	10.85	0.00146*
11	M. M. P. I. Hypochrondriasi		0.002	0.97	0.67581
12	M. M. P. I. Depression	0.02	0.003	0.99	0.68001
13	M. M. P. I. Hysteria	0.04	0.000	0.66	0.57877
14	M. M. P. I. Psychopathic	0.02	0.001	0.25	0.62406
15	M. M. P. I. Masc. / Fem.	0.02	0.000	0.45	0.50852
16	M. M. P. I. Paranoia	0.02	0.000	0.00	1.00000
17	M. M. P. I. Psychothenia	0.02	0.000	00.01	1.00000
18	M.M.P.I. Schizophrenia	0.02	0.002	0.74	0.60803
19	M. M. P. I. Hypomania	0.02	0.001	0.12	0.72652
20	M. M. P. I. Social Introver-				
	sion	0.04	0.002	2.25	0.12972
21	E.P.P.S. Achievement	0.07	0.001	0.99	0.67840
22	E.P.P.S. Deference	0.04	0.001	1.15	0.28270
23	E.P.P.S. Order	0.00	0.001	1.39	0.23754
24	E.P.P.S. Exhibition	0.06	0.001	0.25	0.62010
25	E. P. P. S. Autonomy	0.05	0.000	0.44	0.51285
26	E.P.P.S. Affiliation	0.01	0.000	0.09	0.76326
27	E. P. P. S. Intraception	0.13	0.002	2.07	0.14724
28	E.P.P.S. Succorance	0.04	0.001	0.21	0.64515
29	E.P.P.S. Dominance	0.05	0.000	0.01	0.90615
30	E.P.P.S. Abasement	0.09	0.001	1.25	0.26367
31	E.P.P.S. Nurturance	0.13	0.003	6.29	0.01200
32	E.P.P.S. Change	0.02	0.000	0.04	0.83284
33	E.P.P.S. Endurance	0.03	0.001	0.58	0.54717
34	E.P.P.S. Heterosexuality	0.04	0.001	0.25	0.61863
0	E.P.P.S. Aggression	0.0	0.01	10.01	0.00206

*Regression Coefficient. **Significant variable.

$\frac{\text{Multiple Regression 1 vs. 2 and 3}}{\text{Full Model}}$

R or Multiple Correlation 0.44
F Value 3.40
Probability 0.00010

as indicated by the asterisks on Table II.

The first statistically significant variable on Table II is occupation. Referrals accepted into the program tended to have higher levels of vocational skills than those not accepted. In the accepted group, 33.06 per cent were white collar workers as compared to 28.05 per cent of those not accepted. However, the most striking difference was in the blue collar area where 43.82 per cent of those accepted were skilled workers and only 2.87 per cent of the not accepted group were skilled workers. Only 8.76 per cent of the accepted group were unskilled laborers compared to over 25 per cent unskilled laborers in the not accepted group. Individuals who more closely represent the working class apparently were more likely to continue the program to acceptance for vocational rehabilitation. However, the not accepted group had slightly more individuals of the professional level than were found in the accepted group.

The next statistically significant variable shown on Table II is individual psychotherapy. More referrals in the accepted group had previously received individual psychotherapy than those in the not accepted category. This result could be related to the socioeconomic status of the two groups, inasmuch as the accepted group generally was of a higher status and may have been better able to afford this type of assistance.

The same reasoning applies to the next significant variable on Table II--group psychotherapy. Again, those who followed the program to acceptance had previously received this type of counseling more frequently than the not accepted group. Any type of psychiatric help

TABLE II

540 ALCOHOLIC REHABILITATION CLIENTS DICHOTOMIZED
BY ACCEPTED-NOT ACCEPTED AND DISTRIBUTED
BY NINE DESCRIPTIVE VARIABLES

Descriptive Characteristics	Acce f	pted %	Not Ac	ccepted %	Total
Sex					
Male	187	74.50	222	76.81	409
Female	64	25.48	67	23.18	131
Total	251	99.98	289	99.99	540
Chi Square = .341	d.f. =	1 .70>	P>.50		
Marital Status					
Married	85	33.85	116	40.13	201
Divorced	98	39.04	92	31.83	190
Widowed	11	4.38	18	6.22	29
Single	25	9.96	21	7.26	46
Separated	30	11.95	40	13.84	70
Common Law	2	. 39	2	. 69	4
Other	0	0	0	0	0
Total	251	99.96	289	99.97	540
Chi Square = 5.78	d.f. =	5 .50>	P>.30		
Occupation					
Professional	17	6.77	24	8.30	41
Clerical	30	11.95	16	5.33	46
Sales	24	9.56	30	10.38	54
Managerial	12	4.78	13	4.49	25
Skilled Labor	110	43.82	95	32.87	205
Unskilled Labor	22	8.76	75	25.95	97
Service	31	12.35	32	11.07	63
Agriculture	2	. 79	0	0	2
None	3	1.19	4	1.38	7
Total	251	99.97	289	99.97	540
Chi Square = 36	d.f. = 8	P00	01		
Primary Source of Supp	ort				
Self	102	40.63	128	44.29	230
Family and Inheri-					
tance	53	21.11	63	21.79	116
Friends	9	3.58	10	3.46	19
Public Assistance	68	27.09	62	21.45	130
Pensions	2	. 79	5	1.73	7
Savings	13	5.17	13	4.49	26
Investments	1	. 39	2	. 69	3
None	3	1.19	6	2.07	9
Total	251	99.95	289	99.97	540
Chi Square = 4.98	d.f.	7 .70	> P > . 50		-

TABLE II (Cont'd.)

Descriptive Characteristics	Accept f	ed %	Not Acce	epted %	Total
Individual Psychotherapy Yes No Total	48 203 251	19.11 80.87 99.98	40 249 289	13.84 86.15 99.99	88 452 540
Chi Square = 2.75	d.f. = 1	. 10	>P>.05		
Group Therapy Yes No Total	111 140 251	44.21 55.77 99.98	104 185 289	35.98 64.01 99.99	215 325 540
Chi Square = 3.82	d.f. = 1	.10	> P > . 05		
Alcoholics Anonymous Yes No Total	169 82 251	67.32 32.66 99.98	179 110 289	61.93 38.06 99.99	348 192 540
Chi Square = 1.72	d.f. = 1	. 20	> P > . 10		
If Married, would spouse participate? Yes No Total	96 155 251	38.24 61.74 99.98	104 185 289	35.98 64.01 99.99	200 340 540
Chi Square = .792	d.f. = 1	. 70	> P > .50		
Are you an alcoholic? Yes No Don't know Total	219 18 14 251	87. 24 7. 17 5. 57 99. 98	254 28 7 289	87.88 9.68 2.42 99.98	473 46 21 540
Chi Square = 4.46	d.f. = 2	. 20	>P>.10		

generally is expensive and the higher economic status of those accepted into the program probably accounts for this difference.

The next portion of discussion concerning analysis of data returns to Table I which shows the statistically significant variables

which differentiated the accepted and not accepted referrals. The first significant variable indicated by the multiple regression analysis is age. The frequency distribution in Table III shows age by class intervals.

TABLE III

540 ALCOHOLIC REHABILITATION CLIENTS DICHOTOMIZED
BY ACCEPTED-NOT ACCEPTED AND DISTRIBUTED
BY AGE

Age	Ac	cepted	Not Accepted	
	f	%	f	%
20-29	9	3.55	19	6.55
30-39	69	27.43	59	20.39
40-49	108	42.98	111	38.38
50-5 9	58	23.06	84	29.03
60-69	7	2.75	14	4.82
Over 69	0	0	2	.68
Total	251	99.77	289	99.85

Only 3.55 per cent of the referrals in their twenties were accepted compared to 6.55 per cent in the twenties who were not accepted. Further analysis indicates that the majority of those who followed the program to acceptance were between ages 30 and 49. Within this age range 70.31 per cent were accepted compared to 58.79 per cent of this age range who were not accepted. Percentages twice as high as those not accepted were in the 60 to 69 age group. Two outstanding factors that prevented the age group 60-69 from following through to acceptance were that this particular group had chronic multiple medical complications from intake of alcohol over a span of approximately 20 to 30 years. The TRC policy negates services to chronic medical conditions. Also the chronic medical conditions rendered them unable to return to the competitive labor market. The

second reason dealt with some of this age group clients being on social security and the sense of security from a steady income. Therefore, going to work might jeopardize this security no matter how much this client wanted to be busy and have another source of income. As a result these clients did not follow through to acceptance and take a chance on relinquishing the steady social security resource. These data imply that the referrals between 30 and 49 years of age were much more likely to continue the program to acceptance. Apparently the clients in the accepted group of this group were predominantly in the age range 30-49 years (70.41 per cent). In the not accepted group of the same age range only 58.77 per cent were accepted. Many factors could be involved in explanation of this trend. The older clients have more family responsibilities, and, perhaps, more mature judgment of their situations. Some of the older could have been totally rejected by families and significant others and therefore with no resources they possibly could be more receptive to a comprehensive program such as HARP.

The next significant variable was education. The frequency distribution is shown in Table IV. Apparently individuals with at least an eighth grade education and no more than three years of college were more likely to complete the program to acceptance than were those with less than eighth grade education or those with college degrees.

The next significant variable, verbal I.Q., is shown on Table V. Individuals with average or above average verbal I.Q.'s apparently were more inclined to continue the program to acceptance. Table V shows that 73.93 per cent of the accepted group had verbal I.Q.'s between 100 and 138 while 66.95 per cent of those not accepted were

TABLE IV

540 ALCOHOLIC REHABILITATION CLIENTS DICHOTOMIZED
BY ACCEPTED AND DISTRIBUTED
BY YEARS OF EDUCATION

Years of	Acc	epted	Not Accepted	
Education	f	- %	${f f}$	¹ %
4-7	22	8.72	46	15.8
8-11	85	33.83	92	31.8
12	70	27.88	70	24.2
13-15	50	19.87	51	17.6
16	14	5.57	20	6.9
17-19	$\frac{10}{251}$	$\frac{3.94}{99.81}$	$\frac{10}{289}$	$\frac{3.4}{99.9}$

in this range. Also, 4.46 per cent of those not accepted were in the mentally retarded range whereas none of those accepted had verbal I.Q.'s of less than 79. In the superior and very superior ranges, I.Q. 120 to 138, 37.36 per cent were in the accepted group compared with 31.41 per cent for those not accepted.

TABLE V

540 ALCOHOLIC REHABILITATION CLIENTS DICHOTOMIZED
BY ACCEPTED-NOT ACCEPTED AND DISTRIBUTED
BY PEABODY VERBAL I.Q. CLASS INTERVALS

Verbal I. Q.	Aco	Accepted		Not Accepted	
Scores	f	°%	f	%	
59-78	0	0	13	4.4	
79-99	63	25.01	82	28.2	
100-109	37	14.71	36	12.4	
110-119	55	21.86	67	23.1	
120-129	60	23.85	58	20.0	
130-138	34	13.51	33	11.3	
Total	$\overline{249}$	98.94	$\overline{289}$	99.	

The next significant variable was nurturance as measured by the Edwards Personal Preference Scale which is further analyzed in Table VI. According to the Edwards Personal Preference Scale Manual nurturance is described as a need to assist others less fortunate, to render small favors to others, to be generous, sympathetic, affectionate and to allow others to confide their personal problems. Also, in the Manual, more description is given to each factor on the scale. Thus, the higher the score, the more often the subject has chosen the statements as being descriptive of himself, in preference over other statements. The lower the score for a particular statement, the less frequently has the subject chosen the statements as describing himself. ¹

TABLE VI

540 ALCOHOLIC REHABILITATION CLIENTS DICHOTOMIZED
BY ACCEPTED-NOT ACCEPTED AND DISTRIBUTED
BY EDWARDS PERSONAL PREFERENCE
SCHEDULE -- SCALE NURTURANCE

Scale	Accepted		Not Accepted	
Scores	f	- %	f	%
1-39	100	39.76	97	33.48
40-60	46	18.31	57	19.70
61-99	105	41.74	135	46.62
Total	251	99.81	289	99.80

From the distribution of scores in Table VI, apparently those in the accepted group had a slightly lower percentage and did not experience the needs represented by the term nurturance to the degree found

¹Allen Edwards, Manual for "Edwards Personal Preference Schedule," (New York: Psychological Corporation, 1959).

in the not accepted category. However, both accepted and not accepted showed high percentages of scores in the 61 to 99 interval. This could possibly reflect past experience with Alcoholics Anonymous. As part of the recovery program in Alcoholics Anonymous it is suggested that members help others. However, when A.A. members who are ready to achieve more personal growth, they often times seek professional help. As a result of continuing in the suggestive HARP program they were able to function in their community and assist others and perform appropriate role functions. This trend may mean these individuals were experiencing a need at the time of testing to continue the program as a means of acquiring direction in restructuring their life style and respective roles by receiving the necessary counseling and guidance, vocational services and all the other assistance rendered by HARP.

Aggression is indicated by a probability score of 0.00206 on Table I of the Multiple Correlation Analysis. This finding means that the probability occurring by chance is approximately two in 1000 times. According to the Edwards Preference Scale Manual, aggression is defined as the inclination to "tell others off" when disagreeing with them, to seek revenge for insults, to become angry, to blame others when something goes wrong, and the reading of newspaper accounts of violence. Again, the individual indicates his preference for statements he prefers as being most descriptive of his personality. The intervals shown on Table VII are of the same significance as the distribution

¹Allen Edwards, Manual for "Edwards Personal Preference Schedule," (New York: Psychological Corporation, 1959).

for nurturance: 1 to 39 is low, indicating a passive and subservient type; 40 to 60 is considered average; 61 to 99 indicates excessive preference and needs in this area. Persons within the latter range could be expected to react verbally or physically in a manner not acceptable to general societal customs.

TABLE VII

540 ALCOHOLIC REHABILITATION CLIENTS DICHOTOMIZED
BY ACCEPTED-NOT ACCEPTED AND DISTRIBUTED
BY EDWARDS PERSONAL PREFERENCE
SCHEDULE--SCALE AGGRESSION

Scale	Accepted		Not Accepted	
Scores	f	%c	f	%
1-39	107	42.52	149	51.48
40-60	47	18.69	38	13.13
61-99	97	38.52	102	35.22
Total	251	99.73	289	99.83

Over 50 per cent of those not accepted were within the 1 to 39 range. Perhaps this indicates these persons simply were too passive and lacking in ego strengths to continue to acceptance in HARP. Scores for the accepted group were more frequently in the normal or high range. The assumption is that individuals with average or above average preference or need to be aggressive were more likely to persist to acceptance in the program than were individuals with low scores.

According to the statements in the Edwards Personal Preference Scale Manual all persons have some aggressive characteristics.

Because some members of both groups in this study were in the high range for aggression, it could be concluded that those who were not

accepted displayed aggression in a negative manner toward the program or the HARP personnel reacted negatively to the individual's aggressive manner and did not view them as receptive candidates for rehabilitation.

CHAPTER IV

SUMMARY OF FINDINGS AND CONCLUSIONS

Purpose

The purpose of this study is to ascertain the relationship between specific demographic and psychological variables and the acceptance of diagnosed alcoholics referred to HARP for Texas Rehabilitation Commission's services. A comparison of applicants that were accepted with applicants not accepted was a major concern of this study. The differences between alcoholic clients considered "accepted" and "not accepted" according to Texas Rehabilitation Commission policy were analyzed. Specific basic questions were posed and the data reviewed in this chapter is to determine the degree to which these questions were answered.

The results of this study differ from findings of other interdisciplinary projects for the treatment and rehabilitation of alcoholic
applicants. The data reveal that the findings are different than any of
the data reviewed of reports of similar projects conducted elsewhere
in the United States. The projects that were reviewed included the
New York Alcoholism Vocational Rehabilitation three year research
and demonstration. Among the studies reviewed, the New York project
was the most similar in its multidisciplinary approach to HARP and
also included a vocational rehabilitation counselor. The goal of the
New York project was to see the effectiveness of including vocational
counseling in a group psychotherapy program. This counseling service

is a minor difference from HARP which tried to achieve re-entry of the alcoholic into the community as rehabilitated socially, personally, and vocationally. The most marked difference was the screening measures used by the New York project as this screening eliminated the ordinary the individuals who referred themselves from the street with no home, family ties, source of financial income, and in need of medical attention. Further examination of the New York project indicates that their applicants had higher educational levels in the accepted and not accepted groups. The New York project had 57.7 per cent of accepted applicants with some college or more compared with 29.38 had some college or more. The not accepted applicants in the New York study had some college or more (35.6 per cent).

The not accepted group in HARP had 27.99 per cent with some college or more. The major difference of these two projects was on the occupational level. The New York project close screening measures insured 64.6 per cent of the accepted applicants were white collar workers and 35.4 per cent of these were professional, semi-professional and managerial. The Houston study showed 33.06 per cent were white collar with 12.79 per cent of these in the professional or managerial classifications. The I.Q. was the most remarkable difference as the New York group had an average I.Q. of 108 with a range of 71 to 137 on the Otis Employment Test. The HARP group had an average I.Q. of 111 with a range of 138; 37.35 per cent were within the superior and very superior categories.

Another project similar to HARP in its approach to treatment and rehabilitation was the Salvation Army program in San Francisco.

The men's social service center was religious oriented and the

religious motivation plus an oriented environment in the rehabilitation and improved employability of men suffering from alcoholism.

The San Francisco Men Social Service Center, also on a limited grant, had one major difference. The project only accepted men, thus, restricting females to the program. Because of the nature of the San Francisco study the other significant variables could not be compared.

The least similar project reviewed was conducted by Chicago Alcoholic Treatment Center. The client was contacted on the street by a rescue team composed of rehabilitated alcoholics and plain-clothed police officers. The client was usually toxic and diagnosed and referred for treatment. The only variable which can be compared with the HARP study is occupation. Less than 20 per cent of those in the Chicago project were skilled workers. Most of the Chicago referrals were the very hard core, skid row type of alcoholic. Some of the HARP clients could be placed in that category, but the number is so small comparisons are not meaningful. The fourth and last project reviewed was the Florida Project on Vocational Rehabilitation of Treated Alcoholics. Complete data were available for 795 admissions in the Florida study. Of the total group, 72 per cent were male and 28 per cent were female. This percentage is similar to HARP sex ratio of 75 per cent male and 25 per cent female. The mean age was 45 years at intake. This finding approximates also the mean age of the HARP group. The mean number of school years completed by the Florida study was 11.2. This educational level is comparable to the educational level of the HARP population. The mean I.Q. of the HARP group was 111 based on the Peabody I.Q. Test. In the Florida project the I.Q. mean was 104 based on the Army Revised Beta.

The most outstanding differences in the referral groups and nonreferral groups between the Florida study and the HARP study were the vocational factors. This variable also showed the highest coefficient of contingency in the HARP study. Also significant, but with lower correlations were psychological, psychiatric, social, and medical variables. None of the Florida variables for the Florida project would be considered statistically significant if the probability were restricted to the .05 level of significance. The two projects were similar in treatment, multidisciplinary approach, and intake procedures, but the results and analyses were not focused on the same variables.

The second question asked, "Are the 251 accepted alcoholic applicants for vocational rehabilitation services similar to the 289 unaccepted alcoholic applicants when cross tabulated by the six baseline characteristics?" It was established that three of the nine baseline characteristics, i.e., age, education, and occupation significantly differentiated the "accepted" from the "not accepted." Briefly stated, the accepted group tended to be more from the middle age group--30 to 49, his education was eight years to three years of college, and was a white collar or skilled working middle class. On the other hand, the not accepted applicant was usually in his twenties or was in the 60 to 69 age group. He had less than an eighth grade education or had received a college degree. Occupationally he was more likely to be an unskilled laborer or a professional.

"Do the eleven social factors differentiate the 251 accepted alcoholic applicants and the 289 unaccepted alcoholic applicants for vocational rehabilitation services?" Only two of the social factors were found to be statistically significant. These were whether or not

the applicant had previously received individual and/or group psychotherapy. The accepted applicants were more likely to have previously received individual and/or group psychotherapy. Financial support and/or half-way house facility was provided while diagnostic processing was being done.

The results of the three psychological tests--MMPI, EPPS, and the Peabody Verbal I.Q.--show significant differences between the 251 accepted and the 289 unaccepted alcoholic applicants. The chi square and accompanying probability values indicate that statistically significant differences existed on the Verbal I.Q., EPPS nurturance, and the EPPS aggression scores. No statistically significant differences were found on the MMPI test scores. On the basis of these data, the accepted applicant tended to have a higher Verbal I.Q. and was more aggressive.

Summary

The profile presented from this study describes an individual who is a white collar worker, not too old nor not too young, probably less than middle aged. This individual has a slightly less need for nurturance than the not accepted, and he has an above average amount of aggression. The significant variable aggression could imply various behaviorisms when it is expressed. In the accepted group it is believed by this writer that these clients found more appropriate channels for the outlet of this particular trait.

To enlarge upon the age variable and general social factors from experiences as a counselor on the Houston Alcoholism Rehabilitation Project, the following quotation from Dr. Samuel C. Kaim,

Director, Alcohol and Drug Dependence Service is included.

that attitude toward drinking and environmental support of heavy drinking had the highest correlations with problem drinking. The psychological variables of alienation, maladjustment, impulsivity, and nonconformity were also correlated, although less strongly. These six social-psychological variables combined to make a risk-score predictive of problem drinking, especially when combined with variables of sex, age, social status, urbanism and ethnic background.

Men of higher social status tended to mature out of their problem drinking after age 40. Men of lower social status tended to increased problem drinking between the surveys. 1

Some of the limitations encountered in this study were restriction of physical location. By this comment the study encompassed only the city of Houston and thus, this study may be applicable to Houston. This limitation would also indicate further research for more successful techniques in rehabilitation of the alcoholic. Another limitation was that the Houston project did not reach as much of a cross section of alcoholics as anticipated in the Houston area such as the skid row and the upper middle class.

Data indicate that psychological factors relating to the two personality tests studied had very limited use as factors related to outcome for alcoholics receiving rehabilitation services. There have been many theories which have been proposed to explain the so called 'alcoholic personality.' The descriptions in reported studies reviewed describe the alcoholic as neurotic, dependent, sexually immature, unable to withstand anxiety, and marked by tremendous guilt and feeling of unworthiness. However, many persons leading normal lives have had these same tendencies. Therefore, psychological factors

¹Samuel C. Kaim, M.D., "Recovery, New Approaches in Alcoholism," Vol. 6, No. 1, New York, 1972.

involved in the etiology of alcoholism, related to results of this study, do not appear to offer promising evidence for further investigation at this time.

In this study, sociological factors appear to have the greatest influence on successful rehabilitation of alcoholic clients. The significant variables can be analyzed as indicators of deviations in role performance.

A study in Washington was provided in which drinking patterns of male and female alcoholics were compared. This study suggested that the social role of women may account for the solitary drinking of female alcoholics, opposed to the typical male gregariousness while drinking. ¹ Importance of role structure and whether it is in accordance with social and cultural expectations or whether it deviates and is in conflict with these requirements is indicated by the Washington study.

It is still a source of amazement to many workers in the field of alcoholism the stigma placed upon alcoholism. Especially in view of all the public education through the news media and the recognition of the problem by the Justice Department as not being "criminal."

Probably the first known and acknowledged organization that helps and is supportive to the recovering alcoholic is Alcoholics Anonymous. However, there exists a paradox when an individual contacts Alcoholics Anonymous, becomes sober and begins functioning. The

¹John L. Horn, "Alcohol Use Patterns Sex-Linked," <u>Recovery</u>, Vol. 5, No. 3, 1971.

paradox mentioned above is that if an individual's affiliation with A.A. is discovered by certain insurance companies or banks there will definitely be cessation of insurance and refusal for bank loans. The business firms use this as a means of proof that alcoholism exists.

If a member of Alcoholics Anonymous is put on application for a driver's license, the individual will be denied. When reviewing one's driver's license for the State of Texas five questions are given with a "yes" or "no" answer. The fifth question is "Have you ever been addicted to alcohol or narcotics?" If the individual's answer is "ves" then the license will not be renewed by the Texas Department of Public Safety. The aforementioned statement was an actual experience of a recovered alcoholic who had maintained 21 years of abstinence through A.A. To conclude this experience an A.A. member challenged the Department of Public Safety by stating he did not feel a law existed that said he had to answer those questions. The desk clerk went to the back office and upon return announced that the Captain would like to see him. The A.A. member had quite a confrontation with the Captain and the realization of the extremely limited knowledge of the Captain regarding A.A. or recovered alcoholics prompted the A.A. member to provide some pertinent information regarding A.A. and recovered alcoholics. The Captain of the West Texas Region of the Department of Public Safety approved a "yes" answer. However, the A.A. member waited three months before his renewed driver's license was received by him.

During the early years of A.A., some members rigidly insisted that "only an alcoholic can understand an alcoholic," and there was

minimal cooperation between A.A. workers, on one hand and physicians, clergymen, and social workers, on the other. However, cooperation among professional therapists has been increasing with the accumulation of more experience and knowledge. On the other hand, membership in A.A. is strongly encouraged as part of the therapeutic programs for alcoholics in State mental hospitals.

Given special training, clinical psychologists and psychiatric social workers in many communities have undertaken responsibility for the long-term care of alcoholics and their families usually working as members of a therapeutic team. Vocational rehabilitation workers, public-welfare caseworkers, visiting nurses and probation and parole officers also have been trained to help alcoholic persons, as have many personnel workers in industry, who have often been the first to detect the heavy drinking of employees and to start them on the way to treatment. This start to help for the alcoholic can be the utilization of A.A. and/or all professional disciplines as mentioned above.

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APPENDIX A

BASELINE CHARACTERISTICS

- 1. Age
- 2. Sex
- 3. Marital
- 4. Education
- 5. Occupation
- 6. Primary Source of Support

QUESTIONNAIRE ITEMS OF ELEVEN SOCIAL FACTORS

- 1. Number of Previous Hospitalizations, Alcoholic
- 2. Number of Previous Hospitalizations, Psychiatric
- 3. Number of Arrests for Drunkenness
- 4. How Long Heavy Drinking
- 5. Longest Period of Sobriety
- 6. How Long Since Last Drink
- 7. Experience in Individual Psychotherapy
- 8. Experience in Group Psychotherapy
- 9. Experience in AA
- 10. If Married Would Spouse Participate in Treatment Program
- 11. Are You An Alcoholic?

PSYCHOLOGICAL TESTS

- 1. Peabody Verbal I.Q.
- 2. Minnesota Multiphasic Personality Inventory
- 3. Edwards Personal Preference Schedule

APPENDIX B

OUTLINE OF DATA CLASSIFICATION

COLUMN NO.	DATA	NO.	ITEM
1	()	1	Series 1 - Referred & Not Accepted 2 - Accepted & Successful 3 - Accepted & Failure
2-3	() ()	2	Age
4	()	3	Sex
5	()	4	Martial Status
6 - 7	() ()	5	Education
8	()	6	Occupation
9	()	7	Primary Source of Support
10	()	8	Previous Hosp. for Alcoholism
11	()	9	Number Hosp. for Psychiatric
12-13	() ()	10	Number of Arrests for Drunkenness
14-15	() ()	11	How Long Heavy Drinking
16	()	12	Longest Sobriety Period
17	()	13	How Long Since Last Drink

COLUMN NO.	DATA	NO.	ITEM
18	()	14	Individual Psychotherapy
19	()	15	Group Therapy
20	()	16	AA
21	()	17	If Married Would Spouse Participate in Treatment Prog.
22	()	18	Are you An Alcoholic
23-25	() () ()	19	Peabody - Verbal I. Q.
26-28	() () ()	20	MMPI - Hypochondriasis
29-31	() () ()	21	MMPI - Depression
32-34	() () ()	22	MMPI - Hysteria
35-37	() () ()	23	MMPI - Psychopathic Scale
38-40	() () ()	24	MMPI - Masculinity- Feminity Scale
41-43	() () ()	25	MMPI - Paranoria Scale
44-46	() () ()	26	MMPI - Psychothemia Scale
47-49	() () ()	27	MMPI - Schizo- phrenia Scale
50-52	() () ()	28	MMPI - Hypomanic Scale
53-55	() () ()	29	MMPI - Social Introversion Scale
56-57	() ()	30	EPPS - Achievement Scale

COLUMN NO.	DATA	NO.	ITEM
58-59	() ()	31	EPPS - Deference Scale
60-61	() ()	32	EPPS - Order
62-63	() ()	33	EPPS - Exhibition Scale
64 - 65	() ()	34	EPPS - Autonomy Scale
66-67	() ()	35	EPPS - Affiliation Scale
68-69	() ()	36	EPPS - Intraception Scale
70-71	() ()	37	EPPS - Succorance Scale
72-73	() ()	38	EPPS - Dominance Scale
74-75	() ()	39	EPPS - Abasement Scale
77-79	() () ()		Client ID Number
80	()		Card Number I
1-2	() ()	40	EPPS - Nurturance Scale
3-4	() ()	41	EPPS - Change Scale
5-6	() ()	42	EPPS - Endurance Scale
7 - 8	() ()	43	EPPS - Hetero- Sexuality Scale
9-10	() ()	44	EPPS - Epps Aggres- sion Scale
77-79	() () ()		CLIENT ID NUMBER
80	()		CARD NUMBER 2

Vita redacted during scanning.