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PERSONALITY DIFFERENCES IN ALCOHOLIC AND NONALCOHOLIC BROTHERS

b y

Laurence W. Miller

A Thesis Submitted to the Faculty of the Graduate School of Loyola University in Partial Fulfillment of the Requirements for the Degree of Master of Arts

April

1964

LIFE

Laurence W. Miller was born in Chicago, Illinois, on July 29, 1938.

He was graduated from Fenwick High School, Oak Park, Illinois in June 1956. He attended Loyola University from which he graduated in February 1961 with the degree of Bachelor of Science in Humanities.

The author began graduate studies in psychology at Loyola University, Chicago, in September 1960. During his studies, he served his clerkship in Clinical Psychology at Chicago's Alcoholic Treatment Center, from September 1961 to December 1963.

ACKNOWLEDGEMENTS

The author wishes to express appreciation to his advisor, Dr. Frank J. Kobler, and to Dr. Robert C. Nicolay and Dr. Ronald Walker for their help.

Thanks also are due to Miss Phyllis K. Snyder, Executive Director of Chicago's Alcoholic Treatment Center; to Mr. Vincent Pisani, Chief Psychologist at the Center; and to Dr. Gene Borowitz, Psychiatrist at the Center; for their suggestions and encouragement.

The author also is grateful to Mr. James Erdman and Dr. Hermalinda Fogliotto for their assistance.

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CHAPTER I

INTRODUCTION

The Purpose

There is a growing interest in the alcoholic. It follows upon the belated recognition of the vastness of the problem. The problem is one affecting society in serious proportions and one about which little is known. Little of significance can be done to prevent its occurrence until the problem is more adequately understood. The present study is an attempt at understanding one small segment of the problem. Only comparatively recently has the problem of alcoholism begun to receive the attention in psychological and psychiatric literature that it deserves. Presently, more and more psychological and psychiatric resources are being implemented in an attempt to understand alcoholism and the dynamics involved in this concept. These combined resources have revealed certain dynamic characteristics or traits which are consistently found in an alcoholic population. Among these characteristics is "dependency," a word which has virtually become synonymous with alcoholism. By the nature of the present study, "dependency" must be defined in accord with the definition employed in the research tool being used in this study. This will be discussed later in another chapter.

The General Purpose

The present study is an attempt to examine personality factors as measured by the Edwards Personal Preference Schedule (EPPS) as found in alcoholics and as found in the non-alcoholic brothers of these same alcoholics. It is further an attempt to see what quantitative differences in EPPS scores can be found that significantly differentiate these two groups. The two groups were matched according to age, education and number of years in the home or parental situation.

The above study is unique. It carefully controls in areas of importance, sex, age, education, and number of years in the home situation. It is further unique in that the two groups are composed of siblings. Careful examination of the literature failed to turn up any studies other than twin studies in which siblings were matched and compared. Perhaps it is the time factor involved which has inhibited research of this nature. There is also a problem of gaining of the cooperation of subjects who are not part of a captive body in a hospital setting. Nevertheless, difficulties such as these should not allow an important area of knowledge to go unsought and unexamined. Certainly the comparison of subjects of the nature of brothers, so inherently matched, constitutes a valuable object of research and investigation in psychology.

A major goal of psychological research today is the eventual prevention of pathology. In order to work toward this end, there must be an attempt to discover the factors which contribute to the pathological process in a specific individual. One way of doing this is examining personality traits or characteristics present in certain individuals, and comparing the degree to which these same traits exist in individuals subject to similar early life experiences. It is, indeed, a generally acknowledged fact that early life experiences are of very significant importance in the formation of certain traits and characteristics found in an individual. Once it is known that certain traits or behavior patterns exist to a greater extent in one group than in another of similar background, it is then in order to try to explain the presence of such patterns in the one group and not in the other. Explanations in the form of theory may then be put to strict and well controlled emperical test. If it can be explained how a pathological behavior pattern is brought about, certainly the next step is one of prevention. By this is meant an organized effort to eliminate the factors or experiences contributing to the pathological formation of personality.

The instrument (EPPS) used in measuring personality characteristics in the present study was selected for several reasons. The nature of the imposition upon the purely volun-

tary subjects necessitated a relatively convenient instrument to complete and one which could be completed in a relatively short time. In addition to the above factors, the limited time and financial resources of the investigator prohibited the use of a test battery or of more time consuming projective techniques. Of the instruments available meeting the above qualifications, the Edwards was chosen largely because of an apparent emperically demonstrated ability to measure "dependency", the trait or characteristic of particular interest in the present study. It is of sincere regret to the writer that more could not be done with such a valuable sample as was gathered in the present study.

The present study fits into the above scheme or research approach. It has, at the expense of considerable time and inconvenience, probed into a significant but neglected area of personality research.

Quality of research is all too often sacrificed at the altar of time, and personal convenience. Difficult and time-consuming study of acknowledged value is all too often relegated to the wastebasket of tomorrow. Theses frequently become scholastic necessary evils and topics of research are chosen with a sharp eye towards personal comfort and a minimum of effort. It was the desire of the writer to investigate, within the limits of available resources, an area of personality research largely ignored with an eye toward significantly contributing to the body of knowledge of human behavior.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

"Dependency" as stated earlier, has been very closely associated with the alcoholic. The literature reveals frequent findings that alcoholics are generally more dependent than the non-alcoholic population.

Zwerling (1959) studied a group of forty-six white alcoholic males between the ages of 20 and 56, twenty-three of whom had not been drinking alcoholic beverages for two or more years. These were members of AA (Alcoholics Anonymous) and comprised Group I. Twenty-three men were currently drinking excessively and these men comprised Group II. Each subject was interviewed by a psychiatrist for four or five hours. In addition, a battery of projective and perceptual tests, a series of metabolic measures, a physical examination, and a social history from the subject's wife or parent were obtained. The men in Group I were volunteers recruited from local AA clubs. Those in Group II were selected from among the actively drinking patients under treatment at an alcoholic clinic. The groups were matched in age, duration of problem drinking, severity of alcoholism (as indicated by the number of hospitalizations and episodes of delirium tremens, arrests and divorces) and duration of contact with AA.

The purpose of forming these two groups was to reduce the

confusion of contributing forces in the development of alcoholism with the consequences of prolonged alcoholism.

The authors concluded that the subjects studied were unmistakably unique individually, but yet an impression of similarity was noted to run through the entire group. When the details of the varying behavior patterns could be set aside, the subjects, according to the authors, could be seen to have strikingly characteristic adaptive mechanisms and character traits. The traits were schizoid tendencies, dependence, depression, hostility, and sexual immaturity, all found to be present to a notable degree. Concerning dependency, the authors noted that the adaptive approach to the alcoholics tested was to achieve security through the efforts of others to provide care. It was determined that, in view of the "schizoid" pattern noted, dependency was seldom reflected in a direct passive-receptive attitude toward a particular person. More frequently, it was felt to consist of a concealed and diffuse aspect of ambivolent relationships with people or institutions as opposed to a trusting, dependent relationship. The authors concluded that dependent persons tend to form guarded, taking types of relationships with other persons.

The above conclusions were based purely upon the four or five hour psychiatric interviews, which raises the question of possible investigator bias. However, the authors stated that the character traits cited in the interviews were supported in

the findings of the psychological testing, as well as the data from the perceptual tests and social histories. The possibility of investigator bias still exists, however, regarding the psychological testing and the authors did not discuss it in their presentation. It is not known what in the psychological tests suggested, for example, that the subject was dependent. Similar study must involve a control group of non-alcoholic moderate drinkers matched according to age, education, and socio-economic status. Strict and objective empirical methods must also be brought into such an investigation, especially in regard to the handling of data. Such methods are seemingly lacking in the study being reviewed.

This study is valuable a s a preliminary investigation which has revealed the value in further investigation of a similar, yet more thorough nature. It is unique in its interdisciplinary approach to the study of alcoholism which is desirable in really constructive r esearch. In addition, the attempt is in keeping with a new, broader concept of etiology now evident in the literature. This concept assumes the inter-action of physiochemical psychological, and sociological predisposing factors to be basic in the development of such disorders as alcoholism.

One of the most unique, interesting and adequate studies done in relation to alcoholism and dependency was by Witkin, Karp, and Goodenough (1959). The authors were interested in perception as related to personality. Preliminary studies sug-

gested that the perception-personality relationship might have particular relevance to the study of the personality of alcoholics. The investigators were particularly concerned with the concept of dependency, a characteristic which they noted to be commonly ascribed to alcoholics. The authors attempted to determine, through the use of a well-studied field dependent-independent perceptual function, whether alcoholics are, in effect, characterized by perceptual dependency. The authors defined perceptual dependence as a tendency to rely upon established structure in the perceptual field.

Twenty men recruited from psychiatric wards, each having a history of alcoholism and admitted to the hospital in the course of an acute alcoholic episode, were subjects in this experiment. Subjects with subnormal intelligence and those displaying any signs of organic impairment (other than that regularly associated with alcoholism) were not used. It is not mentioned what methods were used as criteria for these determinations. The group ranged in age from 20 to 40 years, with a mean age of 30.1.

The records of a group of 51 college men who had participated in a different study were used for purposes of comparison, However, the college and alcoholic groups were different in many important ways. They differed in age, education, ethnic and religious background. The authors felt that for this first survey experiment, the college group provided a "base

line" to determine whether the results in the alcoholic group were in the expected direction.

Each subject was administered three different tests of perceptual function: the body-adjustment test (bat), the rod and frame test (rft), and the embedded-figures test (eft), all of which have been shown to provide reliable, valid and objective measures of perceptual dependence. The average of the standard scores the subject obtained on these three tests was computed to provide a perceptual index. Positive index scores reflected a tendency toward field dependent perception; negative index scores, a tendency toward field independent perception. A mean index score of +.86 was obtained from the alcoholic group as compared to a mean index score of .00 in the group of college students. This difference suggested to the authors that alcoholics, as a group, are more field dependent in perception than non-alcoholics.

A second experiment essentially duplicating the first was conducted. However, in this study, attempts were made to control for age, education and ethno-religious background. Again, the results suggested that alcoholics are more field dependent than non-alcoholic subjects. The authors felt that these results substantially confirmed those in the first experiment.

A third experiment was conducted in order to determine whether the greater field dependence of alcoholics was associated with pathology itself, rather than with alcoholism, as

such. In order to test this possibility, alcoholics were compared regarding perception to a control group of psychiatric patients who were not alcoholic. The groups were matched according to age. The same three tests of perceptual field dependence employed in experiment one and two were used here. The results suggested to the authors that psychopathology, per se, is not a likely source of the differences between control and alcoholic subjects obtained in experiment one and two. It is, the authors concluded, the particular form of pathology, alcoholism, which appears to be associated with field-dependent perceptual performance.

Witkin and his colleagues related perceptual dependence with dependence existing between persons. The authors undertook a separate investigation of the personality characteristics of individuals with different modes of perception. They believed their findings demonstrated that people with a more field dependent mode of perceiving tend to be characterized by passivity in dealing with the environment; by lack of self-esteem; and by the possession of a relatively primitive and undifferentiated body image. People who were more field independent in their perceptions were found to tend toward activity and independence in relation to environment, by better control of their own impulses, higher self-esteem, and a more differentiated and mature body image.

The authors stressed that field dependent perceptual performance reflects a general personality constellation rather

than an alcoholic symptom, per se. They postulated that this mode of perceiving occurs in consistent association with alcoholism because persons with such a personality commonly adopt alcoholism as a way to handle their difficulties. The authors then expected the other groups characterized by marked passivity, and poor self-differentiation, to also perform in a field dependent manner. Witkin and associates acting on Lollis's and others' suggestion that obese people and alcoholics display similar personality structure, undertook a study of the perceptual functioning of obese persons. Initial results led the authors to suggest that obese persons are markedly field-dependent in perception. A study by Gordon of ulcer patients, another group often described as dependent, suggested that, as a group, they are markedly field dependent. These studies put forth a substantial argument for the validity of the relationship between perceptual dependence and interpersonal dependence. It is obvious that further studies are necessary before such a relationship can be posited with certainty.

Witkin and associates felt that an association between alcoholism and a particular mode of perceiving seems well established. If so, the question remains as to whether a field dependent mode of perceiving reflects an underlying predisposition toward alcoholism or is, in some way, a consequence of it. This determination can be made only through long range studies of the perceptual functioning of a large group of subjects beginning at an age well below that at which alcoholism usually

first manifests itself.

This is one of the better studies because perception may be studied under carefully controlled laboratory conditions. This study has employed special test methods making it possible to obtain clinically meaningful information by reliable, fairly well controlled, and objective means. In addition, contrary to so many studies dealing with dependency, the concept is well defined and spelled out. More studies are necessary in order to determine the nature of the relationship, if any, between perceptual dependence and interpersonal dependence. Further studies must be done employing even tighter controls, larger samples, and more adequately matched groups. Until this is done, the validity and reliability of the above studies is still open to doubt. It has been a good and fruitful beginning.

Many psychologists, particularly those influenced by Adler, theorize that maternal pampering and over protection is a causative agent in alcoholism. Adler reasoned that alcoholism, with its attendant feelings of inferiority, is a result of childhood pampering, coddling and indulgence, and that the inability of such a child to face the demands of society and reality causes him to turn to alcohol to resolve his feelings.

McCord and McCord (1959) attempted to put this theory to an empirical test. The original project began in 1935 and included 650 boys, both "normal" and "predelinquent." By the time the data was analyzed, about 25 years later, ten per cent of the

subjects had become alcoholics. It was found that a lower percentage of those who experienced overt rejection by their mothers eventually became alcoholics than those whose mothers were alternately loving and rejecting. One third of the latter group had become alcoholics in their thirties.

To test the role of maternal behavior toward the child in relation to later development of alcoholism in that child, McCord and McCord attempted to measure two aspects of the mothers' behavior; that is, the mothers of the subjects mentioned above who later became alcoholic. First, they categorized the degree to which the subjects' mothers had encouraged dependency in their sons and welcomed babyish behavior. Boys, subjected to such maternal behavior, the authors reasoned, might be expected, given Adlerian premesis, to have a high rate of alcoholism. It was found that this was not the case. Thirteen per cent of the 70 boys whose mothers strongly encouraged dependency became alcoholics. Nineteen per cent of the 104 boys who received only moderate or weak encouragement for dependency became alcoholics.

Secondly, the authors attempted to rate the degree to which a mother restricted her child's activity. Some mothers apparently wished their children to be dependent upon them. They sheltered their boys at all times, selecting their friends and activities with great care, and generally restricted the development of independence in their boys. It was found that the over-protected children did not have a higher rate of alcohol-

ism than the boys who were left relatively unguided by their mothers. Ten per cent of the 62 highly restricted boys became alcoholic, while nineteen per cent of the 117 boys who were either normally or subnormally restricted became alcoholics. Thus neither of these findings tended to support the Adlerian interpretation as viewed by the authors. The authors theoretically concluded, however, that dependency, conflict, rather than dependency, per se, is at the heart of the problem of alcoholism.

McCord and McCord theorized that the pre-alcoholic is involved in an endless quest to satisfy strong needs to be dependent. However, in this culture, such a need for a male is frowned upon and, thereby, such an individual has difficulty in accepting this need. Alcohol, for such a person, can simultaneously furnish feelings of dependence and allow him to maintain his ideal image of masculinity by indulging in a he-man's pleasure, drinking. When finally, the authors reasoned, through the effects of prolonged excessive drinking, the self-image of the independent he-man breaks down, alcoholism develops.

This study was included in the present paper because it is one of the first longitudinal investigations of the complicated problem of development of alcoholism in the individual. The study is unique in that it is one of the few studies where a large group of children have been observed in every aspect of their daily lives and this data related to early adult behavior.

The authors have submitted psychological theory to an empirical test. This research can be repeated and it is susceptible to statistical analysis.

The authors, themselves, qualify their own research. They list objections which could be made to the standards and to the method of their research. Those who argue that a metabolic disorder is responsible for alcoholism may argue that regular physical examinations do not include subtle metabolic tests which they would regard as necessary. Those of psychoanalytic inclination may argue that behavioral measurements of such traits as "orality" fail to uncover the deeper processes at work.

The relevance of the authors' theory of "categories" used for statistical analysis appears open to question. In addition, the data was accumulated primarily from the reports of social workers who regularly visited the homes of these children. Just how the data was determined is not specifically spelled out, which prevents adequate analysis and criticism of the process. Psychiatric and psychological interviews also were used. From what is known, the study appears to be vulnerable to the arguments that it is based upon clinical insights and impressions rather than upon sound empirical evidence. In addition, this research was limited to a very specific section of Eastern United States, two cities, to be exact, which does not permit generalization of the findings to other populations or to the general population.

This study is, however, a beginning of the type of study, (longitudinal), necessary and seemingly fruitful in the understanding of the problem of alcoholism, its genesis, etiology, and dynamics.

Sources in the literature, influenced by psychoanalytic theory, constantly indicate in alcoholics the presence of "orality", usually associating such with character traits of immaturity and dependency. Psychoanalytic writers differ regarding the basic personality characteristics of the alcoholic, but they generally include dependency as a prime component of their formulations.

Many theorists have elaborated on Freud's original oral concept, and oral fixation has often been held to be the sole cause of alcoholism. The basic psychoanalytic viewpoint has probably been expressed most concisely by Fenichel (1945). Fenichel placed the blame for alcoholism upon the existence of external misery and frustration which a person wants to get rid of. There is a wish to replace these painful feelings with pleasurable ones. Alcohol, for some reason, becomes the agent which produces such an effect. Fenichel described alcoholism as an impulse neurosis, based upon family relationships which have created specific oral frustrations in childhood.

Fenichel listed two consequences of these early frustrations which are significant in alcoholism: the development of oral fixation and homosexual tendencies. Unconscious oral and

homosexual impulses are, in a sense, acted out in the drinking bout, during which the external frustrations imposed by reality are dimmed and the internal inhibitions are removed from consciousness. Fenichel held that an oral, narcissistic and premorbid personality may be predisposed to alcoholism or some type of addiction.

Lorand (1945), surveying the psychoanalytic literature on alcoholism up to 1945, found the common features attributed to the personality structure of alcoholics were strong homosexual tendencies and oral cravings.

The idea that psychic dependency is etiologically significant in alcoholism seems to have originated in a distinction made by Freud (1925) between the narcissistic (self) and anaclictic (dependent) love. However, the particular application of the dependency hypothesis of alcoholism as a symptom of unresolved oedipal conflicts has been attributed to Ferenzi (1912). Ferenzi held that emotional immaturity and homosexual trends were the chief prerequisits of this disorder. Drinking, then, for Ferenzi, represented regression to an infantile level of oral gratification symbolized by the centering of attention upon the bottle.

A glance at the literature concerning alcoholism reveals the abundant influence of psychoanalytic theory. Terms such as dependency, orality, and homosexuality, are widely used but rarely carefully defined. Writers many times seem to assume

a universally similar interpretation of these terms, which is not warranted. "orality", for example, can refer to specific character traits such as: dependency upon others; immaturity; and arrestation at very early developmental levels. It can also be used to refer to smoking, thumb sucking, and other such behavior. Theorizing regarding alcoholism is complicated by the fact that alcohol is ingested through the mouth, so that, at times, orality takes on a specific, literal meaning. Thus the literature often fails to adequately define the meaning of these terms, leaving the reader to assume the author's particular meaning.

One of the difficulties standing in the way of rigorous testing of the dependency theory of alcoholism has been this failure to achieve clear definitions and empirical referents for dependency, immaturity, etc. This defect is not limited to psychoanalytic contributions to the literature, by any means.

Lemert (1962), suggested that a great part of the difficulty in psychoanalytic theory and in the psychiatric interpretation may be due to the emphasis placed upon the latent, or hidden, aspects of personality which can be expressed in a variety of overt actions. This would seem to allow wide areas of inferring the existence of dependency from several kinds of behavior. When this is done informally or impressionistically from case history or clinical matter, it can make replication almost impossible. The result, according to Lemmert, is often

that studies following this procedure limit the value of cumulative research.

Lemmert concluded that dependency is neither a sufficient nor a necessary cause of alcoholism. Yet, he cited the apparent occurrence of dependency in a substantial portion of cases as requiring explanation.

Lisansky (1960), pointed out that frequently the analysis of case histories, and often psychological test research, conducted within the framework of psychoanalytic theory, have seemed to justify the conclusion, psychiatrically, it is possible to find just a bout what one wants to find in a group of alcoholics. A case is chosen, test data interpreted to demonstrate a point of theory when really, this is not a valid test of the point of theory.

Lisansky (1960), suggested that the psychoanalytic theory on alcoholism may need revision and modernization to take into account increasing information about the physiological and sociological aspects of alcoholism, and changing ideas within psychoanalytic thought itself. Several recent papers by Higgins (1953) and Levy (1958), and Zwerling (1959), have moved in this direction.

Psychoanalytic theory has made a definite contribution to the study of alcoholism. This no one would deny. Yet, these theoretical formulations, assumed to be operating in alcoholism appear to be based primarily upon clinical insights and impres-

sions, rather than upon sound empirical evidence and rigorous experimental control. Clinical observations and test results may well suggest generalizations which would lend themselves to such empirical verification. Experimental methods employing all phases of psychological, social, physiological, and whatever acceptable and appropriate methods of study are available must be employed. Alcoholics then may be compared with other equated groups of normal, pathological, and other alcoholic individuals. Until this is done, psychoanalytic assumptions regarding alcoholism must be considered unverified possibilities.

Dependency and alcoholism have long been associated in the literature. However, there have been very few really adequate studies dealing with the concept of dependency as related to alcoholism. The writer has attempted to review the more scientifically adequate studies on this problem. Even these studies leave much to be desired. However, they are a beginning.

Studies employing reliable, well controlled and objective experimental methods, in which dependency is carefully defined in operational terms, are few, indeed. Effective research requires specific, reliable, and quantitatively expressed indications of personality. The development of such indicators has proven to be difficult but not impossible as Witkin and other investigators have shown.

Any study of alcoholic traits or personality types may be criticized because of the lack of a representative sample. It

is, of course, difficult for the average investigator to obtain a representative sample of a large population. However, the real error, it seems, lies in the tendency to extend findings limited to specific groups of alcoholics to alcoholics in general. What may be true of one group of alcoholics, may not be true of another group chosen at a different time and place, even if by apparently identical methods. The failure to appreciate this difference may be partly responsible for much of the confusing and contradictory findings so abundant in the literature.

The present study attempts not to prove whether a certain trait, dependency in this case, exists as a rule within the alcoholic's "personality" or character structure. It is an attempt to examine a concept - "dependency," which empirical investigation has shown to exist in most alcoholics to a somewhat exaggerated degree - to examine it as it exists in alcoholics and in the non-alcoholic brothers of these alcoholics at Chicago's Alcoholic Treatment Center.

The present study attempts to use a non-projective technique, the Edwards Personal Preference Schedule (E.P.P.S.) to examine personality factors which are found in alcoholics and to compare these with those personality factors found in their non-alcoholic brothers. Many projective and non-projective techniques have been used with alcoholics. However, nearly all of these studies have compared alcoholics with non-alcoholics both normals and psychiatric patients, but not with siblings or blood

relatives. The present study attempts to compare blood brothers, raised by the same people, in approximately the same environment. There is not, to the knowledge of the writer, a single study appearing in the literature in which this has been done, particularly with alcoholics. In addition, no study was found in the literature in which the EPPS was used with an alcoholic group.

It is appropriate, at this point, to more carefully examine the measuring instrument, the EPPS. Norms, "Social Desirability", Reliability and Validity will be discussed, as well as the rationale for using the EPPS as a measure of Dependency.

Norms

Normative data have been developed for two groups of subjects: college students and adults. The college sample was composed of high school graduates with some college training. This sample consisted of 749 college women and 760 college men, as widely spread in age as was possible. They were majors in a wide variety of different areas.

The adult samples were composed of male and female household heads who were members of a consumer purchase panel used for market surveys in urban and rural areas of 1181 counties, 48 states (1957). The consumer panel consisted of 5105 households. The EPPS was completed by 4031 male and 4932 female subjects. Percentile norms were developed for each sex and means and standard deviations were found for each variable. Differences were found between adult and college norm samples. The

manual states that despite differences in absolute scores, all differences between sex groups were in the same direction for both college and adult norm groups. Anastasi (1961) notes that the large and significant mean differences found between the college sample and the consumer panel highlights the need for specific group norms in this and other personality tests. The high potential applicability of this test warrants further and more extensive normative work.

Social Desirability

In the EPPS, an attempt has been made to reduce the tendency of subjects to respond in the socially approved direction by pairing items pertaining to differing needs for personality traits but having similar social desirability scale values and presenting them to the subject in a forced choice format. Each of the fifteen variables in the EPPS is paired twice with each of the other variables, and the subject chooses the goal or behavior he prefers in each pair.

Statement pairs comprising items were matched with respect to the social desirability of scale values. These statements were scaled by using the psychological scaling method of successive intervals described by Edwards and Thurstone. Correlations of .85 were found between the Social Desirability (S.D.) of scale values and the paired statements making up items. The desirability scale value of a statement was obtained as a result

of performing certain operations on a set of observations obtained under specific conditions by subjects in the judging group.

While Edwards obtained his normative data from a large number of colleges throughout the country, only University of Washington students were used as judges of the social desirability of his items. However, Klett (1957) reported data in which social desirability ratings of the single items obtained from widely differing groups (high school students, Nisei, Norwegians) correlated highly with the ratings.

Edwards (1959) presented evidence in the manual that social desirability had been minimized as a factor influencing responses to EPPS items. Evidence is limited primarily to high school graduates with some college experience. Edwards interpreted his findings as apparent indication that social desirability was not a major factor influencing scores on the EPPS variables or scales.

Edwards (1959, p. 23) stated "For samples from this population (college students) we may expect stability in the social desirability scale value of the statements. It is obvious that what is considered desirable or undesirable in the way of personality traits is culturally determined. Social desirability scale values of the statement may, therefore, vary from culture to culture or from group to group."

Edwards (1957) cited several independent experiments demonstrating that, when judged in terms of general cultural norms, the social desirability (SD) of items remains remarkably stable

in groups, differing in age, sex, education, socioeconomic level, or nationality.

Klett (1957-1958), Silverman (1957), Navran and Stauffacher (1954), Kelleher (1958) found indications that social desirability scores play an insignificant role in EPPS item responses.

Corah, Feldman, Cohen, Gruen, Meadow and Ringwall (1958), Howes and Osgood (1954), Feldman and Corah (1960), Dicken (1959), and Cronbach (1960) have found indications suggesting that the factor of social desirability was still an important influence in choosing one of the two paired statements. These authors suggested that social desirability is not equal in some item pairs.

Anastasi (1961) found that, while there were significant differences in social desirability scale values of paired items, correlation of the fifteen EPPS scores with the social desirability scale are lower than those of other inventories. Only two of the EPPS correlations were significant at the .05 level and these were low (.32). The MMPI and the Guilford-Zimmerman, on the other hand, have received social desirability scale values yielding a number of correlations between .50 and .80 (Edwards 1957, 1958).

In summary, it seems that the literature generally suggests that an alert subject can, to a limited extent, present himself in a somewhat favorable light if he is motivated to do so.

Reliability

Edwards found reliability coefficients by the split half method, or methods of internal consistency for the fifteen personality variables in the high seventies and low eighties. Test-retest reliability coefficients or stability coefficients based on records of a group of 89 students who took the EPPS twice, a one week interval separating the two administrations, were found ranging from the high seventies to the mid eighties.

Score intercorrelations were found by Edwards to be satisfactorily low. The highest was .46 and many were close to zero. Many of the intercorrelations were negative, probably a necessary result of the forced choice technique.

Mann (1958) attempted to study the relation between the 15 variables which the EPPS purports to measure and a series of self-ratings on these same variables. It was concluded that:

1) the EPPS has satisfactory test-retest reliability;
2) the EPPS correlates with self-ratings on the variables which it purports to measure;
3) the EPPS does not correlate with ideal self-ratings on the variableswhich it purports to measure.

The reliability coefficients given by Edwards (1959) for the EPPS were somewhat higher than those found by Mann. This discrepancy may be due to the difference in the interval between test and retest for the two sets of data. Edwards reported an

interval of one week between test and retest. Mann's study was based upon a three week interval. Klett (1957) however, found, in an independent study, that the split-half reliability coefficients of the EPPS were also somewhat lower than the corresponding coefficients reported by Edwards in the EPPS Manual (1954). Even these lower coefficients are reasonably high for test reliability of a personality test.

Validity

Validity is often defined as the extent to which the inventory actually measures what it is purported to measure.

Edwards (1959) observed that correlations between EPPS scores and self-ratings or rating by peers (presented in the manual as validating studies), while interesting in terms of studying the characteristics of successful and unsuccessful predictors, would not "add anything to an understanding of the variables purportedly being measured by the inventory." (Edwards, 1959, p. 21). Ellis (1946) noted that the usefulness of earlier personality inventories, the validity of which depended on self-report, has been disappointing.

Edwards cited in the manual as validational, some slight evidence of correlation between various subscales of the EPPS and: a) the socially desirable end of the Guilford-Martin Personnel Inventory; and b) high scores on the Taylor Manifest Anxiety Scale, regarded as socially undesirable.

Edwards also included in his manual some behavioral descriptions which might be regarded as tending, clinically, to validate some parts of the EPPS. Such instances of EPPS subscale "validation", although interesting and clinically helpful, do not furnish sound empirical evidence of validity. Anastasi (1961, p. 517), stated that "the validity data reported in the manual are so meager and tangential as to be virtually negligible."

Bernhardt (1960, p. 368), states "It seems clear from a brief review of pertinent studies, that efforts to validate subscales of the EPPS in either overt behavior or in related projective test scores have not proceeded very far." What, apparently, is necessary is careful investigation of the relationships between EPPS subscale scores and independently obtained related behavior. Since the publication of the test, however, a number of independent studies of concurrent and of construct validity have produced partly positive and partly negative findings. Some recent empirically respectable studies have given some indication of validity regarding quite a few of the EPPS subscales. These studies will be discussed in the following section.

Rationale for Using the EPPS as a Measure of Dependency

Edwards (1959, p. 19), states in his manual "It will be of interest to determine whether certain of the personality variables measured by the EPPS will differentiate among groups ....."

A brief examination of the literature is now in order to see if and why the EPPS is a proper research tool with regard to the primary hypothesis of this study regarding "dependency."

Zuckerman, Marvin and Levitt (1961) noted that widely varying or differing techniques claim to measure the same hypothetical variable - dependency, but in fact, these techniques do not correlate with each other. This was interpreted by the authors as indicative of a lack of construct validity. The authors used the EPPS scales of Deference, Succorance, Abasement, Autonomy and Dominance as relevant to their concept of Dependency and as a criterion for being dependent. A combination or ratio score was formed by converting the raw scores to Edwards' standard scores and taking the ratio of Deference, Succorance, Abasement, to the total sum of all five scores.

The authors found that using combination scores, the self-ratings, questionairres, and the EPPS scores on the five scales, correlated significantly (.68) with peer ratings. It was also found that the magnitude of the validity correlations tended to drop as a function of the indirectness of the tests.

Milan (1959) used the EPPS in an attempt to see if any one of the EPPS scales significantly differentiated an ulcer group from a group with mixed psychiatric symptoms. He found that ulcer patients on the EPPS scored lower on Achievement and higher on Change than the other group. He concluded that the EPPS is sensitive to significant dimensions of psychopath-

ology, and that it is a potentially useful research instrument in this field. Zuckerman and Grosz (1958) found significant difference on the EPPS scale scores between a group of "suggestable" subjects and a group of "non-suggestable" subjects. The former group obtained significantly lower scores on the Autonomy scale of the EPPS than did the latter group. Also noted was a tendency from the "suggestive" group to be higher on the Succorance scale of the EPPS.

Suggestability also has been shown to relate to hypnotizability. Murray (1938) reported a study relating hypnotizability to personality needs. Hypnotizability was found to correlate .43 with a need for Deference and -.44 with a need for Autonomy.

Furneaux suggested the Sway Test as a predictor of hypnotizability. It was found by Eysenck and Furneaux to lead highly on a factor of "primary suggestability."

Zuckerman and Grosz (1958) decided to compare relevant personality needs of high and low groups on the Sway Test, on the assumption that suggestability is related to dependency traits. The EPPS scales of Deference, Autonomy and Succorance were used (according to White's study) to measure "dependency." Deference and Succorance seem to measure "dependency", while Autonomy would seem to measure its antithesis. The low swayers scored significantly higher on the Autonomy scale of the EPPS than did the high swayers. The high swayers scored significantly higher on Succorance attributed to the hero in TAT stories.

The findings from these two studies are congruent and suggest that a person who is suggestable may have strong dependency needs; while a person who resists suggestions may have stronger needs for independence or autonomy. Also, the findings suggest that the EPPS is an adequate measure of the concept of dependency. This and other studies suggest that the EPPS might be useful in predicting behavioral tendencies related to the concept of dependency. Zuckerman (1958) found that his "Rebellious Group" of student nurses was significantly higher on the combination of Autonomy, Dominance and Aggression (EPPS) scale than his "Dependent Groups" and significantly lower than the "Dependent Groups" on the combination of Deference, Succorance, and Abasement scales. Zuckerman found the EPPS Autonomy and Abasement scales to be the most effective in distinguishing between "Rebellious" and the "Conformist and Dependent" groups.

Bernardin and Jessor (1957) attempted to validate experimentally the construct of "dependency" as a variable in performance on the EPPS. The authors acknowledge that the EPPS does not directly measure dependency as a variable but two of the variables measured, Deference and Autonomy, appeared to the authors to be related to their definition of "dependency." The definition is based upon a review of the literature in which considerable agreement was found as to what is meant by dependency. Three properties of dependency were specified: reliance on others for approval; reliance on others for help; and conformity

to the opinions and demands of others. Three experiments were conducted, each to measure a different property of dependency, and a total of 110 subjects was involved. The first two properties were supported by the results. Group conformity did not differentiate the "dependent" from the "independent" group. Those who scored high on Deference and low on Autonomy on the EPPS were "dependent" and those with high scores on Autonomy and low scores on Deference were "independent." Bernhardt (1960) criticized the above study for circular and arbitrary selection of subjects and controls. Bachrach felt that the above study contributed to the construct validity of the EPPS Autonomy and Deference scales and indications were noted of the possible use of the EPPS for research studies in personality. The above study seems, however, to be one of the more adequate studies. It employed relatively empirical and objective measures, and in the writer's opinion, was quite thorough.

Gisvold (1958) attempted to determine the empirical validity of the Autonomy and Deference subscales of the EPPS, using a group situation developed by Asch, to measure conformity behavior as the criterion. He reported finding a product moment correlation of -.54, significant at the .02 level, obtaining between Autonomy score on the EPPS and conforming response in successive line judging groups. Each Group was composed of four college students. The Deference correlation, however, was only .17 and not significant at the .05 level. Gisvold (1958, p.447),

concluded that there was "a high degree of assurance that the Autonomy subscale is measuring the need for Autonomy as described by Edwards" but that a person having need for deference need not necessarily display an equal need to conform to group situations. Since, however, the two subscales were regarded as virtually the opposite of each other, the discrepancy in correlations is not clear to this investigator. In addition, the EPPS was administered within a two-week period after the behavioral measure of conformity was obtained. It is assumed that both were administered by the same experimenter. The above procedure was not discussed, and the possible variables thus introduced were, it can only be assumed, not controlled. At least no controls regarding the situation were mentioned.

Heller (1960) found in his study that the EPPS scales of Succorance, Deference and Autonomy measured conscious self-descriptive dependent behavior.

Marlow (1958) found "field independence" to be positively correlated with the EPPS scale of Intraception and negatively correlated with the scale of Succorance.

Merrill (1956) found indications that a high Succorance and a high Heterosexuality score, and to a lesser extent, a high Abasement score, combined with a high Heterosexualtiy score, identified those in a group who scored especially high on a dependency scale. Those with high Succorance scores were found to be quite similar to those with high Abasement scores with regard to dependency.

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Weiss and Emmerich (1962) reported that Succorance on the TAT and Asch's conformity measure refer to the same construct of dependency according to a study by Kagan and Mussen (1956) who found a positive relation between these two measures in male under-graduates.

Navran (1951), Munt (1960), and Lolli (1961), all refer to the alcoholic's intense fear of dependency for which he really longs. These writers see dependency as being a need unacceptable to the alcoholic and suggest the presence of internal conflict over dependency. The literature, in general, presents a picture of the alcoholic as denying dependency needs. These needs are felt to threaten the alcoholic to such an extent that he may be unaware of them or, at least, of the degree of such needs as existing in himself.

If an individual is unaware of a certain need as existing within himself, or if he views this need as unacceptable to himself and to others, such a need may not be accurately measured by means of a self-report inventory. Self-report inventories are, it has been suggested by some, vulnerable to "faking" or presentation of one's self in a favorable light. In addition, they are not designed to probe deeply into the personality. Button (1956), however, noted that alcoholics tended to score "high" on the de- (dependency) scale of the MMPI, alghough not significantly higher than normals. Button interpreted this data as tending to reliably substantiate the hypothesized dependency of alcoholics.

He also interpreted it as indicative of their lack of concern over dependency.

A thorough examination of the literature suggests to the writer that the EPPS is a fairly adequate measure of "dependency" with particular reference to the EPPS scales of Succorance, Deference, Abasement and Autonomy.

SUMMARY

"Dependency", in the literature, has been very closely associated with the alcoholic. (Zwerling, 1959),(Witkin, et al, 1959),(Lemert, 1962),(McCord and McCord, 1959).

The present study attempts to examine the concept - "dependency", which empirical investigation has shown to exist in most alcoholics to a somewhat exaggerated degree - to examine it as it exists in alcoholics at Chicago's Alcoholic Treatment Center. The research tool was the Edwards Personal Preference Schedule. The Schecule was discussed in terms of Norms, Social Desirability, Reliability and Validity.

Norms were found to be somewhat inadequate. In particular, larger samples and specific group norms are necessary.

Regarding social desirability, the literature generally suggests that an alert subject can, to a limited extent, present himself in a somewhat favorable light if he is motivated to do so.

The literature seems to indicate that the EPPS has reason-

ably adequate reliability. Validity findings were less favorable; however, recent imperically respectable studies have given some indication of adequate validity regarding quite a few of the EPPS scales. The four scales used in the present study, Autonomy, Deference, Succorance, and Abasement, were found in examination of the literature to have apparently adequate validity. In addition, the literature suggested that the EPPS is a fairly adequate measure of "dependency" with particular reference to the four scales mentioned above.

CHAPTER III

THE PROBLEM AND PROCEDURE

The Research Tool

The Edwards Personal Preference Schedule (EPPS) is a pencil and paper type of instrument "designed primarily" according to its authors, "as an instrument for research and counseling purposes, to provide quick and convenient measures of a number of relatively independent normal personality variables." (Edwards, 1959).

The EPPS statements and the variables that these statements attempt to measure are derived from a list of manifest needs presented by H. A. Murray (1938) and others. The names assigned to the variables are those used by Murray. The fifteen personality variables are as follows: 1) achievement (to do one's best); 2) deference (to seek the help and advice of others); 3) order (to be neat and organized); 4) exhibition (to be loud and to command attention); 5) autonomy (to be independent of others in making decisions); 6) affiliation (to be loyal to friends); 7) intraception (to analyze one's own motives and observe others); 8) succorance (to be helped when in trouble); 9) dominance (to be a leader and to argue for one's point of view); 10) abasement (to have guilt feelings - to feel inferior); 11) nurturance (to help friends in trouble); 12) change (to do new and different

things); 13) endurance (to stick to one job until it is finished); 14) heterosexuality (to be sexually excited and to be in love with the opposite sex); 15) aggression (to attack contrary points of view).

Definition of Dependency

Any definition of a concept being measured cannot be separated from the research tool which purports to measure that concept. The concept in this instance is "dependency" and the research tool is the Edwards Personal Preference Scale (EPPS). Four scales in the EPPS are being used in this study as measures of "dependency." These scales are: Succorance, Abasement, Deference, and Autonomy. That which these scales purport to measure must, then, constitute the definition of "dependency" in the present study.

Succorance is defined as follows: To have others provide help when in trouble, to seek encouragement from others, to have others be kindly, to have others be 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.

Abasement: To feel guilty when one does something wrong, 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.

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 decisions.

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 conventional, to avoid situations where one is expected to conform, to do things without regard as to what others may think, to criticize those in positions of authority, to avoid responsibilities and obligations.

A "dependent" person may then be said to be one who tends to look to others to provide help, encouragement and sympathy when he is in trouble; one who needs considerable affection. He is likely to feel guilty and a need to confess when he feels he has done wrong. He is quick to blame himself when things go wrong and feels a need to be punished for his wrong-doings. He

tends to give in rather than to fight for his convictions and to feel depressed over his inability to handle certain situations. He often feels inferior to others and is likely to be largely influenced and guided in his actions by the opinions of others and to gladly accept the leadership and decisions of others. He feels better when conforming to custom and avoiding the unconventional.

The Hypothesis

The present study is primarily concerned with possible differences between alcoholics and their non-alcoholic brothers with regard to the concept of dependency as measured by the EPPS. Put in the null form, this reads: no differences obtain between alcoholics and their non-alcoholic brothers on the trait of dependency as measured by the EPPS scales of Succorance, Abasement, and Deference, and its antithesis as measured by the EPPS scale of Autonomy.

Collecting the Data

The EPPS was administered to twenty male alcoholics who were at the time of the administration voluntary patients at Chicago's Alcoholic Treatment Center. The Center is a 75 bed hospital for alcoholics operated by the City of Chicago. The same Schedule was administered to twenty male non-alcoholics who were blood brothers of the above twenty alcoholics. The alcoholic patients included in the study were hospitalized at the Center for at

least ten days before the administration of the Schedule. The study was, necessarily, limited to those patients who agreed to take part and whose non-alcoholic brothers agreed to take part. The patients included in the study were diagnosed by the Center staff as alcoholic and not presently psychotic. The criteria for diagnosis of "alcoholic" patients was similar to that of Rosanoff (1938).

1. Consumption of alcoholic beverages has resulted for this individual in serious physical and social difficulties: neglect of work, losing jobs, minor violations of the law, and domestic difficulties.

2. Consumption of alcoholic beverages has reached a point where the individual is no longer in complete control of the amount of alcohol ingested.

The criteria for classification of "non-alcoholic" (brothers of patients) was -

1. By the individual's own word and that of his alcoholic brother that the consumption of alcoholic beverages has not resulted for this individual in serious physical and social difficulties: neglect of work, losing jobs, minor violations of the law and domestic difficulties.

2. Consumption of alcoholic beverages has not reached a point where the individual is no longer in complete control of the amount of alcohol ingested.

In addition, the study was limited to include only those brothers who resided in Metropolitan Chicagoland; who were within five years of the patient's age; who were raised in the same relative environment as the alcoholic - same family, parents or parent or guardian and home for a substantial length of time.

Where a patient had two or more brothers qualifying accord-

ing to the above standards for inclusion in the study, one was arbitrarily chosen, usually the one closest to the age of the patient.

The Experimental Group (Alcoholic)

The experimental group consisted of 20 alcoholic in-patients. The mean age of this group was 45.3 years; the median was (for both groups) 44.5 years. The group ranged in age from 28 to 60 years.

The mean number of years of schooling completed was 11.0; the median being 11.2. The range extended from 7 years to 14.5 years.

The mean length of time that the group resided in the home situation with parents or guardians was 25.10 years. The range extended from 14 to 55 years.

The Control Group (Non-alcoholic)

The control group consisted of 20 non-alcoholic, non-hospitalized, brothers of the individuals composing the experimental group. The mean age of this group was 44.8; the median age was 44.5. The group ranged in age from 26 to 62 years.

The mean number of years of schooling completed was 12.2, the median being 11.5. The range extended from 8 years to 18 years.

The mean number of years that the group resided in the home situation with parents or guardians was 24.65 years. The range

Table 1

Summary and Comparison of Personal Data on Subjects

	Alcoholic	Non-alcoholic	t*
Age			
M	45.25	44.80	.60
Md	44.50	44.50	
S.D.	7.47	7.89	
Range	28-60	26-62	
Education			
M	11.03	12.20	-1.92
Md	11.20	11.50	
S.D.	2.49	2.71	
Range	7-14.5	8-18	
No. of Years in Home			
M	25.10	24.65	.32
S.D.	9.63	4.97	
Range	14-55	17-37	
Race			
White	18	18	
Negro	2	2	

*t values not significant at .05 level

extended from 19 to 37 years.

The patient was interviewed personally by the writer, usually several days after his admission to the hospital. He was, at this time, questioned briefly regarding the possibility of his inclusion in the study. If all the qualifications were fulfilled, the writer requested the patient's permission to contact his non-alcoholic brother. If permission was granted, the brother was then contacted by phone in the following manner, without exception:

> Good -------, sir. My name is Laurence Miller, I'm a student at Loyola University and am a staff member at Chicago's Alcoholic Treatment Center. The Treatment Center is presently conducting research, with the aim of trying to uncover something regarding alcoholism. Your brother, a patient at the Center, has agreed to participate in the project, and has given us permission to contact you. Would you be able to participate.
>
> Well, what we are doing is asking the patients and one of their brothers to fill out a "Yes" and "No" type inventory. The names of the people are of no consequence and, therefore, are not included in the report. What we are trying to do is to compare a large group of the completed inventories of alcoholics and brothers of alcoholics to see if there are any similarities or differences. We hope that such studies as this will shed some light on the problem of alcoholism.

If the non-alcoholic brother agreed to take part in the study, an appointment was made to meet with him in order to administer the Schedule. The Schedule was administered at the Center where possible, and at the home of the brother where it was not convenient for him to come to the Center.

The Schedule was administered to the patients at the hospital during the period 10 days to 4 weeks after their entrance into the hospital. It was felt by the medical staff that 10 days was sufficient for the patient to be in satisfactory health and presence of mind to accurately respond to the questionnaire. Where there was some doubt, the patient's physician was consulted.

All administrations were done in person by the writer. The standardized procedure was followed.

The completed protocols were scored by the writer, using the standardized method and equipment provided by Edwards through the Psychological Corporation.

Statistical Treatment

The results of the study were treated statistically in the following manner: An analysis of variance technique (McNamara, 1962, p. 318) was employed, with regard to the four scales used in the present study, to measure dependency. This was done primarily in order to determine whether the four scales, combined, or taken as a whole, significantly differentiated the two groups.

In addition, the analysis of variance method was employed in order to see if there was any significant variation due to interaction between the two groups and the four scales used to measure dependency.

A third purpose was to find whether or not the four scales used in the present study to measure dependency, varied signi-

ficantly among themselves.

t tests for correlated means (McNamara, 1962, p. 101) were used on all 16 EPPS scales in order to establish whether or not the means of the two groups on the scales, taken individually, were significantly differentiated.

t tests were also performed in an effort to see if the means of the two groups differed significantly regarding age, educational level, and number of years in the home or parental situation.

CHAPTER IV

RESULTS

The results of the study are summarized in Table 2. Means, standard deviations, and t scores are presented for all 16 EPPS scales.

The alcoholics and their non-alcoholic brothers in the present study were not significantly differentiated regarding dependency as measured by the combined EPPS scales of Deference, Autonomy, Succorance, and Abasement. In other words, one group did not appear, to a significant degree, to be more or less dependent than the other. The data provided by the particular procedure used in this study led to the acceptance of the null hypothesis stated earlier in Chapter I.

Referring to Table 2, it can be seen that the alcoholic and non-alcoholic groups differed significantly between means on only two EPPS scales. These scales are Dominance, at the .02 level, in which the non-alcoholic group scored higher; and Heterosexuality, at the .05 level, in which the alcoholic group scored significantly higher.

The alcoholic group obtained somewhat higher, though not significantly higher, means than the non-alcoholic group on the following scales: Autonomy (13.7 to 12.), Intraception (15.0 to 14.0), Succorance (12.5 to 10.6), Abasement (16.9 to 16.0),

Table 2

Comparison of Alcoholics and Non-alcoholics on the EPPS

	Alcoholic	Non-alcoholic		
	M	M	S.D.	t
1. Achievement	14.600	16.050	1.072	1.352
2. Deference	13.600	14.600	1.040	.961
3. Order	13.250	13.750	1.382	.506
4. Exhibition	11.800	11.900	1.276	.078
5. Autonomy	13.750	12.250	1.414	1.061
6. Affiliation	11.650	13.000	.938	1.439
7. Intraception	15.250	14.450	1.292	.619
8. Succorance	12.450	10.600	1.357	1.363
9. Dominance	13.300	17.200	1.435	2.718**
10. Abasement	16.950	16.000	1.484	.640
11. Nurturance	14.850	15.500	1.490	.470

**t value significant at .02 level

Table 2 Continued

Comparison of Alcoholics and Non-alcoholics on the EPPS

	Alcoholic	Non-alcoholic		
	M	M	S.D.	t
12. Change	14.000	13.000	.859	1.165
13. Endurance	16.750	16.500	2.148	.116
14. Heterosexuality	15.550	11.750	1.684	2.256*
15. Aggression	12.150	13.200	1.509	.695
Consistency Score			.511	.117

*t value significant at .05 level

Change (14.0 to 13.0). The non-alcoholic group obtained higher means on the following scales: Achievement (16.0 to 14.6), Deference (14.6 to 13.6), Order 13.0 to 14.0), Affiliation (13.0 to 12.0), Nurturance (16.0 to 15.0), Aggression (13.0 to 12.0), and Consistency (12.1 to 11.5). The two groups obtained identical means on the following two scales: Exhibition (12 to 12) and Endurance (17 to 17)

The means of the two groups did not differ significantly regarding the variables of age, educational level, and number of years in the home or parental situation, at any commonly accepted level of confidence.

The results of the analysis of variance indicate that the four scales used to measure dependency vary considerably among themselves (F. ratio significant at the .001 level). These results suggest that the four scales combined, while measuring dependency as defined in the present study, may also measure something else at the same time. At least, each scale appears to measure a very significantly different aspecht of dependency,.

No significant variation due to interaction between the two groups and the four scales used to measure dependency was found.

Table 3

Analysis of Variance on the Four Scales Measuring "Dependency" of the Alcoholic and Non-alcoholic Groups

Source	Sum of Squares	d f	Variance Estimate	F
R	692.15	19	36.42	
B	.23	1	.23	.0005
C	22414.35	3	7471.45	18.67*
Interaction: RB	437.03	19	23.00	
Interaction: RC	1200.40	57	21.06	
Interaction: BC	75.53	3	25.18	.073
Interaction: RBC	1026.23	57	18.00	
Total	25845.92	159		

* Significant at .001 level

Table 4

Means of the EPPS Variables for Edwards' Adult Male Sample and Those of Adult Males in the Present Study

Variable	Alcoholic[a]	Edwards' Sample	Non-alcoholic[a]
1. Achievement	14.60	14.79	16.05
2. Deference	13.60	14.19	14.60
3. Order	13.25	14.69	13.95
4. Exhibition	11.80	12.75	11.90
5. Autonomy	13.75	14.02	12.25
6. Affiliation	11.65	14.51	13.00
7. Intraception	15.25	14.18	14.45
8. Succorance	12.45	10.78	10.60
9. Dominance	13.30	14.50	17.20
10. Abasement	16.95	14.59	16.00
11. Nurturance	14.85	15.67	15.55
12. Change	14.00	13.87	13.00
13. Endurance	16.75	16.97	16.50
14. Heterosexuality	15.55	11.21	11.75
15. Aggression	12.15	13.06	13.20
Consistency Score	11.55	11.35	12.15

[a] Present Study Sample

CHAPTER V

DISCUSSION

The results of the present study suggest that male alcoholics and their non-alcoholic brothers, matched as to age, educational level, and number of years in the home or parental situation, do not differ significantly in terms of dependency. Dependency was measured by the four EPPS scales of Deference, Autonomy, Succorance, and Abasement, taken in combination.

These results may be due to an actual insignificant difference between the two groups regarding dependency needs. It also is possible that the measures of dependency employed in the present study were unable to measure the need for dependency at the level in which it may exist in the alcoholic.

In the present study the alcoholic group scored relatively higher (65th percentile) on the Succorance scale, though not significantly higher than the non-alcoholic group. In addition, the Succorance scale score of the alcoholics in the present study was somewhat higher than that of Edwards' adult male normative sample. The Succorance scale, by definition (Edwards 1959), seems to the writer to be the most similar (of the four scales used in the present study) to the concept of "dependency" as generally defined in the literature. This "high" score on the Succorance

scale obtained by the alcoholic group may be related to the findings of Button (1956). Button noted a tendency for alcoholics to score high on the de (dependency) scale of the MMPI, though not significantly higher than "normals." This would tend to suggest that the EPPS is, at least somewhat, able to measure the need for dependency at the level in which it may exist in the alcoholic.

If such is the case, the results in the present study may be due to an actual insignificant difference between the two groups regarding dependency needs. No studies involving siblings in relation to alcoholism appear in the literature to which such findings could be related or contrasted.

The alcoholic and non-alcoholic groups were found to differ significantly between means on two scales. Dominance at the .02 level in which the non-alcoholic group scored higher, and Heterosexuality at the .05 level in which the alcoholic group scored higher.

The inclusion of the Dominance scale in the present study, as a part of the measure of dependency, might have resulted in the significant, or near-significant differentiation of the two groups. The Dominance scale, as defined by Edwards, could, it seems to the writer, have been employed as a partial measure of dependency. It was not so employed in the present study because very few studies in the literature, relative to the present one, used the Dominance scale as a measure of dependency.

One such study was done by Marlowe (1958) who employed the

Dominance scale EPPS as part of his measure of field independence. Marlowe found that the Dominance scale failed to yield significant correlation. Another such study was by Zucherman,Levitt, and Lukin (1961). These authors employed the Dominance scale in the EPPS, in combination with the Deference, Succorance, Abasement and Autonomy scales, as a measure of dependency. The author found the EPPS scores on the five scales correlated significantly (.68) with peer ratings.

It is notable that the non-alcoholic group obtained considerably higher means on the Dominance scale than did Edwards' adult male normative group. This fact suggests the possibility that the non-alcoholic group may be more dominant than the average adult male. Dominance may, then, for the non-alcoholic in the present study, figure in a system of defense against unacceptable dependency needs. This system of defense would appear to be absent in the alcoholic who must deal in another way with dependency needs. Alcohol may then be a part of the system employed by the alcoholic to deal with such needs. In addition, the effect of hospitalization in the case of the alcoholic group must be considered in any attempt to explain the lower scores obtained by this group. The hospital setting may be one which discourages Dominance and encourages its antithesis. It must also be noted, however, that the mean score of the alcoholic group was not far below that of Edwards' adult male normative group.

The alcoholic group scored significantly higher on the Heter-

osexuality scale. The literature concerning alcoholism and sexuality seems to be largely psychoanalytically dominated in that latent homosexuality is generally supposed to be present in alcoholics. Evidence of this seems to come primarily from the clinical case studies of psychoanalytically oriented psychologists and psychiatrists. This traditional belief is disputed by some writers. "Two traditional analytic hypotheses concerning the etiology of alcoholism, (infantile oral gratification and latent homosexuality) whould be viewed with skepticism." (Pitman, 1959, p. 55). Empirically, it appears difficult, if not impossible, to measure the "latent homosexuality" in the etiology of the alcoholic. While latent homosexuality may well be involved in the etiological patterns of some alcoholics, to posit it as even universally related to alcoholism, let alone as a universal explanation of alcoholism, seems highly unwarrented from the present data.

In general, it seems to the writer, that strict empirical evidence that latent homosexuality is present as a general characteristic in alcoholics is lacking. Wall (1936) noted that the relations of alcoholics to the opposite sex are characterized by striking over-compensations, consisting of many women in their lives, early heterosexual relationships and general "Don Juan" type behavior.

Other studies have found that alcoholics have considerable interest in the opposite sex. The writer's own experience with alcoholics seemed to bear out this latter finding. This interest,

however, seems to be accompanied by an emotional inability to adequately handle close relationships with the opposite sex, particularly within the marital situation.

The higher Heterosexuality score in the population of the present study may also have been related to the primarily male atmosphere of the hospital setting.

Merrill and Heather (1956) found that a high Succorance and a high Heterosexuality score, and to a lesser extent, a high Abasement score and a high Heterosexuality score on the EPPS, apparently identified those in the group who scored especially high on de (dependency) scale on the MMPI. In addition, the authors interpreted the data as suggesting that a high Heterosexuality score on the EPPS was related to a lack of adjustment rather than to adjustment in the sexual sphere.

The comparison of siblings in cases where one is alcoholic and the other is not seems to the writer to be a fruitful area of research. This is an aspect of research concerning alcoholism in which apparently little has been done. It is hoped that research in this vital area will be forthcoming.

CHAPTER VI

SUMMARY

The Edwards Personal Preference Schedule (EPPS) was administered to twenty male alcoholics and their blood brothers who were non-alcoholics. The two groups were matched in terms of age, education, race, and the number of years in the home or parental situation. It was attempted to find what, if any, quantitative differences in EPPS scores could be found to differentiate the two groups. The principal concern was with the possible differences between the two groups regarding dependency as measured by the EPPS scales of Succorance, Abasement, Deference, and its antithesis, as measured by the Autonomy scale.

An analysis of variance was employed with regard to the four scales used in the present study to measure dependency. This was done primarily in order to determine whether the four scales, taken as a whole, significantly differentiated the two groups.

It was found that the two groups in the present study were not significantly differentiated regarding dependency as measured by the above four EPPS scales taken in combination. *t* tests for correlated means were employed with all 16 EPPS scales in order to establish whether or not the means of the two groups on the various scales were significantly different.

The two groups differed significantly on only two scales: Dominance, in which the non-alcoholic group was higher (.02 level) and Heterosexuality, in which the alcoholic group was higher (.05 level). None of the four scales used to measure dependency, taken separately, significantly differentiated the two groups.

The results also suggested that, these four scales taken in combination, while measuring dependency, may also measure something else at the same time. At least each scale appears to measure a very significantly different aspect of dependency.

APPENDIX I

Table 5

Personal Data on Subjects

	Alcoholic					Non-alcoholic				
Subject	Age	Ed.	Sex	Race	ALH[a]	Age	Ed.	Sex	Race	ALH[a]
1	50	12	M	W	22	48	10	M	W	26
2	46	8	M	W	25	43	8	M	W	21
3	40	13.5	M	W	20	43	14	M	W	19
4	60	11	M	W	55	62	18	M	W	37
5	47	14.5	M	W	47	49	16	M	W	25
6	47	12	M	W	23	52	11	M	W	24
7	48	10	M	W	26	53	10	M	W	27
8	42	11	M	W	23	38	15	M	W	34
9	39	13	M	W	37	41	9	M	W	32
10	33	12	M	W	21	38	15	M	W	24

[a] Age when leaving home

Table 5 Continued

Personal Data on Subjects

	Alcoholic					Non-alcoholic				
Subject	Age	Ed.	Sex	Race	ALH[a]	Age	Ed.	Sex	Race	ALH[a]
11	43	13	M	W	27	39	14	M	W	22
12	54	7	M	W	24	52	10	M	W	25
13	47	11	M	W	14	45	12	M	W	29
14	55	7	M	W	21	53	14	M	W	23
15	44	14	M	W	21	48	11	M	W	24
16	28	11.5	M	N	18	26	11	M	N	19
17	34	11	M	N	18	32	15	M	N	19
18	48	9	M	W	25	43	11	M	W	22
19	40	8	M	W	17	44	8	M	W	23
20	42	12	M	W	18	47	12	M	W	18

[a] Age when leaving home

APPENDIX II

Table 6

Information on Early Home Life of Subjects

Subject	Age Left Home Alc.	Non-alc.	Siblings	Sibling Situation Alc.	Non-alc.
1	22	26	10	8	9
2	25	21	5	4	5 (Y)[a]
3	20	19	3	2	3 (Y)[a]
4	55	37	5	2	1 (O)[b]
5	47	25	2	2 (Y)[a]	1 (O)[b]
6	23	24	8	4	1 (O)[b]
7	26	27	5	5 (Y)[a]	2
8	23	34	13	11	13 (Y)[a]
9	37	32	7	5	3
10	21	24	8	2	5
11	27	22	4	3	4 (Y)[a]
12	24	25	4	2	3
13	14	29	3	1 (O)[b]	2
14	23	23	7	1 (O)[b]	2
15	21	24	4	3	1 (O)[b]
16	18	19	10	1 (O)[b]	2
17	18	19	7	5	6
18	25	22	7	1 (O)[b]	4
19	17	23	3	2	1 (O)[b]
20	18	18	4	3	1 (O)[b]

[a] Youngest in Family

[b] Oldest in Family

APPENDIX III

Table 7

EPPS Raw Scores of Alcoholics

Subject	Ach.	Def.	Ord.	Exh.	Aut.	Aff.	Int.	Suc.	Dom.	Aba.	Nur.	Chg.	End.	Het.	Agg.	Con.
1	16	15	12	10	12	6	8	24	8	20	13	14	14	24	14	10
2	16	10	19	7	13	15	9	17	10	20	19	14	22	1	18	12
3	16	11	13	14	10	10	21	8	16	7	9	19	12	27	18	12
4	15	19	23	10	18	10	18	12	11	21	16	10	11	8	8	11
5	16	12	9	11	22	12	11	8	12	8	16	23	22	24	4	10
6	13	21	9	15	10	18	7	14	18	10	20	18	9	8	10	12
7	6	14	9	13	8	10	10	16	21	19	18	12	13	23	18	11
8	25	14	8	16	12	13	25	2	12	19	7	21	19	13	4	11
9	10	15	16	13	16	15	17	13	8	21	13	13	12	21	7	11
10	8	4	5	13	5	12	23	21	20	10	15	15	15	28	15	13
11	16	11	12	7	18	7	12	14	9	16	13	12	23	26	14	12
12	15	12	16	12	13	16	14	17	10	20	20	8	11	20	6	10
13	15	15	11	20	22	12	6	11	17	17	17	8	6	14	19	12

Table 7 Continued

EPPS Raw Scores of Alcoholics

Subject	Ach.	Def.	Ord.	Exh.	Aut.	Aff.	Int.	Suc.	Dom.	Aba.	Nur.	Chg.	End.	Het.	Agg.	Con.
14	19	16	18	14	11	14	14	11	13	22	18	11	25	1	4	13
15	17	16	16	15	13	12	7	1	20	8	7	14	26	22	15	12
16	8	11	7	10	16	5	13	13	16	22	16	16	20	19	18	13
17	15	11	19	15	10	10	22	8	12	18	12	16	20	9	11	10
18	17	15	13	12	13	13	18	3	12	22	15	14	20	9	14	11
19	12	13	18	1	16	12	15	17	11	19	23	12	20	10	11	9
20	17	17	12	8	17	11	25	19	10	20	10	10	15	4	15	15

APPENDIX IV

Table 8

EPPS Raw Scores of Non-alcoholics

Subject	Ach.	Def.	Ord.	Exh.	Aut.	Aff.	Int.	Suc.	Dom.	Aba.	Nur.	Chg.	End.	Het.	Agg.	Con.
1	12	16	11	16	9	12	9	18	13	25	15	19	9	15	11	8
2	12	11	21	11	12	12	17	9	22	14	12	13	25	4	14	12
3	14	8	20	9	11	12	15	10	16	12	8	17	20	21	19	10
4	16	15	12	2	11	12	18	12	17	18	16	6	22	17	16	11
5	17	13	10	13	10	20	13	8	20	15	24	17	3	15	12	11
6	13	14	11	10	14	14	22	14	16	12	26	10	12	11	11	15
7	15	19	23	9	13	6	14	11	13	20	10	6	26	12	12	12
8	17	14	6	14	15	18	19	6	15	13	15	21	19	9	9	11
9	13	16	13	7	10	15	18	8	16	18	19	16	17	10	14	14
10	19	14	16	20	11	11	14	4	21	23	8	13	22	11	2	14
11	17	19	10	10	9	13	6	15	11	20	25	14	12	15	14	11
12	22	14	17	18	21	6	10	5	25	5	4	18	14	10	21	13
13	17	14	18	8	5	14	16	10	23	19	19	9	23	3	12	9

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APPROVAL SHEET

The thesis submitted by Laurence W. Miller has been read and approved by three members of the Department of Psychology.

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content, form, and mechanical accuracy.

The thesis is therefore accepted in partial fulfillment of the requirements for the Degree of Master of Arts.

August 25, 1964
Date

Frank J. Kobler
Signature of Adviser