A STUDY OF SELECTED DEMOGRAPHIC, SOCIAL AND PSYCHOLOGICAL VARIABLES RELATED TO THE VOCATIONAL REHABILITATION OF ALCOHOLICS IN HOUSTON, TEXAS

A Thesis

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by

Monty Rue Collins

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A THESIS

Approved:

[redacted]

Walter H. Bennett

[redacted]

James A. Barrum

[redacted]

Glen A. Kercher

Approved:

[redacted]

Bascom Barry Hayes
Dean of the Graduate School

ABSTRACT

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Purpose

The purpose of this study was to ascertain the relationship between selected demographic social and psychological variables and the vocational rehabilitation of alcoholics as defined by the Texas Rehabilitation Commission policy. Examination of selected relationships were considered to be of value in providing objective guidelines in differentiating among clients with their respective needs. It was also hoped that further research and study would result from this data.

Methods

The primary sources of the datum for this study were obtained on Texas Rehabilitation Commission clients that were accepted into the Houston Alcoholism Rehabilitation project. This program was funded through a Social and

Rehabilitation Service innovation Service innovation grant that began September 1, 1966 and was completed June 30, 1969. The Texas Rehabilitation Commission obtained this grant and the datum was taken from the case records of this Commission's Houston office. Forty-three variables examined were: Six demographic characteristics, eleven social factors, ten personality factors from the Minnesota Multiphasic Personality Inventory, fifteen personality factors from the Edwards Personal Preference Scheduoe, and the verbal I.Q. as measured by the Peabody Verbal I.Q. Test. Secondary sources of information included books, articles, previous research, journals, and agency records. The data were analyzed by relating the 43 variables to indices of rehabilitation outcome between alcoholic clients that were rehabilitated and alcoholic clients that were not rehabilitated as defined by Texas Rehabilitation Commission policy. Statistical techniques included chi square, multiple correlation and regression analysis.

Findings

Only a few of the large number of diagnostic factors analyzed were found to be related to the clients' vocational rehabilitation. Furthermore, the majority of these were demographic characteristics, i.e., age, marital status, education, occupation, and primary source of support. Only two variables from the questionnaire of social

factors were significantly related to rehabilitation and that was previous group psychotherapy and spouse participation in the project.

Of the tests, only the Peabody Verbal I.Q. was related to a statistically significant degree with rehabilitation. None of the numerous categories of the Minnesota Multiphasic Personality Inventory and the Edwards Personal Preference Scale were found to be statistically significant.

From the data the following conclusions were drawn:

1. A comparison of the results of this study with data from five other similar studies and a review of the literature indicates that the Houston Alcoholism Rehabilitation Project and this study are unique.

2. Demographic and social factors rather than personality factors appear to have the greatest influence on successful rehabilitation of alcoholic clients.

3. Comparison of diagnosed rehabilitated and not rehabilitated clients in HARP revealed that: The rehabilitated client tended to fall more in the middle age interval of 35 to 54 years of age, have at least nine years of education and no more than three years of college, more likely to have finished high school, have a high verbal I.Q., still married, be self supporting and receive more help from family and friends, have more savings or no support at all, more likely to have previously received group therapy,

and believes that his spouse would participate in a rehabilitation program. Conversely, the not rehabilitated client is: younger, less likely to have finished high school, yet more likely to have completed college or attended graduate school, have a lower verbal I.Q., not married, is a blue collar or service worker, not self supporting, has not previously received group psyotherapy, does not believe that his spouse would participate in a rehabilitation program.

4. Rehabilitated clients in HARP were more socially stable in terms of both past and present role performance than the not rehabilitated clients.

[redacted]

Walter H. Bennett, Ph.D.
Supervising Professor

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CHAPTER I

SELECTED DEMOGRAPHIC SOCIAL AND PSYCHOLOGICAL VARIABLES RELATED TO VOCATIONAL REHABILITATION AMONG ALCOHOLICS

Statement of the Problem

Various estimates indicate that over 9 million persons in the United States are alcoholics. At least 90,000 of these alcoholics reside in Harris County, Texas (Texas Commission on Alcoholism, 1971). Alcoholism affects a much larger proportion of the population than the number of confirmed alcoholics. The effects of the illness extend to entire families, employers, law enforcement officers, and others who come in contact with the alcoholic. Therefore, this illness has become a major health problem in the United States.

Recent judicial decisions, medical opinions, and police experience have indicated that alcoholism is an illness which should be treated as a medical problem requiring appropriate therapy and rehabilitation. It is an illness marked by continued, uncontrolled consumption of alcoholic beverages, resulting in a dependency over which the individual has little or no control. The significant point is

that alcoholism finally is accepted as a disease (American Psychiatric Association, 1965). In fact, some writers have suggested that alcoholism may be "three" diseases which can be diagnosed clinically (Rimmer, Reich & Winokur, 1972). This illness affects the functioning of an individual in many important areas of his life: physical, emotional, social, and vocational. The return to a functioning role in the community is very difficult and many alcoholics require special assistance to achieve this goal.

The Texas Rehabilitation Commission (formerly the Division of Vocational Rehabilitation of the Texas Education Agency) did not accept clients on the basis of alcoholism as the sole disabling condition. However, Vocational Rehabilitation Counselors did work with persons suffering from alcoholism, but these were clients who also had other disabling conditions which established their diagnostic classifications. None of the vocational rehabilitation services was designed specifically to meet the needs of the alcoholic client. The administrators as well as the counselors throughout the State of Texas were concerned about provision of rehabilitation services for clients addicted to alcohol.

Because of this general awareness of the problem by staff members of the Vocational Rehabilitation Commission, an innovative grant-supported program was developed. This

program, referred to as the Houston Alcoholism Rehabilitation Project (hereafter designated HARP), was designed to meet the needs of the clients of the Vocational Rehabilitation Commission and the patients of the Texas Research Institute of Mental Sciences (hereafter designated TRIMS). The major objective of HARP was the complete rehabilitation of individuals handicapped by alcoholism. New techniques were used to assure reciprocal interaction between vocational rehabilitation services and treatment services including medical, psychiatric, social, psychological and pastoral counseling. The character of this program determined its location within the facilities of TRIMS in the Texas Medical Center, Houston, Texas.

HARP was initiated in 1966 and completed June 30, 1969. Examination of the case records of the 251 clients diagnosed as alcoholics and accepted for vocational rehabilitation services showed 53 per cent were closed as "rehabilitated" while 47 per cent were closed as "not rehabilitated." Therefore, a number of questions arose concerning what, if any, factors were correlated with rehabilitated compared to not rehabilitated participants in the program. For example, could prognostic criteria be delineated through systematic study of the data?

The dilemma of the rehabilitation worker is very well outlined in the following statement taken from the Texas Journal on Alcoholism:

> All aspects of feasibility taken into consideration, the conclusion is that there is no way to establish a realistic set of guidelines for determining the feasibility of alcoholics for rehabilitation services that will apply to all clients, in all states, for use by all counselors. [Arrell, 1970, p. 15]

Thus, the establishment of prognostic instruments or guidelines in the selection of alcoholics for rehabilitation has suddenly become a crucial need. There is very little scientific information concerning how one can separate the alcoholic with potential for rehabilitation from the alcoholic that has no potential for recovery.

The concern of this study is with the evaluation process of the alcoholic. The research undertaken involves the examination of case records of alcoholics in the Houston Alcoholism Rehabilitation Project to determine if selected factors were differentially related to the successful rehabilitation or non-successful rehabilitation in this particular program.

Significance of the Problem

Literature pertaining to rehabilitation of the alcoholic reveals that there are voluminous published reports yet they do not seem to provide the average rehabilitation counselor with many useful prognostic instruments. Most of the studies are descriptive of particular segments of the alcoholic population (Dumas and Muthard, 1970). Many profiles of the alcoholic are presented but very few

useful studies that help to evaluate the results of different rehabilitation approaches. All of these related studies had some control factors either in forms of referral sources or elaborate screening. This would be expected to predetermine final results, in other words, studies were well designed and controlled; yet the rehabilitation counselor has no such conditions to place upon persons coming to him for help. At least in the state of Texas, the rehabilitation counselor is required to closely evaluate and attempt to help every person that comes to his office, whether he is referred by agencies, individuals, or simply refers himself. Because of the lack of experimental controls used in the program from which data for this study were drawn, appears to make it highly significant as it more closely approximates the actual situation that most rehabilitation counselors encounter in the course of their job. None of the studies provided adequate theories or instruments that could identify factors related to which alcoholics will respond to rehabilitation, and which alcoholic is unlikely to respond to rehabilitation. It is the belief of this researcher that differences do exist in demographic, social, and psychometric factors between the alcoholics that were rehabilitated, and the alcoholics that were not rehabilitated, that received services in the Houston Alcoholism Rehabilitation Project. Any observed differences will contribute to the knowledge of the

rehabilitation counselor.

Theoretical Orientation

The Texas Rehabilitation Commission, Division of Vocational Rehabilitation (formerly under the Texas Education Agency), is a Federal-State program for the vocational rehabilitation of physically and/or mentally disabled individuals. Since 1929 (Texas Rehabilitation Commission, 1971) the Texas Division of Vocational Rehabilitation has functioned continuously in assisting handicapped persons to obtain gainful employment.

The services of the Texas Rehabilitation Commission offered to help the handicapped overcome their vocational disabilities are quite extensive and flexible, based upon the specific needs of the individual. These services include diagnostic examinations, vocational counseling and guidance, any medical, surgical, or psychiatric treatment that might be necessary in the rehabilitation of the client. Also, prosthetic devices, college training, vocational training, or on the job training to prepare the client for his occupational goal may be furnished. In addition, financial assistance while in training, transportation, books, tools, and training supplies necessary for the client to pursue his rehabilitation plans are provided as needed.

The need for these services are determined by the rehabilitation counselor working in the client's local community, and after the client has been prepared for employment, the counselor then assists him in securing a suitable job compatible with his personality. However, it was not until 1965 that the Texas Division of Vocational Rehabilitation accepted clients for rehabilitation on the basis of alcoholism as the sole disabling condition. Eventually alcoholism was accepted as a legitimate disease entity and a need to provide specialized and comprehensive assistance was recognized and is now routinely provided.

As previously indicated, alcoholism is generally accepted as a disease, however theories concerning the causes and treatment of alcoholism are confusing and conflicting. One line of thinking relates alcoholism to inheritance (Vocational Rehabilitation Commission and North American Association of Alcoholism Programs).

Many investigators emphasize the constitutional basis of alcoholism. Still, the urge to drink cannot be proved to be inherited, and the concensus is that no person is definitely destined to become an alcoholic because of his heredity.

Many psychoanalysts explain alcoholic addiction on the basis of repressed homosexuality. One argument advanced in favor of this hypothesis is that excessive drinking by men occurs principally in the company of other men,

and the alcohol overcomes inhibitions, permitting the repressed homosexual urges to emerge. Other analysts report that the voices which torment the hallucinating alcoholic patient sometimes accuse him of homosexual practices. Also, many alcoholics are reported to have difficulty in sex role identification on various psychometric test protocols (Abramson, 1946).

Other, still popular, psychoanalytical theories are that alcohol addiction is a form of partial suicide or a form of self destruction stemming from elements of self directed aggression, excited by ungratified eroticism and a need for punishment related to aggressiveness. (Menninger, 1938)

A very well known theory and a surprisingly popular one, especially among alcoholics themselves, is the "alcoholic personality concept." Many investigators have studied the personality make up of alcoholics and have indicated that specific personality traits in the alcoholic repeatedly become apparent (Trice, 1966). In the opinion of this researcher, based upon many years of counseling experience, there does not appear to be a specific personality type and alcoholics do not seem to constitute a homogeneous group. In any unselected group of alcoholics, as many different personality types will be found as there are in the general population. However, there does appear to be personality differences between alcoholics that

respond to rehabilitation and alcoholics that do not respond to rehabilitation.

Learning theory is again gaining prominence in the local Texas Rehabilitation Commission program in the attempt to understand alcoholism, especially as it relates to the utilization of conditioning in the treatment of alcoholics. The drinking behavior is believed to have immediate rewarding consequences and delayed punishing factors. These rewards can be sedative or pleasurably stimulating, and tension or anxiety may be reduced promptly following alcohol ingestion. By using various adverse conditioning procedures, pairing electric shock with the intake and ingestion of alcohol, impressive percentages of successful treatments have been reported (Franks, 1966).

Of course many miscellaneous concepts of alcoholism develop from time to time relating to vitamin deficiency, low blood sugar and high blood sugar. Others include the belief that all alcoholics are sociopathic, neurotic and some investigators even consider them to be psychotic.

For the purpose of this study, most of the above concepts will be considered in regard to their utility as prognistic criteria in the rehabilitation of the alcoholic. However, the main theoretical consideration to be explored is the social and personality stability or instability, in the framework of "role theory." If variables can be distinguished, they are believed to be important factors

relating to the final outcome of certain vocational rehabilitation approaches to the problem of alcoholism. For example, some alcoholic clients may display a high degree of social stability judged by successful role performance, i.e., social roles of student, spouse, parent, employee, and sexual identity. In this study the concept role will be considered in its broadest sense, including effects of deficient role performance as it relates to intelligence and total personality. This concept relates to the set of variables central to this study. It also refers to role as a kind of job description or prescribed behavior and attitudes a person occupying a certain status is expected to assume. The concept role has traditionally provided the principal theoretical point of articulation between analyses of the behavior of individuals and groups by anthropologists and sociologists and analyses of individual personality and motivation by psychologists and psychiatrists (Kluckhohn, Murry, Schneider, 1953).

Every culture provides a set of patterns that are applicable to all members of the society. It also formally recognizes age, sex, occupational, and other statuses and supplies blueprints for training individuals to play roles that correspond to these statuses (Park, 1972). Each person's level of aspiration and success in playing his role as culturally defined varies, especially with the alcoholic, but no personality escapes the molding influences of one

set of roles as opposed to another. It is the discrepancies between the expected personality manifestations in the various roles played by the alcoholic that gives rise to many conflicts.

The alcoholic that has been able to perform the prescribed role requirements in the past and still maintains sufficient personality stability to function within these roles in the present is considered to have more readiness for rehabilitation. Conversely, the alcoholic that has never successfully functioned within the sociocultural roles expected of him will be less likely to respond to a rehabilitation program.

A Review of the Literature

Much has been written concerning role structure and personality. Also, there are many references as to how the alcoholic performs the particular roles pertinent for him. His behavioral tendencies have been analyzed with respect to the role expected of him, and how he complies, or deviates, from them. Bales (1942) gives particular attention to the alcoholic roles, especially the sex and occupational factors. Patrick (1952) also provides considerable information relating to the cultural and personality traits that are considered to be of significance to understanding why the alcoholic uses alcohol. He describes the influence

of various traditions and customs that are considered to be the determining factors involved in the use of alcoholic beverages by the alcoholic as well as the non-alcoholic.

Many other important writings were reviewed; however, in the interest of brevity, only those considered to be of direct importance to this study will be referred to. It was noted that most writings indicated that the alcoholic cannot consistently satisfy role requirements in terms of their cultural definition.

In addition to a review of the literature, extensive investigation of previous research was performed as follows: Medlar search through the University of Texas; contact with the Smithsonian Science Information Exchange; review of social and rehabilitation service reports on rehabilitation research and demonstration projects; evaluation of research grants, Review Branch of Research Grants, NIH; review of social and rehabilitation service abstracts, Computer Management Corporation; research of Texas Rehabilitation Commission Library, Houston Council of Alcoholism Library; and Texas Commission on Alcoholism Reports; also all available sociology, anthropology, psychology, and alcoholism related journals and abstracts were reviewed. Most of these reviews were conducted at the University of Houston, Rice University, and the Jesse Jones libraries. This research resulted in over 100 references relating to studies of the alcoholic and alcoholism. Generally, these

references were descriptive studies of particular segments of the alcoholic population, and therefore did not reveal the effectiveness of rehabilitation programs as they relate to demographic and personality factors. Furthermore, results of any such study will reflect the design of the program, the specific location, and population, which means the results are not reproducible and findings are difficult to compare. However, within these limitations, a comparative review will be undertaken between HARP and any similar programs which have been reported.

M. B. Bailey (1963) reported on a project in New York City which indicated some differences in the social characteristics of applicants accepted into that treatment program and those accepted in HARP. The median age of those accepted in the New York project was 40 years, compared to a median age of 45 years for clients in the Houston project. In the New York project 46.1 per cent of the accepted applicants were married; only 33.4 per cent of accepted clients in the Houston project were married.

Educational levels were different also, with 57.7 per cent of the New York applicants having "some college or more" compared to 30 per cent for the Houston group. Comparison of occupation showed 64.6 per cent of the New York group were white collar workers; of these, 35.4 per cent were professional, semiprofessional and managerial. In the Houston study only 33.06 per cent of clients were white

collar workers. Apparently, applicants for the New York project were carefully screened and differed considerably from the clients accepted in HARP.

The report of a rehabilitation program in San Francisco, California described another type of client in regard to social stratification. Lawrence Katz, Program Director, observed that the participants were primarily between age 36 and 55, which approximates the age range of HARP clients. However, most of the San Francisco subjects were skilled laborers or semi-skilled and unskilled occupationally. The San Francisco applicants were not as well educated as the Houston group and only five per cent of the San Francisco clients were married (Katz, 1966). In summary, the New York participants were from a much higher middle class level than were Houston clients but San Francisco subjects were of lower social stratification. However, the findings of the San Francisco program indicated that factors significantly related to successful rehabilitation included evidence of prior satisfactory work and social attainments as well as relatively stable recent social functioning. As will be discussed later, these variables will also be considered in relation to successful rehabilitation in HARP.

The Chicago Alcoholic Treatment Center conducts a rehabilitation project which still is in operation. This very extensive program is designed primarily to reach the

skid row alcoholic. Less than 20 per cent of patients in the Chicago project were skilled workers.

However, the major connotation which emerged from this project was that rehabilitation programs for victims of alcoholism must focus on three primary life areas. These are, reduction of drinking, improved employment status, and better social and living arrangements (Snyder, 1971).

Although the literature was voluminous, only one study was found which actually measured the results of a treatment and rehabilitation program according to the criteria "rehabilitated" and "not rehabilitated" as defined by a state vocational rehabilitation agency. This was the Florida Project on Vocational Rehabilitation of Treated Alcoholics (Williams, 1964). Under this collaborative program conducted by the State of Florida, the Division of Vocational Rehabilitation and the Alcoholic Rehabilitation Program conducted a joint referral system which enabled treated alcoholics to receive vocational assistance when they returned to their home communities. Patients were screened during their stay in the alcoholic treatment center and subsequently were referred through routine procedures to their community representatives of the Division of Vocational Rehabilitation. As will be observed later in the description of the HARP project, this referral system was one of the major differences between the Houston and

the Florida programs.

In the Florida project, age and services provided the referrals were the main factors differentiating those vocationally rehabilitated from the "not rehabilitated." Very few of the many background and diagnostic factors used to analyze the data for the Florida study showed significant correlations with the patients' outcome. For example, the initial physical condition of the applicant apparently had little or no influence on whether he eventually was vocationally rehabilitated.

> Of those background and diagnostic factors that differentiated rehabilitated referrals from nonrehabilitated ones, the rehabilitated males had greater frequencies in the favorable direction. These factors were: married, frequent (weekly or oftener) contact with closest friend in past year, no other disease at final medical diagnosis, and stable interpersonal relations. [Williams, 1964, p. 75]

Followup in the Florida study showed the typical rehabilitated client was a male under 35 years of age, married, had contact with closest friend, had no other diseases, had stable interpersonal relations, and was a white collar worker before treatment.

Vocational Rehabilitation among Alcoholics and Demographic Factors

Traditionally the vocational rehabilitation counselor is careful to examine the demographic factors of the clients referred to him as they can many times determine

which goals are feasible and which are not feasible. For example, certain occupations and treatment modalities would not be of value for certain age groups. Even marital status can rule out some occupations and some forms of treatment, e.g., couples group counseling. In addition, previous occupations and marital status give important clues as to what future goals are realistic. The client's sex, education, and source of support also provide important factors related to the rehabilitation of handicapped individuals. In some respects these demographic factors function as role determinants for all persons whether they are handicapped by alcoholism or are considered to be normal. The society in which one lives defines how the different roles necessary to group life are to be performed. In other words, many roles are assigned by the culture on the basis of sex, age, membership in a caste, class, or occupational group. Naturally this is crucial information for the counselor to have if he is to be successful with his client.

It is believed by some counselors that demographic factors such as those mentioned above are directly related to whether or not a client can profit from vocational rehabiliation services. An aged client with a poor work history and family instability would be considered as a poor risk for rehabilitation by some counselors. A client that has never successfully supported himself would likewise

be considered as unlikely to respond to rehabilitation services by some counselors.

For these reasons the demographic factors of age, marital status, education, occupation, and source of support were chosen as factors to be examined in this study.

Vocational Rehabilitation and Psychological Factors

Psychological tests have been devised and are used primarily for the determination and analysis of individual differences in general intelligence, specific aptitudes, educational achievement, vocational fitness, and personality traits. Tests also have long been used for a variety of sociological, cultural, psychological, educational, and employment studies of groups rather than for the study of a particular individual. Among these studies of groups, the following have been most common and include the most important fields of investigation: mental development, intellectual differences, personality differences associated with age, sex, and racial membership; differences among persons at different occupational levels and intellectual and other personality traits of atypical groups such as gifted, neurotic, psychotic, and alcoholic. The available data for this study include two personality tests and one verbal IQ test as follows: the Minnesota

Multiphasic Personality Inventory (MMPI), the Edwards Personal Preference Schedule EPPS, and the Peabody Picture Vocabulary Test.

The Minnesota Multiphasic Personality Inventory (MMPI) is considered to be one of the most elaborate instruments in the area of personality tests. It has been subjected to more research than any other inventory of this type and is considered to very reliable. The inventory consists of 550 statements that require the subject to mark two possible answers, true or false depending upon whether he considers the answer as, "true as applied to you or false as applied to you." (Hathaway and McKinley, 1966) The statements cover a wide range, including physical condition, morale, and social attitudes. The items have been classified under twenty-six headings, i.e., general health, gastrointestinal system, family and marital, religious attitudes, affect, delusions, phobias, masculinity-femininity interests etc. There are nine clinical scales or categories grouped from this that will be discussed in more detail under "construction of psychological indexes" in Chapter II.

The Edwards Personal Preference Schedule (EPPS) is designed primarily as an instrument for research and counseling purposes. It provides measures for independent normal personality variables. The EPPS is easy to administer and can be given either individually or to large groups. Fifteen personality variables are measured by this test as

follows: achievement, deference, order, exhibition, autonomy, affiliation, intraception, succorance, dominance, abasement, nurturance, change, endurance, heterosexuality, and aggression. These variables will also be discussed in detail in Chapter II.

The Peabody Picture Vocabulary Test (PPVT) is an individually administered test of verbal intelligence. It can be given to individuals from ages two years six months through adulthood. It is an individual wide range picture vocabulary test utilizing a graduated series of 150 plates, each containing four pictures. The test administrator provides a word and the subject is instructed to point to the picture which best describes the word.

The validity of the Peabody test is high when compared to other tests even though it only measures vocabulary. However, vocabulary tests have repeatedly been found to measure effectively verbal intelligence. Between 1959 and 1964, 33 studies were completed on the validity of the Peabody Picture Vocabulary Test. The median correlation of the PPVT with the Stanford-Binet was .71, and with the Wechster Scale it was .61 (American Guidance Service, Inc., 1973).

Vocational Rehabilitation among Alcoholics and Social Factors

The Texas Rehabilitation Commission (TRC) has long

been aware of the importance of social factors in the rehabilitation of disabled individuals. The policy of TRC requires that the vocational counselor investigate and evaluate the sociological influences acting upon clients throughout the rehabilitation process. The counselors are also directed by policy to consider these factors as they relate to the client's early life and how they may have had some bearing upon the development of his handicap. Social factors are also considered when the counselor is determining readiness or feasibility for rehabilitation services.

The social factors considered by the vocational counselor working specifically with alcoholics are tied to the social and cultural environment of the client. Both in terms of etiology and rehabilitation alcoholism is viewed as a product of social interaction within a given cultural setting rather than as an individual aberration plus the chemical alcohol. The beliefs and attitudes, especially the degree of tolerance among group members for behavioral deviation in relation to alcohol are felt to be essential elements in the emergence of alcoholism in any one member of the group. Similarly, the chances of success in rehabilitation are felt to be dependent on these surrounding attitudes and behaviors. Of particular interest to the counselor attempting to rehabilitate the alcoholic is the willingness to develop changes of attitudes and behavior

in relation to the alcoholic by his family, friends, and community. Will the alcoholic's family and friends agree to refrain from reinforcing his destructive behavior? Will his employer and community accept him back after rehabilitation?

Contrary to popular opinion, a large segment of the alcoholic population is married. This being the case, counselors working with alcoholics must also work with their families. Since the American family is usually made up of a couple and offspring, each member has to have a predictable role. Unless these roles are adequately performed by all members, the family function breaks down, resulting in frustration, uncertainty, and "a clouding of roles." (Trice, 1966) These predictable roles are also required in education, business, recreation, and all other social areas of the alcoholics life and one or all of these roles can be clouded because of his disability.

The specific social factors examined in this study relate to such things as number of hospitalizations, number of arrests for drunkenness, how long heavy drinking, longest period of sobriety, experience in psychotherapy, experience in AA, and others. These factors will be considered in terms of how they affect and/or how they are affected by the role fulfillment of the alcoholic client.

Summary

1. The prupose of this study was to ascertain the relationship between selected demographic, social and psychological variables and the vocational rehabilitation of alcoholics as defined by the Texas Rehabilitation Commission policy.

2. The significance of this research is of both practical and theoretical value. The findings should be of practical value to the rehabilitation counselor working with alcoholics. The study should also contribute to the continued research involving the alcoholic.

3. The study sample consists of diagnosed alcoholic clients that were accepted into a comprehensive rehabilitation project sponsored by two state agencies and funded by the Vocational Rehabilitation division of the Department of Health, Education, and Welfare.

4. Review of the literature suggested that the appropriate theoretical orientation to this thesis is role theory. That is, the ability of the alcoholic to adequately fulfill the role requirements of his society. There is a scarcity of relevant research in this area. However, there are abundant reports pertaining to the alcoholic and alcoholism, yet all were different in varying degrees from this study.

CHAPTER II

RESEARCH PROCEDURES AND PLAN OF ANALYSIS

The purpose of this chapter is to state the methodological procedures employed in this research. Two concerns are covered; namely the source of data and the analytical design.

The source of data section includes a discussion of the recording of data, the universe and sample from which data were eventually ascertained. The section on analytical procedures is directed toward the operational measurement of dependent and independent variables and the techniques employed for the statistical interpretation of the data.

Source of Data

To reiterate, the researcher plans to distinguish between the two groups the clients' pathological scores from normal scores. This section of the chapter serves to operationalize variables chosen from these scales.

The data were secured from the case folders kept

on all clients that were referred to the Houston Alcoholism Rehabilitation Project described in Chapter I. All clients referred to this project were subjected to a complete diagnostic evaluation.

It included a general medical exam, psychiatric evaluation, psychological testing, social case history, vocational interview, and a clinical pastorial evaluation. During the psychological testing phase the clients were also given a questionnaire of demographic and social factors. Data relevant to this study includes six demographic characteristics, eleven social factors, and three psychological scales yielding twenty-six variables.

The Universe and Sample

The total population from which the sample selected for evaluation for this study was drawn from the 1,107 diagnosed alcoholics referred to HARP. From this population only 540 alcoholics completed the diagnostic phase. This study is concerned with the 251 alcoholics who were accepted and received TRC services. Another study is being conducted which will examine the 289 alcoholics who were referred but not accepted and the 251 alcoholics who were accepted for TRC services.

The study consists of 251 "accepted" clients. They were dichotomized by 132 rehabilitated clients and 119 not rehabilitated clients. Thus dichotomized, they were cross

tabulated by six baseline social and demographic characteristics and eleven questionnaire items of social factors. In addition, these two groups were compared in terms of their scores from the MMPI the EPPS and the PPVT.

Plan of Analysis

Dependent Variable

The dependent variable in this research is a dichotomous classification of clients by the Texas Rehabilitation Commission that have been "rehabilitated" or "not rehabilitated." This classification is specifically in accordance with the operational definition established in the Texas Rehabilitation Commission policy manual as follows:

> Cases closed as rehabilitated must as a minimum (1) have been declared eligible, (2) have received appropriate diagnostic and related services, (3) have had a plan for vocational rehabilitation services formulated, (4) have completed the plan insofar as possible, (5) have been provided counseling as an essential rehabilitation service, and (6) have been determined to be suitably employed for a minimum of 30 days. [Texas Rehabilitation Commision, 1971]

From this definition, two terms within will be defined, i.e., "eligible," "suitably employed":

Eligible is defined by Texas Rehabilitation Commission as "the presence of apphysical or mental disability; the existence of a substantial handicap to employment; and reasonable expectation to render fit to engage in a gainful occuplation" (Texas Rehabilitation Commission,

May 1971, p. xi).

Suitably employed is defined as

> Employment is considered suitable when, after a reasonable period of follow-up (30 days minimum), it has been established that the following minimum conditions have been met:
> 1. The work performed is consistent with the client's physical and mental capabilities, interests, and personal characteristics.
> 2. The client possesses or has acquired necessary skills to perform the work successfully.
> 3. The employment and working conditions will not aggravate the client's disability nor jeopardize the health or safety of others.
> 4. The wage and the working conditions conform to State and Federal statutory requirements.
> 5. The client and employer are satisfied.
> 6. The employment is regular and reasonably permanent and the client receives a wage commensurate with that paid other workers for like productivity on similar jobs [Texas Rehabilitation Commission, May 1971, p. xi].

Operationally, "not rehabilitated" in this study refers to clients who have been accepted for services but have been accepted for services but have been declared not rehabilitated after a plan was initiated. "Not rehabilitated" is defined as

> after the plan has been initiated, it may be determined that suitable vocational adjustment cannot be achieved; therefore, rehabilitation services to the client would be discontinued. Such a decision is to be arrived at only after considering all the facts and circumstances present in the situation. Rehabilitation services to a client should not be terminated until the counselor is convinced that every possible resource and service has been exhausted. If the counselor is satisfied, following plan initiation, that vocational adjustment cannot be attained, he must, insofar as possible, advise the client of his decision and, if appropriate, refer the client to the agency that can best serve his needs.
>
> Following a determination that services are to be discontinued the counselor is to close the case record

as 'Closed Not Rehabilitated (Status 28)' [Texas Rehabilitation Commission, May 1971, p. xi].

From this definition the term accepted is defined. "An individual who has been certified as meeting the three basic eligibility requirements is accepted for vocational rehabilitation services, designated as an active case, and placed in Status 10." (Texas Rehabilitation Commission, May 1971, p. xi)

The term "plan," used in the above definitions, simply refers to developing a vocational rehabilitation plan of services in writing after the client is accepted.

Independent Factors

Independent factors are grouped under three headings for purposes of this investigation. These are designated as demographic, social and psychological.

Demographic factors. The specific demographic factors to be examined are as follows: age, sex, marital status, education, occupation, and primary source of support. Age and sex are self explanatory. Marital status is categorized as follows: married, divorced, widowed, single, separated, common law, and other. Education refers to actual number of years, i.e., twelve forhhigh school, sixteen college, above sixteen graduate school. Occupation is categorized as follows: professional, clerical, sales, managerial, skilled labor, unskilled labor, service,

agricultural, and none. Primary source of support: self, family and inheritance, friends, public assistance, pensions, savings, investments, and none.

Social factors. The specific social factors are as follows: number of previous hospitalizations for alcoholism, number of previous hospitalizations for other psychiatric reasons, number of arrests for drunkenness up to thirty arrests, how long heavy drinking (days, months, years), longest sobriety period (days, months, years), how long since last drink (days, months, years), previous experience in individual psychotherapy, previous experience in group psychotherapy, previous experience in alcoholics anonymous, if married would spouse participate in the rehabilitation program, and does client believe he is an alcoholic. Special data forms were used to collect the above information, copies of these are appended (see Appendix B).

Psychological factors. As mentioned and described in Chapter I data pertaining to three psychological scales were available for this investigation. These include the MMPI, EPPS, and PPVT.

The scores derived from the two populations, "rehabilitated" and "not rehabilitated," were to be compared in order to ascertain whether there were significant differences between the two variables in the study. The specific classification of the scores as well as the types

of scores utilized are stated below

MMPI. The "T" or standard score was the index to be utilized in the comparison of the two groups. The "T score" has a mean of 50 and a standard deviation of 10. Those scores that fall 2 standard deviations above the mean (70+) are considered as indicators of psycho-pathology. When a "T score" falls below the mean, it cannot be interpreted as an indicator of greater adjustment, since low scores have not been proven clinically valid. However markedly low "T scores" are generally considered as indicators of maladjustment rather than superior adjustment.

EPPS. The raw scores obtained from the test protocol were converted to percentile scores based on the general adult sample. A percentile score of 50 indicates that a specific factor was an average need. Scores of 75 or higher indicated a high need and scores that fall from the 25th percentile and below were considered as low needs.

PPVT. The raw scores obtained by this measure were converted into standard score IQ's. Average IQ's were considered as ranging from 91-110.

The following ten independent variables from the MMPI that were used in this study include:

1. Hypochondriasis (33 items). Mostly body complaint items. Scale shows minor elevations in physical illness. Diffuse, scattered, non-specific complaints are associated with scores in the higher ranges.

2. Depression (60 items). Reflects current morale. This is the best single indicator of adjustment. Can be interpreted directly, according to the usual psychodynamic formulations of depression.

3. Hysteria (60 items). Provides an estimate of the underlying psychology of hysteria more than the likelihood of symptomatic expression. High scorers tend to be self-centered, demanding, immature, and somatically preoccupied, alternately suggestible and deeply skeptical.

4. Psychopathic scale (50 items). Refers to the asocial psychopathic type, rather than the inadequate constitutional inferiors, deranged, and other such varieties listed in psychiatric texts. High scores are associated with impulsivity, insensitivity, but not hostility toward others, and where intellect is high, easy, effortless social technique.

5. Masculinity-femininity scale (60 items). Feminine scores (high for men low for women) indicate breadth of interest, intellectuality, scope as a person, and self-awareness. Masculine scores connote aggressiveness, inflexibility, coarseness, and a general tendency to think and behave in a crude and vulgar manner.

6. Paranoia scale (40 items). Like hysteria, not a direct measure of the symptomatic picture, but a gauge of the predispositions. Heightened personal sensitivity is the main feature.

7. Psychasthenia scale (48 items). This scale has the highest correlations with conventional scales of neurotic tendency. It provides an index of agitation, perplexity, self-doubt, apprehension, anxiety, etc.

8. Schizophrenia scale (78 items). Includes material on ego deterioration and malignant breakdowns of self-direction, along with feelings of isolation, worry, and inferiority. High scores involve considerable affect and tension, and are associated with acute clinical syndromes rather than with the typical well-patterned schizophrenic picture.

9. Hypomania scale (46 items). Expansiveness, spontaniety, enthusiasm, frankness, etc., are associated with elevated scores. Depending on other scores, irritability, lack of control, and defects of judgment may also be suggested.

10. Social introversion scale (70 items). This scale is self explanatory, however clinical evidence suggests that it is a general index of neuroticism, high scores indicate a tendency to withdraw from social contact and feels more comfortable alone or in small groups. (Carkhuff, 1955)

The EPPS afforded the researcher the following fifteen variables for consideration:

1. Achievement: To do one's best, to be successful, to accomplish tasks requiring skill and effort, to be a recognized authority, to accomplish something

of great significance, to do a difficult job well, to solve difficult problems and puzzles, to be able to do things better than others, to write a great novel or play.

2. Deference: To get suggestions from others, to find out what others think, to follow instructions and do what is expected, to praise others, to tell others that they have done a good job, to accept the leadership of others, to read about great men, to conform to custom and avoid the unconventional, to let others make decision.

3. Order: To have written work neat and organized, to make plans before starting on a difficult task, to have things organized, to keep things neat and orderly, to make advance plans when taking a trip, to organize details of work, to keep letters and files according to some system, to have meals organized and a definite time for eating, to have things arranged so that they run smoothly without change.

4. Exhibition: To say witty and clever things, to tell amusing jokes and stories, to talk about personal adventures and experiences, to have others notice and comment upon one's appearance, to say things just to see what effect it will have on others, to talk about personal achievements, to be the center of attention, to use words that others do not know the meaning of, to ask questions others cannot answer.

5. Autonomy: To be able to come and go as desired, to say what one thinks about things, to be independent of others in making decisions, to feel free to do what one wants, to do things that are unconventional, to avoid situations where one is expected to conform, to do things without regard to what others may think, to criticize those in positions of authority, to avoid responsibilities and obligations.

6. Affiliation: To be loyal to friends, to participate in friendly groups, to do things for friends, to form new friendships, to make as many friends as possible, to share things with friends, to do things with friends rather than alone, to form strong attachments, to write letters to friends.

7. Intraception: To analyze one's motives and feelings, to observe others, to understand how others

feel about problems, to put one's self in another's place, to judge people by why they do things rather than by what they do, to analyze the behavior of others, to analyze the motives of others, to predict how others will act.

8. Succorance: To have others provide help when in trouble, to seek encouragement from others, to have others be kindly, to have others by sympathetic and understanding about personal problems, to receive a great deal of affection from others, to have others do favors cheerfully, to be helped by others when depressed, to have others feel sorry when one is sick, to have a fuss made over one when hurt.

9. Dominance: To argue for one's point of view, to be a leader in groups to which one belongs, to be regarded by others as a leader, to be elected or appointed chairman of committees, to make group decisions, to settle arguments and disputes between others, to persuade and influence others to do what one wants, to supervise and direct the actions of others, to tell others how to do their jobs.

10. Abasement: To feel guilty when one does something wring, to accept blame when things do not go right, to feel that personal pain and misery suffered does more good than harm, to feel the need for punishment for wrong doing, to feel better when giving in and avoiding a fight than when having one's own way, to feel the need for confession of errors, to feel depressed by inability to handle situations, to feel timid in the presence of superiors, to feel inferior to others in most respects.

11. Nurturance: To help friends when they are in trouble, to assist others less fortunate, to treat others with kindness and sympathy, to forgive others, to do small favors for others, to be generous with others, to sympathize with others who are hurt or sick, to show a great deal of affection toward others, to have others confide in one about personal problems.

12. Change: To do new and different things, to travel, to meet new people, to experience novelty and change in daily routine, to experiment and try new things, to eat in new and different places, to try new and different jobs, to move about the country and live in different places, to participate in new fads and fashions.

13. Endurance: To keep at a job until it is finished, to complete any job undertaken, to work hard at a task, to keep at a puzzle or problem until it is solved, to work at a single job before taking on others, to stay up late working in order to get a job done, to put in long hours of work without distraction, to stick at a problem even though it may seem as if no progress is being made, to avoid being interrupted while at work.

14. Heterosexuality: To go out with members of the opposite sex, to engage in social activities with the opposite sex, to be in love with someone of the opposite sex, to kiss those of the opposite sex, to be regarded as physically attractive by those of the opposite sex, to participate in discussions about sex, to read books and plays involving sex, to listen to or to tell jokes involving sex, to become sexually excited.

15. Aggression: To attack contrary points of view, to tell others what one thinks about them, to criticize others publicly, to make fun of others, to tell others off when disagreeing with them, to get revenge for insults, to become angry, to blame others when things go wrong, to read newspaper accounts of violence [Edwards, 1959, pp. 28-29].

The third type of psychological factors involves scores from the PPVT.

Hypotheses

Working Hypothesis

The 132 rehabilitated clients that received services in the Houston Alcoholism Rehabilitation Project will be found to show significant differences in a positive direction in demographic, social and psychometric factors than the 119 non-rehabilitated clients who will reveal history and scores in a negative direction in these same areas.

Statistical Hypothesis

The background of the rehabilitated clients obtained from an analysis of social and demographic characteristics, and responses to questionnaire items will show significant differences in a positive direction for the rehabilitated clients, and negative or pathological for the 119 nonrehabilitated clients. Analysis of differences between these two groups, as measured from resulting scores of the Minnesota Multiphasic Personality Inventory, Edwards Personal Preference Schedule, and Peabody Verbal I.Q. Tests will also show a pattern of significant differences among the various scales of each of these instruments. The scores for each scale, will indicate more favorable emotional stability by the 132 rehabilitated clients and the scores of the 119 nonrehabilitated clients will be skewed in the negative or pathological direction. Also, the I.Q., as measured by the scores of the Peabody Verbal I.Q. Test, will be higher for the rehabilitated than for the nonrehabilitated.

Null Hypothesis

Responses in terms of ratios, proportions, and percentages will not significantly differentiate the 132 rehabilitated clients from the 119 nonrehabilitated clients. The responses to the questionnaire items, the baseline social and demographic characteristics, and the data from

the test battery given these two groups will be comparable, and any differences will be due to chance alone.

Basic Questions

1. Does literature reveal differences in social, vocational, and psychological characteristics of alcoholics accepted in similar treatment and rehabilitation projects?

2. Is there any significant difference between the 132 rehabilitated clients, that received Vocational Rehabilitation services, and the 119 nonrehabilitated clients, that also received Vocational Rehabilitation services, when they are cross tabulated by the six baseline characteristics, the eleven social factors, and when the psychological tests are analyzed?

3. To what extent do the baseline characteristics differ, and to what extent do the responses made the the 132 rehabilitated clients differentiate them from the 119 nonrehabilitated clients? Also, what degree will the psychological test profiles differ after statistical analysis?

4. If there are items in this study that significantly differentiate the two samples, will the computed statistical analysis and cross tabulations suggest a low, medium, or high degree of association?

Statistical Techniques Employed

Statistical analysis of data consisted of relating the above demographic, social and psychological factors to rehabilitation outcome, i.e., rehabilitated or not rehabilitated. Statistical techniques in determining levels of significance included chi-square (X^2) and multiple correlation and regression analysis. Determined probabilities that are .05 or less are regarded as significant associations between variables tested.

Summary of Research Procedures and Plan of Analysis

The universe from which the sample was drawn included 1,107 patients referred to the Houston Alcoholism Rehabilitation Project during the period September 1, 1966 through June 30, 1969. The subjects selected for this sample included 251 alcoholic patients who were accepted by and received services from the Texas Rehabilitation Commission. The accepted clients, after completing treatment, were classified as "rehabilitated" or "not rehabilitated" in accordance with specific criteria as outlined in the TRC policy manual. Independent factors that were to be examined in this study are grouped under three specific areas; demographic, social and psychological. The purpose of this investigation was to determine if there were

significant differences between the two groups on each of the three independent categories. Statistical analysis of the data consisted of relating the above demographic, social and psychological factors to the rehabilitation outcome.

CHAPTER III

FINDINGS OF THE STUDY

This study was designed to identify differences between diagnosed alcoholics who were accepted and successfully rehabilitated, and those who were accepted but not rehabilitated in the HARP program. In order to determine significant variables forty-three available characteristics were utilized. Multiple correlation analyses were performed, using "rehabilitated" and "not rehabilitated" as the dependent variable and the interval level measurement of 34 independent variables. For the remaining nine variables (not lending themselves to correlational analysis), a chi-square measure of significance was applied. Data contained in Table display the results of multiple correlation analyses.

The overall correlation between the 34 variables and the dependent variable was .57 (see Table 1). To determine whether this determined correlation could occur by chance, an analysis of variance was performed which yielded an F ratio of 3.03. This was shown as having the probability of less than one in ten thousand that the arrayed variables were not related. Analyses were performed to

TABLE 1

Multiple Correlation Analysis

	Variables	Correlation	RC	F	P
2	Age	0.10	0.020	8.00	0.00531*
3	Education	0.48	0.028	18.34	0.00013*
4	Previous Hosp. IA	0.19	0.006	0.03	0.85562
5	No Hosp. Psych.	-0.14	0.057	0.40	0.53058
6	No. Arrests Drunk	-0.01	0.003	0.35	0.55710
7	How long heavy dr.	-0.12	0.000	0.01	1.00000
8	Longest Soby. Pd.	-0.25	-0.053	2.55	0.10796
9	How long since postd.	-0.14	-0.002	0.00	1.00000
10	Peabody V. I.Q.	-0.40	-0.007	4.97	0.02530*
11	MMPI-Hypochondriasis	-0.29	-0.004	0.45	0.50818
12	MMPI-Depression	-0.33	0.004	0.30	0.59563
13	MMPI-Hysteria	-0.07	0.001	0.13	0.71494
14	MMPI-Psychopathic	-0.33	0.002	0.24	0.62861
15	MMPI-Mascu./Fem.	-0.32	-0.002	0.18	0.67724
16	MMPI-Paranoia	-0.31	0.002	0.15	0.69351
17	MMPI-Psychothemia	-0.33	0.001	0.02	0.91257
18	MMPI-Schizophrenia	-0.28	-0.003	0.39	0.54159
19	MMPI-Hypomania	-0.29	0.005	0.99	0.67740
20	MMPI-Social Introv.	-0.33	-0.001	0.00	1.00000
21	EPPS Achievement	-0.21	-0.001	0.85	0.63896
22	EPPS Deference	-0.14	-0.003	1.15	0.28550
23	EPPS Order	-0.11	0.001	0.00	1.00000
24	EPPS Exhibition	-0.18	-0.001	0.14	0.71071
25	EPPS Autonomy	-0.14	0.001	0.01	1.00000
26	EPPS Affiliation	-0.10	-0.001	0.17	0.67691
27	EPPS Intraception	-0.11	0.001	0.97	0.67108
28	EPPS Succorance	-0.16	-0.002	0.84	0.63698

TABLE 1 (continued)

	Variables	Correlation	RC	F	P
29	EPPS Dominance	-0.19	-0.003	2.48	0.11220
30	EPPS Abasement	-0.16	-0.003	1.09	0.29744
31	EPPS Nurturance	0.00	-0.000	0.01	0.90761
32	EPPS Change	-0.03	-0.000	0.21	0.65579
33	EPPS Endurance	-0.04	-0.001	0.14	0.70279
34	EPPS Heterosexuality	0.00	0.003	1.39	0.23936
0	EPPS Aggression	0.0	0.008	1.18	0.27812

*Significant variable

R of Multiple Correlation = 0.57, F Value = 3.03; Probability = 0.00010

determine which of the factors were significantly related to the rehabilitated or not rehabilitated criteria.

As indicated in Table 1, the variables with statistical significance include age, education, and verbal I.Q. Initial consideration of the correlated variables having statistical significance shown in Table 1, age of the client is the first "variable." This variable is shown by frequency distribution in Table 2.

TABLE 2

Frequency Distribution of Ages

	Rehabilitated		Not Rehabilitated	
Age	f	%	f	%
25-34	15	11.31	23	19.32
35-44	50	37.84	40	33.60
45-54	54	40.88	43	36.12
55-64	13	9.80	13	10.92
Total	132	99.83	119	99.96

As shown in Table 2, the clients in the rehabilitated group of this study were predominantly in the age range 35 to 54 years (78.72 per cent) as compared to only 69.72 per cent of the not rehabilitated in this same age group. In the "not rehabilitated" group the 25 to 34 year category was much higher than in the rehabilitated group, 19.32 per cent, as compared to only 11.31 per cent in the rehabilitated group. This may support the tenet of

Alcoholics Anonymous that a person has to reach middle age before he is hurting enough to want to sober up. Many factors could be involved in explanation of this trend. The older clients have more family responsibilities, and, perhaps, more mature judgement of their situations. They are aware of the fact that satisfactory wmployment situations are more difficult to obtain. Conversely, the younger alcoholic client believes he always has one more chance to achieve rehabilitation.

Education was also determined to be a significantly correlated variable (see Table 3). Further examination of this independent variable indicates that clients suffering from alcoholism who have at least nine years of education and no more than three years of college are more likely to pursue a program and achieve successful rehabilitation than are the clients with 4th to 8th grade education, or those with college degrees or three years of graduate school. As shown in Table 3 the most obvious differences, however, occurred in comparison of those rehabilitated who had 9th through 12th grade education (58.31 per cent) versus 49.57 per cent of the not rehabilitated in this educational category.

Correlational analysis revealed that verbal I.Q. (measured by the Peabody Verbal I.Q. test) was also statistically significant. In the rehabilitated and the not rehabilitated groups the range of scores were the same -

TABLE 3

Frequency Distribution of Education

Years of Education	Rehabilitated		Not Rehabilitated	
	f	%	f	%
4-8	17	12.85	24	20.16
9-11	38	28.77	28	23.52
12	39	29.54	31	26.05
13-15	27	20.44	23	19.32
16	7	5.30	7	5.88
17-19	4	3.02	6	5.04
Total	132	99.92	119	99.97

79 through 138. The frequency distribution of these data are shown in Table 4.

TABLE 4

Frequency Distribution of Verbal I.Q.

I.Q. Scores	Rehabilitated		Not Rehabilitated	
	f	%	f	%
79-99	27	20.39	36	30.24
100-109	15	11.33	22	18.40
110-119	35	26.47	20	16.80
120-129	33	24.95	27	22.68
130-138	22	16.64	14	11.76
Total	132	99.78	119	99.88

As indicated clients with higher I.Q. scores (as measured in this study) apparently had better prognosis for rehabilitation than did the clients with lower I.Q. scores. In the rehabilitated group 68.06 per cent of participants

had I.Q. scores of 110 or above. Among those who were not rehabilitated, only 51.24 per cent had I.Q. scores of 110 or above. Furthermore, only 20.39 per cent of the rehabilitated group had scores below average compared with 30.24 per cent below average scores in the not rehabilitated group. An interesting finding was that both groups scored slightly above the average I.Q. level of 100 which is found in the general population. The mean I.Q. for the rehabilitated group was 114.3, with the most frequent score of 130. The mean I.Q. for the clients in the not rehabilitated group was 110.8. The most frequent score in that group was 111.

For the nine variables analyzed using the chi-square method of determining statistical significance, two were found to be statistically significant. These included primary source support and (if married) participation of the spouse in the treatment program. These data are presented in Table 5. However, three variables that were not statistically significant at the .05 level still merit consideration. These were marital status, occupation and previous experience in group therapy. The differences observed were in the direction expected and are discussed.

While marital status is not the most prominent factor of the nine variables themselves to X^2 analysis, it still merits consideration. For example, those clients who were married as compared with the unmarried ones are

TABLE 5

Rehabilitated and Nonrehabilitated

Chi-Square Variables

(Sex, Marital Status, Occupation, Primary Support, Individual Psychotherapy, Group Therapy, Alcoholics Anonymous, Spouse Participation, Alcoholic Perception)

Independent Variable	Rehabilitated f	Rehabilitated %	Nonrehabilitated f	Nonrehabilitated %	Total
Sex					
Male	99	75	88	73.94	187
Female	33	25	31	26.05	64
Total	132	100	119	100	251
N = 251 X^2 = .1875 d.f. = 1.70 > P.50					
Marital Status					
Married	53	40.15	32	26.89	85
Divorced	49	37.12	49	41.17	98
Widowed	6	4.54	5	4.20	11
Single	10	7.57	15	12.60	25
Separated	14	10.60	18	15.12	32
Total	132	100	119	100	251
N = 251 X^2 = 6.144 d.f. = 4.20 > P > .10					
Married N = 85 X^2 = 3.69 d.f. = 1.10 > P > .05					
Occupation					
Professional	9	6.81	8	6.72	17
Clerical	15	11.36	15	12.60	30
Sales	17	12.87	7	5.88	24
Managerial	10	7.57	2	1.68	12
Skilled Labor	49	37.12	61	51.26	110
Unskilled Labor	11	8.33	11	9.24	22
Service	20	15.15	11	9.24	31
Agricultural	0	0	2	1.68	2
None	1	.75	2	1.68	3
Total	132	100	119	100	251
N = 251 X^2 = 15.17 d.f. = 8 .107 > P > .05					

TABLE 5 (continued)

Independent Variable	Rehabilitated f	Rehabilitated %	Nonrehabilitated f	Nonrehabilitated %	Total
Primary Source of Support					
Self	56	42.42	46	38.65	102
Family & Inheritance	30	22.72	23	19.32	53
Friends	8	6.06	1	.84	9
Public Assistance	27	20.45	41	34.45	68
Pensions	0	0	2	1.68	2
Savings	8	6.06	5	4.20	13
Investments	0	0	1	.84	1
None	3	2.27	0	0	3
Total	132	100	119	100	251
N = 251 X^2 = 16.26 d.f. = 7 .05 > P > .02					
Individual Psychotherapy					
Yes	22	16.66	26	21.84	48
No	110	83.33	93	78.15	203
Total	132	100	119	100	251
N = 251 X^2 = 1.09 d.f. = 1 .30 > P > .20					
Group Therapy					
Yes	65	49.24	46	38.65	111
No	67	50.75	73	61.34	140
Total	132	100	119	100	251
N = 251 X^2 = 2.86 d.f. = 1 .10 > P > .05					
Alcoholics Anonymous					
Yes	85	64.39	84	70.58	169
No	47	35.60	35	29.41	82
Total	132	100	119	100	251
N = 251 X^2 = 1.177 d.f. = 1 .30 > P > .20					

TABLE 5 (continued)

Independent Variable	Rehabilitated f	Rehabilitated %	Nonrehabilitated f	Nonrehabilitated %	Total
If married, Would Spouse Participate					
Yes	59	44.69	37	31.09	96
No	73	55.30	82	68.90	155
Total	132	100	119	100	251
N = 251 X^2 = 4.88 d.f. = 1 .05 > P > .02					
Are you an Alcoholic?					
Yes	112	84.84	107	89.91	219
No	13	9.84	5	4.20	18
Don't know	7	5.30	7	5.88	14
Total	132	100	119	100	251
N = 251 x^2 = 3.36 d.f. = 2 .20 > P > .10					

significantly associated with the dependent variables. This indicates the difference between married and unmarried clients was between .10 and .05, and perhaps married clients had a better opportunity of being rehabilitated. For example, 40.15 per cent of the rehabilitated were married compared to 26.89 per cent of those not rehabilitated.

Occupation also appears to be an important factor. Of the rehabilitated group, 38.61 per cent were in the white collar category compared to 26.88 per cent white collar workers in the nonrehabilitated group. In the blue collar or service classification, 61.35 per cent were rehabilitated compared with 73.20 per cent among the not

rehabilitated. When the service occupations, including private household help, are considered separately, the percentage of rehabilitated clients was higher than the not rehabilitated. This is the only non-white collar occupational group which showed this balance in favor of the rehabilitated. Occupation, therefore, may indicate the prognosis for alcoholic clients receiving vocational rehabilitation services.

Primary source of support was the next variable considered on Table 5. From this distribution, the typical rehabilitated client apparently was more likely to be self-supporting, receive more help from family, have more friends who would support him, more savings, or, conversely, no support at all. In keeping with the previous finding, clients not rehabilitated were more likely to be receiving public assistance or a pension than were rehabilitated persons. This may indicate that welfare assistance, veterans' pensions, and other help of this type interfered with the clients' desire or motivation to recover from alcoholism; or, perhaps clients receiving such assistance had greater physical and mental handicaps than the others.

As shown in Table 5, clients who previously had received some form of group therapy at the time of intake were more likely to be rehabilitated than were alcoholics who had not received this type of treatment. Of course, this may be interpreted as indicating the more favorable

financial and occupational levels of the rehabilitated. However, individual psychotherapy is usually considered to be more expensive than group therapy, and (although not statistically significant) Table 5 shows that the clients who were not rehabilitated previously had received more individual psychotherapy than had the rehabilitated group. These findings support the policies of HARP, in which group therapy was the treatment of choice.

Do these findings indicate that clients who were rehabilitated were familiar with, and therefore more receptive to the group therapy which were readily available to all clients in the program. In fact, the rehabilitated clients had previously received slightly less experience in the Alcoholics Anonymous program at the time of intake than did the not rehabilitated group. These data appear to weaken the premise that persons suffering from alcoholism will respond more readily to group therapy if they have had previous experience in Alcoholics Anonymous.

The final independent variable to be discussed from Table 5 is, "If married would spouse participate?" These data are compatible with findings for some of the other variables, particularly, source of support. The rehabilitated clients generally appear to have had more family support than those not rehabilitated. The same is true for marital status and participation of the spouse. In other words, family participation in the rehabilitation

program assures the alcoholic client a better opportunity for recovery.

In conclusion, eight variables showed differences between the 132 rehabilitated clients who received vocational rehabilitation services and the 119 clients also receiving vocational rehabilitation services who did not respond favorably. The variables were age, education, verbal I.Q., marital status (considering only married or not married), occupation, primary source of support, experience in group therapy and whether the spouse was willing to participate in the rehabilitation program.

One of the most pertinent observations was that only a few of the large numbers of diagnostic factors analyzed were found to be related to the client's ultimate vocational rehabilitation. Furthermore, the majority of these were demographic characteristics - age, marital status, education, occupation, and primary source of support. Only two variables from the questionnaire were related to rehabilitation - previous group psychotherapy and spouse participation.

Of all tests administered to participants in HARP, only the Peabody Verbal I.Q. was related to a statistically significant degree with rehabilitation of the client. The categories of the Minnesota Multiphasic Personality Inventory and the Edwards Personal Preference Scale were analyzed and proved to have no statistically significant

relationships with the criteria, rehabilitated or not rehabilitated. This finding was somewhat unexpected, considering the breadth and depth of these two personality tests.

This material should not be interpreted as a firm recommendation that rehabilitation counselors reject as poor risks clients who do not possess the eight significant characteristics. The rehabilitation counselor is dealing with human life and many factors unrelated to the client could significantly influence response to rehabilitation services. For example, most of the significant factors reflect the middle class values held by many rehabilitation counselors themselves. Also, the comparatively large percentage of successfully rehabilitated clients who did not demonstrate the eight significant characteristics cannot be overlooked. Why were they successfully rehabilitated?

Perhaps treatment and rehabilitation services inadvertently are designed for the white collar middle class client, bypassing the disadvantaged, the blue collar and the academically oriented clients to some degree. This suggests a further analysis of these data to determine precisely how many of the successfully rehabilitated clients possessed none of the significant characteristics.

Therefore, without additional studies that duplicate and strengthen the results of this study, it would be

considered ill advised to screen clients out of a rehabilitation program on the basis of this study. Further research using different populations yet receiving similar services is indicated.

CHAPTER IV

SUMMARY AND DISCUSSION

The purpose of this study was to determine factors which might indicate which alcoholic clients will respond to a multidisciplined rehabilitation program. The distinguishing factors between alcoholic clients considered to be "rehabilitated" and clients "not rehabilitated," according to criteria established by Texas Rehabilitation Commission, were analyzed. A series of research questions were posed. The data are reviewed in this chapter to establish the degree to which this study answered the basic research questions.

The first question was, "Does the literature reveal differences in social, vocational, and psychological characteristics of alcoholics accepted in similar treatment and rehabilitation projects?" Review of published and unpublished reports of projects conducted elsewhere in United States showed that the alcoholic clients participating in HARP were somewhat different than any of the alcoholic subjects described in the literature. As previously discussed, participants in the Florida project were comparable but the variables studied were different. In essence, HARP and

this study are unique.

The second question asked, "Are there any significant differences between the 132 rehabilitated clients who received vocational rehabilitation services and the 119 nonrehabilitated clients who also received vocational rehabilitation services, when cross tabulated by the six demographic characteristics, the eleven social factors, and when the psychological tests are analyzed?" In reply to this question, significant differences were found to exist for eight of the variables studied; five of the demographic factors (age, marital status, education, occupation and primary source of support); two questionnaire items (experience in group psychotherapy, if married would the spouse participate; and for one test, the Peabody I.Q. Test. Comparisons between the two groups are summarized in Table 6.

The third and fourth basic questions concerned the extent and degree of the differences between the two groups. The probability values shown in Tables 1 and 5 indicate these differences were not due to chance. Therefore, generally speaking, the rehabilitated and not rehabilitated clients entered HARP with contrasting backgrounds and different innate characteristics. However, the Minnesota Multiple Personality Inventory and the Edwards Personal Preference Scale did not show personality differences between the two groups. Nevertheless, the results of this

TABLE 6

Comparison of Rehabilitated and not Rehabilitated Clients by Demographic Characteristics, Social, and Psychological Factors

Rehabilitated Clients
AGE range of 35 to 45 years
EDUCATION at least 9 years of schooling and no more than 3 years of college. More likely to have finished high school
I.Q. higher verbal I.Q.
MARITAL STATUS still married
OCCUPATION Most likely to be a white collar worker
SOURCE OF SUPPORT Likely to be self supporting and receive more help from family and friends; have more savings; or have no support
PREVIOUS THERAPY More likely to have received previous group therapy
SPOUSE PARTICIPATION Believed spouse would participate in program
Nonrehabilitated Clients
AGE range of 25 to 34 years
EDUCATION less likely to have finished high school but more likely to have completed college or attended graduate school
I.Q. lower verbal I.Q.
MARITAL STATUS less likely to be married
OCCUPATION More likely to be a blue collar or unskilled laborer
SOURCE OF SUPPORT not self supporting; less likely to receive help from family or friends
PREVIOUS THERAPY probably had no previous group therapy
SPOUSE PARTICIPATION if married, did not believe spouse would participate in program

study indicate the types of demographic characteristics appearing to be more conducive to successful rehabilitation in an endeavor such as HARP conducted in this geographical area. Can these data be used to evaluate the rehabilitation

potential of alcoholic clients in other geographical areas? Such extrapolation probably is not valid. Although all clients were offered the same services, these rehabilitation services could be based on middle class values and designed and administered for the middle class client. Therefore, the techniques used by the counselor, as well as the background of the counselor, may have accounted for differences in response to rehabilitation services.

Instead of using the significant variables found in this study as a basis for screening clients for acceptance into rehabilitation programs, counselors and rehabilitation services should concentrate on designing programs to fit the client rather than selecting clients to fit the programs. Furthermore, many clients who did not match the profile of the successfully rehabilitated which emerged from this study were, in fact, successfully rehabilitated.

From this viewpoint, the results of this study assume a more realistic and meaningful perspective. Without further research, the basic questions were answered inasmuch as the statistical analyses showed a significant degree of association between successful rehabilitation in HARP and the variables age, education, source of support, prospect of spouse participation, and I.Q.

These data are sufficient to substantiate the working hypothesis, and reject the null hypothesis. The statistical hypothesis cannot be supported. However, from

the standpoint of efficient use of counselor time and funds available for alcoholism rehabilitation programs, the results of this study could prove valuable. If, for example, a counselor in the Houston area has very limited funds, and can accomodate only a small number of additional clients, the variables shown to be significant in this study may be of assistance in prognostic evaluation of the applicants.

It is emphasized that the results of this study may be applicable only in the Houston area, and indicate the need for additional research to establish more generally applicable prognostic indicators of rehabilitation of alcoholics.

These data indicate that psychological factors relating to the two personality tests studied were not useful as factors related to outcome for alcoholics receiving rehabilitation services. This finding is unusual in view of the tendency of many counselors to rely heavily upon test results of this type when working with alcoholics.

The voluminous literature describes the victim of alcoholism as neurotic, sexually immature, dependent, unable to withstand anxiety, and marked by tremendous guilt and feelings of unworthiness. Freud, among many others, proposed that alcoholics were actually drinking heavily in attempts to repress unconscious homosexual drives (Chafety, 1959). Also, data has been presented to demonstrate that alcoholics come from broken or unhappy homes and

experienced serious emotional deprivation during their childhood (McCord, 1960). However, many persons leading normal lives have had these same experiences. Therefore, psychological factors involved in the etiology of alcoholism, related to the results of this study, do not appear to offer a promising direction for further investigation at this time.

This study has indicated that demographic and social factors appear to have influence on successful rehabilitation of alcoholic clients. The significant variables can be analyzed as indicators of deviations in role performance. The significance of social factors is further emphasized by comparisons of drinking habits and incidence of alcoholism in various nations and religious groups.

Highest incidence rates were found among the French, Americans, Irish-Americans, Swedes, Swiss, Poles, and Russians. The Italians, Chinese, Orthodox Jews, and Spaniards had low rates of alcoholism (Leake, 1966). These differences also were seen among these cultures within the United States. One study in New York City involved the following ethnic groups: 10 per cent Irish, 15 per cent Italian, and 25 per cent Jewish. The incidence of alcoholism was: 40 per cent of the Irish, 1 per cent of the Italians, and no alcoholics were found among the Jewish (Lolli, 1960).

Further evidence of the relationship between social

factors and alcoholism was provided by a study in Washington 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 habits of female alcoholics, opposed to the typical male gregariousness while drinking (Horn, 1971).

Many counselors in the field of alcoholism (including this researcher) are finding that sexual behavior as related to role performance is an important area of study. A comparative study of response to treatment by alcoholic patients whose spouses were also involved in therapy was performed in Avon Park, Florida. The team of therapists found that all couples had sexual problems. Female alcoholic patients reportedly used sex as a device to achieve a sense of feminine selfworth. Almost without exception they had been promiscuous and were guilt-ridden (Strack, 1972).

All of these studies indicate the 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. The low incidence of alcoholism among the Jewish is not surprising because the appropriate roles are well defined. Drinking customs, values, and sanctions are well established and consistent with the other elements of that culture. The same can be said of the Italians. Conversely, the French, American and

other Anglosaxon groups do not have well defined roles and are very ambivalent toward the use of alcohol, as well as the entire socialization process. The family is the first and most important agent of socialization. Alcoholics seem to experience difficulty with family living. This situation, according to some authorities, is generalized by the alcoholic beyond his parents to his marital partner, and even further to the entire social system (Button, 1956).

The experience of this researcher as a counselor at HARP was that many of the clients did generalize this difficulty in this manner. Frequently there appeared to be a role reversal between alcoholic and spouse and sometimes even between the alcoholic and children. Then when the alcoholic removed himself from alcohol dependency and attempted to establish himself in the role of spouse and parent he would many times have difficulty as by this time his family was experiencing role deviation. Also, he usually displayed a different personality to his family which did not seem to meet the needs of a family that had adjusted to his active alcoholic personality. Along this line, a factor that seemed to contribute to the difficulty the dry alcoholic had in fulfilling role requirements of marital partner and parent was sexual performance. Frequently the alcoholic client would discover that he had never or rarely performed coitus without first consuming alcohol. This usually resulted in impotence for the male

and frigidity for the female. Knowing that he was able to perform sexually when drinking, he would return to alcohol. This resulted in many rehabilitation failures until the staff became aware of this possibly happening and began to counsel the client in this area. This is just one example of the many areas in the life of the alcoholic that can threaten his sobriety. Some alcoholics require alcohol consumption before participating in many types of family and social activities. Drinking before dancing and attending parties are frequently mentioned as social activities that the dry alcoholic has trouble adjusting to. The alcoholic appears to eventually experience difficulty whether he is actively drinking or undergoing adjustment to sobriety.

It is evident that alcoholism and alcohol abuse is no small problem and will require the utmost effort upon the part of all institutions concerned to reduce the negative effects upon society. If this study can contribute somewhat to the understanding of the problems met in the rehabilitation of the alcoholic or stimulate further research in this area it will be considered as a worthwhile project by this researcher. In light of that lack of certain controls, the data researched merits further study.

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APPENDIXES

APPENDIX A

DEMOGRAPHIC CHARACTERISTICS

1. Age
2. Sex
3. Marital Status
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. If Married Would Your Spouse Participate in Treatment Program?
10. 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	Marital 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 Drunkeness
14-15	( ) ( )	11	How Long Heavy Drinking
16	( )	12	Longest Sobriety Period
17	( )	13	How Long Since Last Drink

COLUMN NO.	DATA	NO.	
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-Femininity Scale
41-43	( ) ( ) ( )	25	MMPI-Paranoia Scale
44-46	( ) ( ) ( )	26	MMPI-Psychastenia Scl
47-49	( ) ( ) ( )	27	MMPI-Schizophrenia Scale
50-52	( ) ( ) ( )	28	MMPI-Hypomanic Scale
53-55	( ) ( ) ( )	29	MMPI-Social Introversion Scale
56-57	( ) ( ) ( )	30	EPPS-Achievement Scale
58-59	( ) ( )	31	EPPS-Deference Scale
60-61	( ) ( )	32	EPPS-Order
62-63	( ) ( )	33	EPPS-Exhibition Scale
64-65	( ) ( )	34	EPPS-Autonomy Scale

COLUMN NO.	DATA	NO.	ITEM
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-Heterosexuality Scale
9-10	( ) ( )	44	EPPS-Epps Agression Scale
77-79	( ) ( ) ( )		CLIENT ID NUMBER
80	( )		CARD NUMBER 2

Vita redacted during scanning.