THE SELF-CONCEPT OF ALCOHOLICS DURING THE PROCESS OF ABSTINENCE

By

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Michael A. Harrell

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The researcher selected 30 alcoholics who terminated excessive
alcohol consumption within a two-week period and asked them to complete
the Tennessee Self Concept Scale, the Rotter I-E Scale, and a question-
naire concerning drinking habits prior to testing. Two months later,
all subjects were retested with the same instruments, and the results
were used to test 8 hypotheses concerning the identity of alcoholics
tested in comparison to norm groups, differences between successful
abstainers and non-abstainers, and differences in the self-concept and
perception of locus of control which occur over time.

The researcher proposes a theoretical model of the alcoholic
process and offers three basic ideas that are pertinent to this research:

1. The alcoholic sees himself as in control of his reinforce-
ments.

2. In a period of abstinence, the alcoholic modifies his self-
image by changing his perceptions of the positive and
negative aspects of his self-concept.
3. Successful abstinence is an expression of a modification in the way the alcoholic maintains his self-concept.

Results of testing indicate that abstainers and non-abstainers do not differ significantly with regard to Rotter I-E Scale means over a two-month period and that both groups tend to score consistently toward internal locus of control. Abstainers move significantly in a positive direction with regard to self-esteem and show change in the manner in which they balance their positive and negative self-characteristics. Non-abstainers tend to remain consistent with regard to self-definition and this group shows significant negative movement in terms of self-esteem.

The researcher concludes that respecting the alcoholic's predilection for internal control and understanding the self-esteem problems of the alcoholic commencing abstinence are important factors in good counseling support of these individuals. The elemental view that the alcoholic needs to stop drinking is given added dimension as the alcoholic in order to sustain abstinence needs to be effective for himself and work out the negative facets of his experience with alcohol.
CHAPTER I
THE ALCOHOLIC IN ABSTINENCE: A PERSPECTIVE

Introduction and Purpose of the Study

The purpose of this study is to explore several dimensions of the self-concept of persons diagnosed as alcoholic, during a period of abstinence through the use of two instruments, the Tennessee Self-Concept Scale and the Rotter I-E Scale.

The Researcher intends to investigate how alcoholics maintain their self-concept in a period of abstinence in relationship to the following four aspects of the self-concept:

1. Perception of locus of control
2. Self-esteem
3. Perception of positive and negative characteristics
4. Self-definition

Impetus for this study arose out of concern centering around the following general questions which are relevant to this investigation:

1. How is the phenomenon of alcoholism related to the self-concept of the alcoholic?
2. What is the impact of a successful period of abstinence from heavy alcohol consumption upon the self-concept of the alcoholic?
3. Is abstinence from alcohol related to a particular pattern of self-concept maintenance or perception of the locus of control for reinforcement?
4. How does the phenomenon of alcoholism relate to the individual's ability to assess and take responsibility for his positive and negative self-characteristics?

5. Is there a relationship between perceived locus of control and self-esteem maintenance that has relevance to the alcoholic process?

The researcher has worked in group and individual counseling with clients diagnosed as "alcoholic" over a period of several years as a clinician at a community mental health center. This experience generated questions as to the personality make-up of these individuals called "alcoholic," especially in the areas of self-esteem and the ability to prefer control of one's self-directions.

The program at the mental health center included group and individual therapy for these individuals. The cessation of alcohol consumption is viewed as the best option in promoting recovery. Participating in these sessions as group leader, the researcher noted several phenomena particularly evident in the self-description of these individuals which sparked interest for this investigation.

Alcoholic clients, when describing themselves, were often unrealistic in assessing their past and present behavior although the facts were known by both the client and the therapist. This distortion of experience puzzled the researcher in that the client appeared to be confirming himself and seemed unaware of the denial of his experience. The researcher questioned whether this phenomenon was important to the client's ability to maintain his self-esteem while abstinent or played some role in the client's proclivity to be alcoholic.

The researcher also noted that clients who had recently terminated heavy drinking consistently made attempts to explain their motivation for maintaining abstinence in terms of their past alcoholic behavior.
Especially in group therapy there would occur much competitive reminiscence about the control that alcohol had exercised over the client and that constructive growth towards abstinence was perceived in the acknowledgment that the individual himself was inadequate to deal with the control that alcohol had asserted in his life.

The researcher wondered how the termination of alcohol consumption was related to the individual's perception of himself as having the choice or power to help himself. In addition, it appeared that recovery for the alcoholic meant more than simply not drinking alcohol and that alcoholics may be involved in some form of self-concept change in order to maintain abstinence.

The character of this study is primarily theoretical research. Although the researcher is employing two objective instruments and will study a group of alcoholics over a period of time, the general thrust of this study will be to illuminate a concept of the alcoholic process as a function of the self-concept and to define the role of abstinence in this process.

**Survey of the Problem**

According to the Secretary of Health, Education, and Welfare, an estimated 7 percent of the adult population in this country manifest the behaviors of alcohol abuse and alcoholism, making alcohol the most abused drug in the United States. Among an estimated 95 million drinkers, approximately 9 million adults and adolescents may be labelled "alcoholic," as the term is generally used (Rosenberg, 1971).

The researcher who wishes to explore this problem must encounter and explore the dimensions of two vital questions: (1) what is an alcoholic, and (2) what determines alcoholism? The problems inherent in
definition and etiology of the phenomena termed alcoholism point to a core of difficulties which are largely responsible for a dearth of conclusive information regarding this condition.

The factor or factors which tend to define an individual as alcoholic are largely, for lack of information, within the province of direct observation of behavior after the fact of repeated indulgence in alcohol. For example, Keller (1962) defines alcoholism as a chronic disease manifested by repeated implicative drinking so as to cause injury to the drinker's health or to his social or economic functioning. Milt (1971) defines alcoholism more empirically, citing four characteristics and consequences of the alcoholic's drinking behavior: (1) compulsive, uncontrollable drinking, (2) chronicity, (3) intoxication, and (4) injury to functioning.

Although Milt's and Keller's definitions attempt to describe the phenomenon of the alcoholic, they also tend to hint at some psychological or physiological dynamic inherent in the alcoholic's condition. They use such terms as "chronic disease" and "compulsive." More direct in this regard is the following definition: "Alcoholics are those excessive drinkers whose dependence on alcohol has attained such a degree that it shows a noticeable mental disturbance or an interference with their bodily and mental health, interpersonal relations, and their smooth social and economic functioning" (Expert Committee on Mental Health, 1952, p. 85).

Here the problem in definition becomes clearer. One cannot simply define the alcoholic in terms of a factor or factors which, when present and observable, determine that this individual is an alcoholic. The general effort seems to be to isolate a number of criteria into which the vast number of individuals can be placed who overindulge in alcohol, lose
control of their ability to stop overindulging, and function inadequately in some social or personal sense.

Isolating a psychological or physiological cause for these behaviors would solve the dilemma as to whether alcoholism is a discrete condition, disease, inherited disposition, or is behaviorally symptomatic of the effects of prolonged indulgence. Milt (1971, p. 10) comments on this: "The continued consumption of alcohol, regardless of the reason for the need, will produce certain predictable mental, emotional, and physical effects which are similar from case to case, especially in the advanced stages. This similarity produced by the alcohol and its effects make different subjects look and act alike at times, adding to the impression of a single disease." Milt suggests that evidence from the research points away from such a conclusion and the search for "the" cause of alcoholism, conceived as a unitary disease, has not produced convincing results.

Psychological research has approached the problem of defining the alcoholic by attempting to define an "alcoholic personality." The theoretical basis for this research lies in the assumption that in the pre-alcoholic stage a personality pattern or constellation of characteristics should be identifiable and should correlate with a predisposition toward alcoholism. One of the main difficulties in this approach is that the population usually available for this study is already involved with alcohol. The question arises as to whether the personality traits observed in these people existed before the onset of alcoholism, or are a consequence of the alcoholism.

Attempts to find an "alcoholic personality" through projective tests have produced no conclusive evidence that such a personality type
exists. Syme (1957) reviewed all available research studies published since 1936 which endeavored to differentiate the personality traits of alcoholics from non-alcoholics using non-projective testing. His general impression was that non-projective tests of personality fail to provide data for the theory of an "alcoholic personality."

More fruitful are the research findings which relate alcoholism to different types of personality structure and different kinds of psychiatric disorder. Sherfy (1955) concludes in his study of the underlying psychopathology and personalities of 161 chronic alcoholics, that alcoholism is not a single entity or disease, but a symptom associated with several illnesses or syndromes. Chafetz and Demone (1962) conclude:

The causes of alcoholism are unknown, although the number of theories that have been advanced are as numerous as the professions and scientific disciplines concerned with the problem. No single theory has yet proved adequate to explain the complex of symptoms which are collectively called alcoholism, alcohol addiction, or alcohol dependence. (p. 14)

Many theorists suggest a multifaceted approach which incorporates elements from two or more hypotheses. A model developed by Plaut (1967) tentatively defines the alcoholic as follows:

An individual who (1) responds to beverage alcohol in a certain way, perhaps physiologically determined, by experiencing intense relief and relaxation, and who (2) has certain personality characteristics, such as difficulty in dealing with and overcoming depression, frustration, and anxiety, and who (3) is a member of a culture that induces guilt and confusion regarding what kinds of drinking behavior are appropriate, is more likely to develop trouble than will most other persons. (p. 22)

Franks (1966) suggests that a general systems theory approach could be helpful to clarify the complexities in defining alcoholism. He indicates that in the general field of human actions, behavior is composed
of several layers of action and reaction, with each layer related to other layers that are more or less complex . . . in a systems hierarchy. He concludes that we cannot treat disordered behavior by assigning ultimate cause to one system but that multiple, interacting systems must be taken into account.

A Theoretical Framework

This theoretical proposition is reflective of Frank's systems theory approach and is presented so that the reader may understand the researcher's conception of the alcoholic process.

The researcher assumes that the alcoholic process is in part a function of an inadequate self-concept and reflects a need for control in a dependent situation in which inadequacy tends to increase. Correspondingly, the researcher views the maintenance of sobriety or abstinence as an expression of self-confirmation and self-affirmation and as a reflection of a modification in the alcoholic's self-concept.

The following postulates define the basis for these assumptions:

1. Alcohol is a consciousness altering drug.

Ethyl alcohol when ingested into the body acts as a central nervous system depressant. This quality gives alcohol a capability to affect both the physical and mental state of an individual and therefore alter his consciousness of self. The initial effect of the drug produces a state of consciousness in which the individual experiences a reduction of anxiety and tension which is reflected in the self-concept as a reduction of inadequacy.

2. Alcoholism is a cyclical consciousness of self.

The ability of an individual to maintain a satisfactory drug-state consciousness or experience a consistent reduction of inadequacy, is limited
because of the progressive effect of the drug, alcohol, as a depressant and an anesthetic. These effects of alcohol tend to result in the cessation of consumption and the decline of intoxication. The individual returns to a sober-state consciousness with a reexperiencing of inadequacy, and its physical and mental correlates, tension and anxiety. In alcoholism, reexperiencing of anxiety and tension is met with renewed drinking, completing the cycle.

3. The alcoholic process is a progressive expression of an inadequate self-concept.

The effects of the drug, alcohol, are utilized by the alcoholic to avoid the personification of his inadequacies in terms of his self-image. The immediate effects of the drug are offset in the repeated use of alcohol by an increase of conflict in the self-concept produced by the ineffectiveness of the drug-state consciousness in achieving a meaningful solution in coping with inadequacy. The individual comes to experience more of a sense of inadequacy in the drug state but at the same time depends on the drug to reduce his feelings of anxiety and tension, which tend to become progressively more pervasive.

4. The alcoholic engages alcohol to gain control of the negative aspects of his self-concept.

In alcoholism, the repeated use of alcohol is supported by the individual's belief that he is in control of his reinforcements and therefore can control the negative aspects of repeated indulgence on his self-esteem. He uses alcohol to repress or modify the negative aspects of his self-concept and tends to deny that his repeated use of alcohol may be responsible for his increasing inadequacy. At times, the alcoholic may be aware of this, but he insists that he is in control and therefore is
more powerful than the drug. Basically, this satisfies the alcoholic's need for control in a dependent situation.

5. Sobriety is an expression of self-confirmation for the alcoholic.

When the alcohol permits himself to remain sober, he is in effect rejecting the meaningless of the drug-state consciousness and entertaining the possibility of dealing with his inadequacies on a more substantial level than simply attempting to control his inadequacy. The major dynamic inherent in the maintenance of sobriety is self-acceptance and self-affirmation. The alcoholic acknowledges the positive and negative characteristics of his self on a more realistic plane than self-indulgence. He must allow himself to affirm what is positive about himself and reject those negative aspects which do not reflect what he is but are products of unrealistic self-expectations and inadequate behavior.

6. Successful abstinence is an expression of a modified self-concept for the alcoholic.

Continued sobriety or successful abstinence must indicate a reformation in the individual's self-concept. It is likely that the alcoholic cycles back to indulgence in response to anxiety and tension produced by an inadequate self-concept which cannot cope. Indeed, it is common for an alcoholic to cycle between abstinence and indulgence, according to a pattern that is individual. However, this pattern is primarily a function of the unrealistic supposition on the part of the alcoholic that he can drink without ill effect. Successful abstinence is not necessarily the avoidance of alcohol. It may reflect an intimate knowledge on the part of the alcoholic of the relationship between himself and alcohol and his ability to maintain and support his self-esteem from
within, instead of needing to use a drug to control his sense of inadequacy.

Definition of Terms

Alcoholic

Clark (1966) suggests that alcoholism definitions usually share four elements: (1) excessive intake of alcohol; (2) a mental disturbance due to drinking; (3) disturbed social and economic behavior; and (4) loss of control over drinking behavior. The Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association defines alcoholism as a category, "for patients whose alcohol intake is great enough to damage their physical health, or their personal or social functioning" (American Psychiatric Association, 1968, p. 45).

In view of these definitions and the definitions cited in this proposal in the "Survey of the Problem" section, alcoholic subjects selected for this study will have met the following criteria:

History of repeated intoxication resulting in significant physical and/or social dysfunction.

History of admission into an outpatient or inpatient facility designed to treat alcoholism and alcoholics.

History of having one's drinking behavior termed "alcoholism" by medical or psychological personnel.

Abstinence

Abstinence represents the avoidance of alcohol for a given period of time after a period of heavy consumption of alcohol. Abstinence is considered as part of the alcoholic process, as it is common for alcoholics to cycle between drinking and abstinence during their alcoholic career. Long term abstinence, which is out of the context of this research, may be considered an index of cure for alcoholism; however, for the majority
of alcoholics abstinence is temporary and it is for this reason that members of Alcoholics Anonymous consider themselves to be "alcoholics" or "recovered alcoholics" although they are not currently drinking.

Abstinence may be motivated by many factors including the debilitating effects of repeated intoxication, diminished functioning, and social and moral pressure. Furthermore, the meaning of abstinence may be essential for rehabilitation but also semi-pathological in the sense that it may be substituting one compulsion for another.

In the context of this research, abstinence represents the choice of wanting to avoid alcohol and is considered operational when the individual does not engage in more than one episode of alcohol consumption for more than 48 hours during the period of time that he participates in this study.

Self-esteem System

This term is operationally defined with regard to this research in terms of the Tennessee Self-Concept Scale and how an individual scores on the following scales: Total P Score, the T/F Ratio, and the Net Conflict Score, hereafter called the N/C score.

The Total P Score reflects the over-all level of self-esteem and is a composite of how the individual rates himself in terms of positive and negative characteristics within the following dimensions: (1) physical self; (2) moral-ethical self; (3) personal self; (4) family self; (5) social self; (6) basic identity; (7) self-satisfaction; and (8) behavior.

Persons with high scores tend to like themselves, feel that they are of value and worth, have confidence in themselves, and act accordingly. People with low scores are doubtful of their own worth, see themselves as
undesirable, often feel anxious, depressed and unhappy, and have little faith or confidence in themselves (Fitts, 1965).

The T/F Scale indicates how the individual is achieving self-definition or self-description and how he affirms what is self and what is not self. High scores indicate the individual is achieving self-definition by focusing on what he is and is relatively unable to accomplish the same by eliminating what he is not. Scores in the middle ranges indicate that the subject achieves self-definition by a more balanced employment of both tendencies (Fitts, 1966).

The N/C Scale measures the extent to which an individual's responses to positive items in the TSCS differ from, or conflict with, his responses to negative items in the same area of self-perception. Fitts (1966) describes two kinds of conflict, both of which are dependent upon the ratio of positive scores to negative scores. If the sum of the positive scores exceed the negative, this is termed "acquiescence conflict," and can be interpreted that the subject over-affirms his positive attributes. If the negative scores exceed the positive, this is termed "denial conflict," and can be interpreted that the subject over-denies his negative attributes in relation to the way he affirms his positive characteristics.

Each of these scales, especially if they yield significant scores, may reveal the manner in which an alcoholic maintains his self-esteem and the way he deals with his positive and negative characteristics of self.

Internal - External Control

The concept of internal - external control of reinforcements grew out of a social learning theory advanced by Julian Rotter. He suggests
that there are basic differences among people in the dimension of expectancy for internal versus external control of reinforcement. He defines people who perceive reinforcements as being the result of luck or chance, "externalizers," and those people who perceive events as being contingent upon their own behavior or their own relatively permanent characteristics, "internalizers."

According to Morgan (1967, p. 31), externalizers differ from internalizers in the following ways:

High externals are more likely to behave as if all their reinforcements were determined by luck or chance—that is, they seem to feel and behave as if they had no real control over the course of events. They are likely to learn little from their experiences. They often tend to be passive and to wait for things to happen to them. They tend to be more conforming and less confident of themselves than are internalizers.

High internalizers, . . . tend to behave in ways consistent with the behavior called for by the situation. They tend to be more capable of handling others (more successfully persuasive) and themselves. . . . They place more emphasis on achievement, but are more likely to repress failures. . . . When given conscious choices internalizers tend to act on them, but when they perceive subtle attempts to influence them, they become resistive. They feel that they are in control whether they are, in fact, or not.

In this research, an individual's score on the Rotter I-E Scale is viewed as indicative of the status of the self-concept with regard to a preference for internal versus external control of reinforcements.

**Overview of the Study**

The researcher selected 30 alcoholics who terminated excessive alcohol consumption within a two-week period and had them complete the Tennessee Self-Concept Scale, the Rotter I-E Scale, and a brief questionnaire concerning drinking habits prior to testing. Two months later, all subjects were retested with the same instruments. The results are used
to test 8 hypotheses concerning the identity of alcoholics tested in comparison to norm groups, differences between successful abstainers and non-abstainers, and differences in the self-concept and perception of locus of control that may occur over time.

The researcher presents a theoretical framework concerning the role of the self-concept and abstinence in the alcoholic process. The results from testing the hypotheses are discussed in terms of questions which relate to this theoretical framework in order to establish the validity of the proposed assumptions.

In summary, this research is a study of 30 alcoholic individuals in order to explore four variables of self-perception. The results of testing with the Tennessee Self Concept Scale and the Rotter I-E Scale are related to a proposed theoretical model concerning the role of the self-concept to abstinence in the alcoholic process.
CHAPTER II
THE REVIEW OF THE LITERATURE

Introduction

The review of the literature is divided into two sections: (1) general review of the literature regarding the alcoholic process and personality studies; and (2) review of the literature with regard to the Tennessee Self Concept Scale and the Rotter I-E Scale and studies utilizing these instruments in describing alcoholics.

General Review

Fox (1972) indicates that a certain cluster of personality traits are found in most alcoholics during the active phase of the disease. These traits, he asserts, may be as much a result of years of addictive drinking as they are the cause. Fox lists the following as most frequently mentioned: (1) extremely low frustration tolerance, (2) inability to endure anxiety or tensions, (3) feelings of isolation, (4) devalued self-esteem, (5) a tendency to act impulsively, (6) a repetitive "acting out" of conflicts, (7) often an extreme narcissism and exhibitionism, (8) a tendency toward masochistic self-punitive behavior, (9) somatic preoccupation and hypochondriasis, and (10) often extreme mood swings.

Fox cautions, however, that projective and non-projective tests revealing these personality traits were conducted with people who had already become heavily addicted to alcohol and may in no way represent
their personalities before the addictive process took over. He indicates that these traits may express either fixations or regressions and they may be considered as immature methods of coping with stressful situations.

McCord and McCord (1960) studied the personality characteristics of a group of adult alcoholics as compared with the childhood personality characteristics of a group of boys who eventually became alcoholics. McCord and McCord indicate that,

It is important to recognize that the sample of pre-alcoholics (the children who eventually became alcoholics) differed in several important respects from the sample of adult alcoholics. The adult alcoholics, (1) tended to feel victimized by society; the pre-alcoholics appeared to be self-confident; (2) the adult alcoholics were often highly dependent, the pre-alcoholics emphasized their independence; (3) whereas the adult alcoholics tended to avoid group activities and to express feelings of grandiosity, we found that neither of these traits distinguished the pre-alcoholics from the non-alcoholic children. (p. 28)

The McCord and McCord study is significant in that it deals with persons who became alcoholic before as well as after the onset of heavy drinking behavior. Robins et al. (1962) studied the follow-up case records of several hundred children who had originally been seen in child guidance and social status and anti-social behavior in these children's histories correlate with alcoholism in later life; however, Robins' sample was highly weighted with socially deviant children.

Psychological theorists tend to assume that alcoholism is a symptom of an underlying personality or emotional disorder. McCord and McCord (1960) state that psychodynamic explanations of the causes of alcoholism rest on one or another of three major theoretical positions: (1) the Freudian view that alcoholism results from one or more of three unconscious tendencies, including self-destruction, oral fixation, and latent homosexuality; (2) the Adlerian view that alcoholism represents a struggle for
power, and (3) the view that alcoholism develops as a response to an inner conflict between dependency drives and aggressive impulses.

The Adlerian view poses a model which is relevant to this research. This view theorizes that alcoholism represents a striving for power which compensates for a pervasive feeling of inferiority. It is assumed that the alcoholic person derives his feelings of inferiority from a childhood in which overindulgent parents did not permit him to learn how to cope with the problems of adult life. The alcoholic person turns to alcohol to enhance his feelings of self-esteem and prowess (Rosenberg, 1971).

Studies by McClelland and associates (1971) suggest that the alcoholic may have an enhanced need for power but finds himself inadequate to achieve his goals. He resorts to alcohol because it provides a sense of release, power, and a feeling of achievement. Since overindulgence in alcohol precludes an effective coping with problems needing solution and leads to additional problems, this vicious cycle results in confirmed alcoholism.

According to learning and reinforcement theory, alcoholism can be explained as a reflex response to some stimulus and as a way to reduce an inner drive state such as fear or anxiety. Characterizing life situations in terms of approach and avoidance, this theory holds that persons tend to be drawn to pleasant situations or repelled by unpleasant or tension producing ones. In the latter case, alcohol ingestion is said to reduce the tension of feelings of unpleasantness and to replace them with the feeling of well being or euphoria generally observed in most persons after they have consumed one or two drinks (Rosenberg, 1971).
Schilder (1941) gives us a graphic description of the alcoholic process somewhat reflective of Rosenberg's comments.

The chronic alcoholic is one who from earliest childhood has lived in a state of insecurity. The characteristic of the alcoholic is social tension, with the tendency to give in passively to the assumed pressure or to react by over-compensation. Alcoholism reverses the process. It gives security and acceptance as long as the intoxication lasts. With the wearing off of the intoxication, the underlying tensions and terrors reappear in increased form and create the demand for renewed drinking . . . . (p. 293)

Wexberg (1951) indicates that there is some evidence in the dynamics of alcoholic patients that they were less able to "take it" than the average person long before they started drinking to excess. He explains, "When something went wrong, when they failed to obtain a goal they had been hoping for, . . . they became desparately unhappy to the point that they 'just had to do something about it'" (p. 219).

Zwerling and Rosenbaum (1959) state, "In essence, the alcoholic is seen as having been rendered vulnerable by early security threatening experiences to addiction by a . . . fluid which dispels tension and depression, relieves the sense of aloneness, places an instantaneously available source of pleasure at his disposal . . . " (p. 405).

White (1948) probes the alcoholic's self-concept in the following description:

His childhood experiences have given him a personality characterized by excessive demands for indulgence. These demands are doomed to frustration in the world of adults. He reacts to frustration with intolerable disappointment and rage. This reaction impels him to hostile acts and wishes against the thwarting individuals for which he feels guilty and then punishes himself masochistically. As reassurance against guilty feelings and fears of dangerously destructive masochism and the reality consequences of his behavior, he feels excessive needs for affection and indulgence as real proof of affection.
Again, the excessive claims, doomed to frustration arise, and the circle is complete. (p. 417)

White's description of the alcoholic lacks specification. He does not explain what such terms as "needs for affection," "demands," and so forth, mean operationally, but he does point out and clarify some interrelationships between internal dynamics and behavior in the alcoholic. Lolli (1956, p. 96) poses a more concise explanation of the alcoholic's personality characteristics which reflect White's reasoning. He indicates that the alcoholic person experiences overwhelming unconscious longings for warmth and nurture, equivalent to longings for security and self-respect, which cannot be satisfied in ordinary relationships.

In an earlier section, the researcher discussed the problems inherent in attempting to define an "alcoholic personality," reporting Syme's (1957) general assertion that there is no conclusive evidence through non-projective testing and that no such personality type exists. Many researchers, however, have attempted to isolate personality variables or traits which seem to emerge again and again when alcoholics are tested.

Blane et al. (1970) have set forth some of the personality characteristics commonly seen in alcoholism, suggesting that they are relevant to treatment and rehabilitation of alcoholics. These characteristics include: (1) low frustration tolerance, (2) feelings of inferiority combined with attitudes of superiority, (3) sociability, (4) fearfulness, and (5) dependency.

The Minnesota Multiphasic Personality Inventory is widely used to assess the degree to which an individual possesses the characteristics of people in various psychiatric diagnostic groups. Alcoholic persons
tend to show an elevated Pd (psychopathic deviate) trait score on the MMPI. This subscale is related to the category sometimes labeled "psychopathic personality." Although such individuals have not lost touch with reality, they seem unable to profit from experience and come into conflict with societal norms in a variety of ways, including the abuse of alcohol (Rosenberg, 1971).

Lisansky (1960) suggests a predisposed personality constellation type awaiting the stresses and strains of the environment and the possible resort to alcohol. She indicates that this predisposed personality type has (1) an intensely strong need for dependency, and (2) a weak and inadequate defense mechanism against this excessive need, leading, under certain conditions, to (3) an intense dependence-independence conflict. There is also, she adds, (4) a low degree of tolerance for frustration or tension, and (5) unresolved love-hate ambivalences.

Jellinek (1952) has developed a classification system which divides alcoholics into two main classes, "alcohol addicts" and "habitual symptomatic excessive drinkers." In this system, the author separates alcoholic behavior from the "alcoholic personality" or addicted personality. To Jellinek, "habitual symptomatic excessive drinkers" are persons who rely on alcohol consumption in response to a psychological need as opposed to a chemical-somatic habituation or addiction to alcohol. He identifies four phases of alcoholism and indicates that self-esteem loss may be only a function of the social setting after the alcoholic has entered a "crucial phase."

Williams (1964), in a study which compared the self-concepts of college problem drinkers with those of alcoholics, indicates that problem drinking is associated with low self-evaluation. He questions whether
the loss of self-esteem evidenced in his research was a function of the role the alcoholic is subjected to after he becomes an alcoholic as opposed to a pre-disposed personality factor.

The Rotter I-E Scale, Tennessee Self Concept Scale, and Associated Studies

Rotter (1966) notes that correlations of the I-E Scale scores with measures of adjustment (Rotter Incomplete Sentences Blank and Taylor Manifest Anxiety Scale) have generally been difficult to interpret. He suggests that the test may discriminate between well adjusted and mal-adjusted groups, and one might expect a positive relationship between both extreme internality and extreme externality and maladjustment. The author hypothesizes that more seriously maladjusted individuals would probably score more toward the externalizer end of the scale than would normals or less seriously maladjusted individuals.

Smith et al. (1971) indicate that members of a severely emotionally impaired group were significantly higher in external control than were members of a mildly impaired group when tested with the Rotter I-E Scale and the Behavioral Adjustment Scale. Cash and Stack (1973) found a positive relationship between external control and degree of psychological disturbance.

Examining the relationship between the Rotter I-E Scale and the MMPI Clinical Scale scores of 15 alcoholics, Lottman et al. (1973) found a positive relationship between external control perception and elevated MMPI scales. This relationship did not hold, however, for other diagnostic groups, and Lottman et al., conclude that alcoholics are more environmentally focused than are other groups. They found a significant negative
correlation between external perception of control and a preference for success attainment over failure avoidance with two samples of 75 alcoholics.

Hersch and Sheibe (1967) found that internals are a more homogeneous group than externals and suggest that "external orientation" has more than one psychological meaning. They indicate that one may be an externalizer because he is fact intellectually or physically weak in relation to those around him. He adds that a person may describe himself as external because he is in a highly competitive social situation, where the actions of others may have great relevance for the success of his own efforts.

Davis and Davis (1972) indicate that some individuals who obtain external scores on the Rotter I-E Scale and may have developed this expectancy for defensive reasons. Studies suggest that externals have less need than internals to resort to forgetting and denial as defensive strategies since they can readily account for failures by attributing them to impersonal forces. Phares et al. (1968) offer further support for a defensive interpretation of externality in a study in which they report that externals attribute more blame for their failures to environmental factors than do internals.

Rotter (1966) reports a 1963 study by Efran which found that people who scored toward the internal end of the Rotter I-E Scale tended significantly to repress failures. He also quotes Deever and suggests that people with high achievement motivation may defensively adopt an external orientation as a protection against self-blame in case of failure.
In a conditioning situation, internalizers who have already learned drinking habits and regard them as being under their control tend not to resist extinction. They apparently feel that they have already learned to drink as a consequence of their own actions. Externalizers, in extinction, tend not to unlearn the conditioning because they regard it as under someone else's control and so beyond their power to change (Cohen and Phelen, 1972).

Distefano et al. (1972) found that alcoholics tested with the Rotter I-E Scale scored significantly towards the internal end when compared with normals, while emotionally disturbed patients scored more towards the externalizer and than normals. Goss and Morosko (1970) also found that alcoholics tested scored significantly lower (towards the internal end) than normals.

Comparing alcoholics with non-alcoholics, Gozale and Sloan (1971) found that their alcoholic subjects were significantly more internally oriented. They suggest this accounts for the alcoholics' belief that they could control their drinking. The authors add that although internally oriented persons are considered "healthier," an internal orientation may contribute to a person's proclivity to become an addict.

Berzins and Ross (1973) predicted that because the use of opiates enables the user to exert direct control over reinforcements, opiate addicts would show strongly internal expectancies on the Rotter I-E Scale, especially on items referring to personal control. Their prediction was strongly supported in a study of 200 male and 100 female narcotic addicts.
Comparing a sample of 20 "first time" alcoholics, 20 repeat members of Alcoholics Anonymous, Carothers (1971) concludes that the successfully rehabilitated alcoholic's locus of control is more internal than that of the intemperate. His results indicate that intemperate and rehabilitated alcoholics reveal different personality characteristics and can be considered as two distinct groups.

Fitch (1970), testing 135 undergraduates, reports that his subjects attribute significantly more causality to internal sources for success outcomes than for failure outcomes. Low self-esteem subjects who received failure feedback attributed significantly more causality to internal sources than did high self-esteem subjects who received failure feedback. This finding supports a self-esteem consistency prediction for low self-esteem subjects using the Rotter I-E Scale.

Fish and Karabenick (1971) administered the Rotter I-E Scale and the Janis and Field Feelings of Inadequacy Scale to 285 male undergraduates. They interpret their results as supporting the contention that persons of high self-esteem have greater potential for self-reinforcement. Ryckman and Sherman (1973) conclude that subjects with high self-esteem tend to be more internally controlled. This finding adds support to Fish and Karabenick's conclusion.

In a study using the Tennessee Self Concept Scale, Vanderpool (1969) offers two conclusions concerning the self-concepts of alcoholics he tested: (1) an alcoholic probably has a poor self-concept when sober; and (2) even when he is drinking, he does not feel more positive about himself; in fact, he tends to confirm and worsen his already low self-concept.
Vanderpool concludes that the alcoholic while drinking does not enhance his self-esteem but undermines his already poor sober self-concept. He adds that drinking appears to be a mechanism to effect a positive self-image and to enable the drinker to give the impression of being friendly, outgoing, and socially adequate, while permitting him to disguise his feelings of social inadequacy. From the results of testing with the Tennessee Self Concept Scale, Vanderpool hypothesizes that the drinking alcoholic tries to project a self-image by calling attention to what he is or would like to be, but at the same time has reduced capacity to eliminate or reject what he is not or feels he is not.

Wells and Bueno (1975) found that a group of male and female alcoholics had significantly low P Scores (general self-esteem), high V Scores (inconsistency from one area of self-perception to another), and more extreme D Scores (defensiveness) than normals.
CHAPTER III

THE INVESTIGATION

Introduction

The purpose of this study is to explore four dimensions of the self-concept of a group of individuals diagnosed as alcoholic, during a period of two months, in order to investigate the meaning of abstinence. Two instruments, the Tennessee Self Concept Scale and the Rotter I-E Scale will be used in a pre-test/post-test model to gather information on the following areas of the self-concept:

1. Perception of locus of control
2. Self-esteem level
3. Perception of positive and negative self-characteristics
4. Self-definition

The researcher proposes a theoretical model of the alcoholic process and asserts three basic ideas that are pertinent to this research:

1. The alcoholic sees himself as in control of his reinforcements.
2. In a period of abstinence, the alcoholic modifies his self-image by changing his perceptions of the positive and negative aspects of his self-concept.
3. Successful abstinence is an expression of a modification in the way the alcoholic maintains his self-concept.

The researcher chose two instruments, the Tennessee Self Concept Scale and the Rotter I-E Scale in order to test the validity of these ideas and their application to the treatment of alcoholism.
The Rotter I-E Scale yields one score which indicates how an individual perceives the locus of control for reinforcements. The data provided by this instrument is pertinent to the researcher's considerations of the nature of alcohol addiction for the drinking alcoholic.

The Tennessee Self Concept Scale yields three scores which operationalize facets of the self-concept pertinent to this research; self-esteem, perception of positive and negative self-characteristics, and mode of self-definition. The Tennessee Self Concept Scale is designed to assess the self-esteem of an individual as a balance of his perception of his positive and negative self-characteristics and the manner in which he maintains these characteristics.

The researcher proposes 8 hypotheses which refer to possible differences between alcoholics who do and do not remain abstinent as evidenced in the pre-test and post-test results, differences that may occur over time, and the identity of alcoholics tested when compared to the norm groups for both test instruments.

The research design is basically a pre-test/post-test model but is somewhat unusual in the idea that the post-test data must be gathered before the pre-test data can be analyzed.

The post-test data gathered after a two-month interval represents individuals who did and did not remain abstinent according to the criteria outlined in the "Definition of Terms" section of this proposal. These test data are statistically compared to the pre-test data in order to determine whether a significant change occurs in an interval of time.

Statistical measures are used to determine whether the pre-test and post-test scores of those individuals who remained abstinent over a two-
month period are significantly different from the pre-test and post-test scores of those alcoholics who did not remain abstinent. The purpose of this procedure is to determine whether alcoholics tested have different self-concepts when entering abstinence and when tested two months later.

In addition, a Pearson correlation is used to determine whether the effect that may occur between pre-test and post-test is consistent for those alcoholics who remain abstinent and those who do not.

**Hypotheses**

Hypothesis 1 - Alcoholic subjects will not score significantly toward internal locus of control on the pre-test score of the Rotter I-E Scale in comparison with a norm group for that instrument.

Hypothesis 2 - The pre-test P Score of alcoholic subjects will not be significantly below the mean P Score (self-esteem) of a norm group for the Tennessee Self Concept Scale.

Hypothesis 3 - The pre-test Net Conflict Score of alcoholic subjects will not be significantly below the mean Net Conflict Score of a norm group of the Tennessee Self Concept Scale.

Hypothesis 4 - The pre-test T/F Ratio Score of alcoholic subjects will not be significantly above the mean T/F Ratio Score of a norm group for the Tennessee Self Concept Scale.

Hypothesis 5 - Alcoholic subjects who remain abstinent will not differ significantly at the beginning of abstinence from those subjects who do not so remain, when compared according to pre-test P Score, Net Conflict Score, and T/F Ratio Score on the Tennessee Self Concept Scale and the pre-test I-E Score on the Rotter I-E Scale.
Hypothesis 6 - There will be no significant difference between the group of alcoholics who remain abstinent and the group who do not so remain, when compared according to post-test P Score, Net Conflict Score, and T/F Ratio on the Tennessee Self Concept Scale and the post-test I-E Score on the Rotter I-E Scale.

Hypothesis 7 - Alcoholic subjects who remain successfully abstinent will show no significant change over time in P Score, Net Conflict Score, and T/F Ratio on the Tennessee Self Concept Scale and the I-E Score on the Rotter I-E Scale.

Hypothesis 8 - Alcoholic subjects who do not remain successfully abstinent will show no significant differences over time in P Score, Net Conflict Score, and T/F Ratio on the Tennessee Self Concept Scale and the I-E Score on the Rotter I-E Scale.

Subjects

Subjects selected for this investigation have met the criteria to be termed "alcoholic" described in the "Definition of Terms" section of this proposal. Data for testing the hypotheses represent the pre-test and post-test results of a group of thirty subjects, some of whom remained abstinent and some of whom did not.

Alcoholic subjects asked to participate in this study were selected from clients of the North Central Florida Community Mental Health Center Alcohol Program and its associate helping organizations; The Bridge Council on Alcoholism, Inc., Gainesville, Florida, and Alcothon House, Gainesville, Florida.
The following is a description of these treatment facilities and organizations:

1. North Central Florida Community Mental Health Center Alcohol Program.

Description: This outpatient program provides psychiatric and evaluation services, treatment planning, and individual and group counseling to individuals with alcohol related problems. The Alcohol Program is active in a ten county area and is open to any resident within that area who desires help with an alcohol problem.

2. Alcothon House.

Description: This facility provides a supervised residential setting for individuals who have progressed through alcohol detoxification and are unable to return directly to their home and community. Alcothon House associates itself with Alcoholics Anonymous and urges its residents to become members of this organization in order to help maintain sobriety.

3. The Bridge Council on Alcoholism, Inc.

Description: The Bridge Council provides limited medical, psychiatric, and residential treatment to individuals undergoing alcohol detoxification. The Council also provides alcohol information, counseling, and job placement for a limited period of time.

Participants selected for this study completed detoxification or withdrawal from alcohol consumption within two weeks before testing. The detoxification process commences with the individual's request for help in terminating heavy drinking and consists of supervision with medical support for approximately one week. The completion of the detoxification process signifies the beginning of abstinence; detoxification having occurred after the individual becomes systematically free of alcohol. Medical personnel monitor the individual and observe when he has passed the point of danger from withdrawal symptoms such as delirium tremens, malnutrition, and other physical and nervous conditions associated with acute and prolonged intoxication from alcohol.
The researcher accepted variety in the selection of subjects, as the purpose of this study is to explore the relevance of a general theoretical framework to particular changes which may take place in the self-concept in a two-month period after abstinence commences. In order to produce a subject pool of both abstainers and non-abstainers, the researcher pre-tested more than thirty subjects but post-tested no more than this number. The testing results generated data on twelve alcoholics who did not remain abstinent and eighteen alcoholics who did remain abstinent for two months.

All subjects selected came to a treatment facility and therefore, were initially in treatment on an outpatient basis. The problem of accounting for treatment as part of the variance is discussed in the "Limitations of the Study" section of this proposal.

The researcher obtained information as to age, sex, treatment, education, and work involvement during the two-month period between testings and this data is presented in the Appendix of this research. Within the scope of this study, the researcher attempts to achieve a balance within the subject pool for these variables.

**Instruments**

Rotter I-E Scale. This instrument consists of 29 items, including 6 filler items, in a forced-choice format scored by counting the number of choices of external items. High scores indicate a preference for external locus of control; scores which fall below the norm mean 8.15 indicate externality. The Rotter I-E Scale is considered a measure of generalized expectancy because the items deal with the subjects' beliefs about the world. Rotter (1966, p. 10) states, "Such a generalized
expectancy may correlate with the value the subject places on internal control but none of the items is directly addressed to the preference for internal or external control."

The Rotter I-E Scale has become popular in recent years and has been utilized in hundreds of studies exploring locus of control with a diversity of populations and variables. Construct validity for the Rotter has been generally supported in the literature (Throop and Mac-Donald, 1971) and several studies have helped to validate the Scale as a predictor of generalized interpersonal control expectancy (Goldberg, 1972).

Hersch and Scheibe (1967) assert that the test-retest reliability of the Rotter I-E Scale is consistent and acceptable, varying between .49 and .83 for varying samples and intervening time periods. Test-retest comparisons over a month-long period were consistent for two different samples with correlations of .72 for a group of elementary psychology students and .78 for a group of prisoners (Rotter, 1966).

Internal consistency estimates were somewhat low in the studies reported (.65 - .79), however, Rotter suggests that this is due to the forced-choice format of the test.

The researcher will use a sample of 575 male and 605 female Ohio State psychology students as the norm group for this test (Rotter, 1966). This group produced a mean of 8.15 for males and 8.45 for females with a standard deviation of 3.88 (male) and 4.06 (female). These figures will be used in testing Hypothesis 1 in ascertaining whether subjects in this research differ significantly from a norm group in perceived locus of control.
Tennessee Self Concept Scale. The Tennessee Self Concept Scale was developed as a tool in a research program on self-concept and rehabilitation conducted by William H. Fitts in 1955. The instrument has been standardized on a norm group of 626 people from various parts of the country ranging from ages 12 to 68. Special norm groups of 100 persons standardize four of the empirical scales, none of which are used in this research. This instrument was standardized on a total of 1,091 persons representing all social, economic, and intellectual levels and educational levels from 6th grade through the Ph.D. degree (Fitts, 1966, p. 12).

The 100 items on this paper and pencil test represent 8 dimensions of the self-concept. Scales were derived from a phenomenological classification scheme based upon what subjects were saying about themselves. The original analysis of the item pool revealed that subjects conveyed three primary messages: (1) this is what I am; (2) this is how I feel about myself; and (3) this is what I do. These scores represent an internal frame of reference within which the individual is describing himself and comprise part of the P Score (self-esteem) pertinent to hypotheses 2, 5, 6, 7, and 8.

The other five scores which compose part of the P score are indicative of an external frame of reference and refer to how the individual sees his physical self, moral-ethical self, personal self, family self, and social self. There are 29 scales on the Tennessee Self Concept Scale, plotted on a profile sheet titled the "Clinical Form."

In this investigation, the researcher uses three scores on The Tennessee Self Concept Scale; the P Score (self-esteem), the Net Conflict Score (perception of positive and negative characteristics), and the T/F Ratio (self-definition). A description of these three scales and their
operational definitions is discussed in the "Definition of Terms" section of this proposal and how they will be used to describe what the researcher calls the "self-esteem system."

Collection and Analysis of Data

Subjects selected for this study were asked to complete the Rotter I-E Scale, the Tennessee Self Concept Scale, and a brief questionnaire concerning their drinking habits on two occasions. Advance arrangements were made with each subject as to the date of each testing and where the event was to take place. On each testing occasion, the subject was given a packet consisting of both instruments and a questionnaire with directions on how to complete them. At the end of each testing occasion, each subject was given notice of the next testing.

Each subject was tested in accordance with the following timetable. First, testing was conducted within two weeks of terminating indulgence in alcohol after detoxification, and second, two months after the first testing. The researcher attempted to maintain consistent conditions within the testing situation for each subject and conducted the second testing reasonably close to the prearranged date.

The final data consists of initial and follow-up scored answer sheets for each test instrument and initial and follow-up completed questionnaires concerning drinking habits (see Appendix) concerning the two-month period prior to each testing. The researcher accepted the subject's word concerning his drinking habits and corroborated this information with that of treatment personnel.
The data from the questionnaires is used to identify those alcoholics tested who remained abstinent according to the criteria proposed in the "Definition of Terms" section of this proposal. The data is statistically processed in order to test 8 hypotheses.

The post-test data determines which of the pre-test alcoholics tested were abstainers and non-abstainers. Hypotheses 1, 2, 3, and 4 is subjected to a $z$ test which compares subject pre-test scores with the norm group scores for each scale mentioned. This treatment is used to test the difference between the sample mean and the population mean.

The formula for this procedure is as follows:

$$z = \frac{\bar{x} - \mu}{\frac{\sigma}{\sqrt{n}}}$$

$\bar{x}$ equals the mean of the subject sample; $\mu$ equals the mean of the norm group; $\sigma$ is the standard deviation of the norm group; and $\sqrt{n}$ is the square root of the sample size.

The results of this treatment for hypotheses 1, 2, 3, and 4 is discussed in relation to the following questions.

1. How does the alcoholic who has recently terminated drinking perceive the locus of control of reinforcements?

2. How does the alcoholic who has recently terminated drinking maintain his self-esteem system in relation to his perception of his positive and negative self-characteristics?

The researcher integrates this discussion to the following assumptions proposed in the theoretical model.

1. The alcoholic sees himself as in control of his reinforcements.

2. The alcoholic's self-concept is negative.
Hypotheses 5 and 6 are tested with two statistical treatments in order to compare the pre-test and post-test scores of alcoholics after they have been separated into two groups: abstainers and non-abstainers. This is done in order to determine whether there is a significant difference between these two groups of alcoholics.

Hypothesis 5 is tested with an independent t test to determine whether the abstainers and non-abstainers are significantly different in their pre-test scores. Hypothesis 6 is tested by an analysis of covariance on the post-test scores using the pre-test scores as the covariate. This is to determine whether in the post-test scores there is a significant difference between abstainers and non-abstainers.

The results of the testing of Hypotheses 5 and 6 are discussed in relation to the following questions.

1. How do alcoholics tested who successfully remain abstinent differ from alcoholics who do not in terms of perception of locus of control and self-esteem system when entering abstinence?

2. After a two-month period, how do alcoholics tested who remain abstinent differ from alcoholics who do not in terms of perception of locus of control and self-esteem system?

Hypotheses 7 and 8 are tested using a dependent t test to determine whether significant changes occur over time for alcoholics who do not remain abstinent over a two-month period. An additional treatment, a Pearson correlation for pre-test/post-test scores for abstainers and non-abstainers is used to determine whether the effect over time is consistent.

The results of these treatments for hypotheses 7 and 8 are discussed in terms of the following questions.
1. What differences occur over time in perceived locus of control of reinforcements when alcohol consumption is and is not terminated?

2. What differences occur over time in the self-esteem system of alcoholics when alcohol consumption is and is not terminated?

3. What reformation in the manner in which the alcoholic maintains his self-esteem occurs during a two-month period of abstinence?

4. What reformation in the manner in which the alcoholic assesses his positive and negative characteristics occurs during a two-month period of abstinence?

The researcher then integrates this discussion to the following assumptions proposed in the theoretical model.

1. In a period of abstinence, the alcoholic modifies his self-image by changing his perceptions of the positive and negative aspects of his self-concept.

2. Successful abstinence is an expression of a modification in the way the alcoholic maintains his self-concept.

In addition, the researcher discusses the following question in order to provide direction for future research.

1. What relationship may exist between perceived locus of control of reinforcements and self-esteem maintenance system for the alcoholic who remains abstinent for a two-month period?

**Limitations of the Study**

The limitations of this study are presented in terms of two aspects, the scope of the study and methodology. More fundamental limitations concerning problems in the etiology and definition of alcoholism and the alcoholic are discussed in the "Survey of the Problem" section of this proposal.
In determining the scope of this study, the researcher decided to investigate alcoholism by assuming a general point of view and presenting these assumptions in a theoretical framework. In this framework, the researcher asserts that alcoholism is a complex process, alternating between abstinence and indulgence, and that a part of this process concerns the relationship between alcohol and the self-concept of the alcoholic. The researcher does not seek to solve the problem of what factor or factors cause alcoholism or establish that abstinence is a solution to this condition. The intent of the researcher is heuristic in that by probing a conception, facts may emerge that generate more specific directions for future research.

The researcher's methodology is a pre-test/post-test design which employs two instruments to provide empirical data in order to assess psychological movement over time. The hypotheses are constructed so that the researcher may be able to relate operational definitions of test scales to more general assumptions in a theoretical model. The problems inherent in this approach are particular to inductive research. Stated specifically, how does the researcher establish that the results of testing are more relevant to the alcoholic process as theorized than to other factors such as treatment variables and individual differences among subjects?

In order to cope with this problem, the researcher will, in the Appendix, list aspects of the subjects' identity and treatment during the course of this study. The researcher presents information regarding the age, sex, education, and work involvement of subjects selected in table form. Treatment information is presented with regard to the use
of Antabuse and involvement in psychotherapy.

In this sense, the identity of the subjects somewhat determines the limit to which the researcher is able to relate the results from testing the hypotheses to the general assumptions of the theoretical framework. However, the researcher is confident that the literature concerning the self-concept of alcoholic individuals gives broad support to the idea that alcoholism is a manifestation of a personal process.
CHAPTER IV
PRE-AND POST-TEST RESULTS FOR ALCOHOLIC SUBJECTS AND STATISTICAL TREATMENTS

Introduction and Tables

The following tables depict the statistical information generated by pre-and post-test results from the testing of 30 alcoholic subjects over a two-month period. The data are divided into pre-test and post-test results and further subdivided into two groups, labeled abstainers and non-abstainers. The rationale for using the following statistical treatments is discussed in Chapter III, in the section entitled "Collection and Analysis of the Data," and the tables listed are sequenced to correspond with the numerical order of hypotheses.

The comparisons of alcoholic subjects pre-test means with instrument norm group means are shown in Table 1. Significant differences ($P < .01$) were found for the Rotter I-E Scale and the Tennessee Self Concept Scale P Score. In addition, a significant difference ($P < .05$) was found for the N/C Scale on the Tennessee Self Concept Scale. Thus, significant differences were found for 3 of the 4 scales investigated in this manner.

Results from the test for significant differences between the pre-test means for abstainers and non-abstainers are shown in Table 2. No significant differences ($P < .05$) were found for Rotter I-E Scale or
### TABLE 1

z Test Comparison of Pre-test Group Means with Instrument Norm Group Means

<table>
<thead>
<tr>
<th>Scale</th>
<th>( \bar{x} ) (Pre-test)</th>
<th>( \bar{x} ) (S.D.) (Norm)</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-E</td>
<td>6.20</td>
<td>8.15 (3.88)</td>
<td>-2.75**</td>
</tr>
<tr>
<td>P</td>
<td>313.57</td>
<td>345.57 (30.70)</td>
<td>-5.71**</td>
</tr>
<tr>
<td>T/F</td>
<td>.97</td>
<td>1.03 (.29)</td>
<td>-1.20</td>
</tr>
<tr>
<td>N/C</td>
<td>9.73</td>
<td>-4.91 (13.01)</td>
<td>2.03*</td>
</tr>
</tbody>
</table>

*P < .05    **P < .01

\( N_1 = 30 \) alcoholic subjects

\( N_2 = 626 \) norm group of Tennessee Self Concept Scale

\( 1,180 \) norm group of Rotter I-E Scale
### TABLE 2

_t_ Test Comparison of Pre-test Mean Scores for Abstainers and Non-abstainers

<table>
<thead>
<tr>
<th>Scale</th>
<th>$N_1$ Abstainers (Pre-test)</th>
<th>$N_2$ Non-abstainers (Pre-test)</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}$ (S.D.)</td>
<td>$\bar{x}$ (S.D.)</td>
<td></td>
</tr>
<tr>
<td>I-E</td>
<td>5.89 (6.67)</td>
<td>6.67 (4.27)</td>
<td>+0.56</td>
</tr>
<tr>
<td>P</td>
<td>306.39 (40.19)</td>
<td>324.33 (39.88)</td>
<td>+1.20</td>
</tr>
<tr>
<td>T/F</td>
<td>1.02 (0.30)</td>
<td>0.91 (0.59)</td>
<td>-0.70</td>
</tr>
<tr>
<td>N/C</td>
<td>4.56 (17.49)</td>
<td>17.50 (22.39)</td>
<td>+1.78</td>
</tr>
</tbody>
</table>

*P < .05      **P < .01

df = 28 for all tests

$N_1$ = 18 abstainers

$N_2$ = 12 non-abstainers
Tennessee Self Concept Scale scores.

The post-test mean scores for abstainers and non-abstainers are presented in Table 3. The negative N/C score is almost the same as the mean for the norm group for this scale, and norms for other scales are listed in Table 1.

**TABLE 3**
Post-test Mean Scores for Abstainers and Non-abstainers

<table>
<thead>
<tr>
<th>Scale</th>
<th>$N_1$ Abstainers (Post-test)</th>
<th>$N_2$ Non-abstainers (Post-test)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}$</td>
<td>$\bar{x}$</td>
</tr>
<tr>
<td>I-E</td>
<td>5.50</td>
<td>7.50</td>
</tr>
<tr>
<td>P</td>
<td>323.33</td>
<td>303.58</td>
</tr>
<tr>
<td>T/F</td>
<td>0.90</td>
<td>0.65</td>
</tr>
<tr>
<td>N/C</td>
<td>-6.44</td>
<td>8.83</td>
</tr>
</tbody>
</table>

$N_1 = 18$ abstainers

$N_2 = 12$ non-abstainers

Table 4 presents the analysis of covariance for the post-test mean I-E scores for abstainers and non-abstainers with the pre-test I-E scores as the covariate. There are no significant differences between the mean post-test scores on the Rotter I-E Scale indicated in these results.
TABLE 4
Analysis of Covariance for Post-test Mean I-E Scores for Abstainers and Non-abstainers

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates Pre-test I-E</td>
<td>188.53</td>
<td>1</td>
<td>188.53</td>
<td>43.83</td>
</tr>
<tr>
<td>Main Effects Group</td>
<td>15.63</td>
<td>1</td>
<td>15.63</td>
<td>3.63</td>
</tr>
<tr>
<td>Explained</td>
<td>204.16</td>
<td>2</td>
<td>102.08</td>
<td>23.73</td>
</tr>
<tr>
<td>Residual</td>
<td>116.14</td>
<td>27</td>
<td>4.30</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>320.30</td>
<td>29</td>
<td>11.05</td>
<td></td>
</tr>
</tbody>
</table>

*P < .05    **P < .01

N = 30 alcoholic subjects

The analysis of covariance for post-test mean P scores for abstainers and non-abstainers is presented in Table 5. Significant differences were found (P < .05) between the post-test means. This indicates that the abstainers' P score post-test mean was significantly higher than the one for non-abstainers.

Table 6 shows the analysis of covariance for post-test mean T/F scores for abstainers and non-abstainers. Significant differences (P < .05) were found between post-test mean T/F scores for abstainers and non-abstainers. The mean T/F score of the abstainers was significantly lower.
TABLE 5
Analysis of Covariance for Post-test Mean P Scores for Abstainers and Non-abstainers

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariance Pre-test P</td>
<td>24145.88</td>
<td>1</td>
<td>24145.88</td>
<td>73.56</td>
</tr>
<tr>
<td>Main Effects Group</td>
<td>8034.57</td>
<td>1</td>
<td>8034.57</td>
<td>24.48*</td>
</tr>
<tr>
<td>Explained</td>
<td>32180.45</td>
<td>2</td>
<td>16090.23</td>
<td>49.02</td>
</tr>
<tr>
<td>Residual</td>
<td>8862.87</td>
<td>27</td>
<td>328.25</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41043.32</td>
<td>29</td>
<td>1415.29</td>
<td></td>
</tr>
</tbody>
</table>

*P < .05  **P < .01

N = 30 alcoholics

TABLE 6
Analysis of Covariance of Post-test Mean T/F Scores for Abstainers and Non-abstainers

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates Pre-test T/F</td>
<td>0.02</td>
<td>1</td>
<td>0.02</td>
<td>0.21</td>
</tr>
<tr>
<td>Main Effects Group</td>
<td>0.41</td>
<td>1</td>
<td>0.41</td>
<td>5.65*</td>
</tr>
<tr>
<td>Explained</td>
<td>0.42</td>
<td>2</td>
<td>0.21</td>
<td>2.93</td>
</tr>
<tr>
<td>Residual</td>
<td>1.95</td>
<td>27</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.38</td>
<td>29</td>
<td>0.08</td>
<td></td>
</tr>
</tbody>
</table>

*P < .05  **P < .01

N = 30 alcoholics
The analysis of covariance for post-test mean N/C scores for abstainers and non-abstainers is presented in Table 7. This analysis reveals no significant differences between these two groups.

**TABLE 7**

Analysis of Covariance for Post-test Mean N/C Scores for Abstainers and Non-abstainers

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates Pre-test N/C</td>
<td>2387.20</td>
<td>1</td>
<td>2387.20</td>
<td>11.17</td>
</tr>
<tr>
<td>Main Effects Group</td>
<td>720.68</td>
<td>1</td>
<td>720.68</td>
<td>3.37</td>
</tr>
<tr>
<td>Explained</td>
<td>3107.88</td>
<td>2</td>
<td>1553.94</td>
<td>7.27</td>
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<tr>
<td>Residual</td>
<td>5772.76</td>
<td>27</td>
<td>213.81</td>
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</tr>
<tr>
<td>Total</td>
<td>8880.64</td>
<td>29</td>
<td>306.23</td>
<td></td>
</tr>
</tbody>
</table>

*P <.05  **P <.01

N = 30 alcoholic subjects

The tests of significance of difference between the pre and post-test means for abstainers on the Tennessee Self Concept Scale and the Rotter I-E Scale are presented in Table 8. Significant differences in a positive direction were found for the P score means (P <.01) and in a negative direction for the N/C score means (P <.05) on the Tennessee Self Concept Scale. Table 8 also shows the pre-test and post-test correlation coefficients. Significant correlations were found for the Rotter I-E Scale and the P Scale on the Tennessee Self Concept Scale.
### Table 8

**t Test and Correlation Comparison of Pre-test and Post-test Mean Scores for Abstainers**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>t value</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}$ (S.D.)</td>
<td>$\bar{x}$ (S.D.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-E</td>
<td>5.89 (3.38)</td>
<td>5.50 (3.13)</td>
<td>-0.79</td>
<td>0.80**</td>
</tr>
<tr>
<td>P</td>
<td>306.39 (40.19)</td>
<td>323.33 (30.17)</td>
<td>+3.52**</td>
<td>0.87**</td>
</tr>
<tr>
<td>T/F</td>
<td>1.02 (0.30)</td>
<td>0.90 (0.18)</td>
<td>-1.32</td>
<td>-0.32</td>
</tr>
<tr>
<td>N/C</td>
<td>4.56 (17.49)</td>
<td>-6.44 (9.91)</td>
<td>-2.75*</td>
<td>0.33</td>
</tr>
</tbody>
</table>

*P < .05 **P < .01

df = 17 for all t tests

N = 18 abstainers

The tests of significance of difference between the pre and post-test means for non-abstainers and correlations are presented in Table 9. A significant difference in a negative direction was found for the P score on the Tennessee Self Concept Scale (P < .05) and significant correlation coefficients were found for the Rotter I-E Scale (P < .01), P Scale (P < .01), and N/C Scale (P < .05) on the Tennessee Self Concept Scale.
<table>
<thead>
<tr>
<th>Scale</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>t value</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{x} ) (S.D.)</td>
<td>( \bar{x} ) (S.D.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-E</td>
<td>6.67 (4.27)</td>
<td>7.50 (3.37)</td>
<td>+1.03</td>
<td>0.76**</td>
</tr>
<tr>
<td>P</td>
<td>324.33 (39.88)</td>
<td>303.58 (45.49)</td>
<td>-4.08*</td>
<td>0.92**</td>
</tr>
<tr>
<td>T/F</td>
<td>0.91 (0.59)</td>
<td>0.65 (0.36)</td>
<td>-1.39</td>
<td>0.17</td>
</tr>
<tr>
<td>N/C</td>
<td>17.50 (22.39)</td>
<td>8.83 (22.42)</td>
<td>-1.38</td>
<td>0.53*</td>
</tr>
</tbody>
</table>

*P < .05    **P < .01

df = 11 for all t tests

N = 12 non-abstainers
CHAPTER V

SUMMARY AND CONCLUSIONS

The results given in Chapter IV serve as the basis for discussion for each of the 8 hypotheses proposed in this research. As indicated previously in Chapter III, testing results are evaluated with regard to questions pertinent to each hypothesis and consequently to the proposed theoretical model.

Discussion of the Hypotheses

Hypothesis 1 - Alcoholic subjects will not score significantly toward internal locus of control of the pre-test score of the Rotter I-E Scale in comparison with a norm group for that instrument.

The z test comparison of the pre-test group mean with the Rotter I-E Scale norm group yields a z score of -2.75, indicating a significant difference at the .01 level. The null hypothesis is rejected. Alcoholics tested who have recently terminated drinking show a statistically significant expectancy for internal control.

Hypothesis 2 - The pre-test P Score of alcoholic subjects will not be significantly below the mean P Score (self-esteem) of a norm group for the Tennessee Self Concept Scale.

The z test comparison of the pre-test group mean score for the P Scale on the Tennessee Self Concept Scale with the norm group mean for that instrument yields a z score of -5.71, indicating a significant difference at the .01 level. The null hypothesis is rejected, since the
pre-test group of 30 alcoholics, when rating themselves in terms of positive and negative characteristics, tend significantly towards the negative.

Fitts (1965) indicates that people with low P scores are doubtful of their own worth, see themselves as undesirable, often feel anxious, depressed and unhappy, and have little faith or confidence in themselves. Test results for this group of alcoholics indicate an overall low sense of self-worth as these individuals enter a period of abstinence from alcohol.

Hypothesis 3 - The pre-test Net Conflict score of alcoholic subjects will not be significantly below the mean Net Conflict score of a norm group for the Tennessee Self Concept Scale.

A z test comparison of pre-test group mean N/C score on the Tennessee Self Concept Scale with the norm group mean N/C score for that instrument yields a z score of -2.03. This result indicates a significant difference at the .05 level; however, as the direction of the difference is above the mean the researcher chooses not to reject the null hypothesis.

Hypothesis 3 is worded in the null fashion as the assumption supporting it was that alcoholic subjects, when entering abstinence, might be more likely to over-den[y] their negative characteristics in relation to the way they affirm their positive characteristics. This would yield a negative N/C score; however, the pre-test results reveal a significant leaning toward what Fitts (1965) describes as "acquiescence conflict," indicating that these subjects tend to over-affirm their positive attributes when compared to a norm group.
Hypothesis 4 - The pre-test T/F ratio score of alcoholic subjects will not be significantly above the mean T/F ratio score of a norm group for the Tennessee Self Concept Scale.

The z test comparison of the pre-test group mean T/F score on the Tennessee Self Concept Scale with the norm group mean T/F score for that instrument yields a z score of -1.20. The researcher chooses not to reject the null hypothesis as the level of difference between the means is not significant (p < .05).

Fitts (1965) describes the T/F scale as a measure of response set or response bias and as an indicator of whether a test subject's approach to the test involves any strong tendency to agree or disagree regardless of item content. Hypothesis 4, although worded in the null fashion, is based on the assumption that alcoholics, upon entering abstinence, might show an inability to achieve self-definition by eliminating what they are not. The pre-test group mean fell below the norm group mean but is considered in the mid-range for this scale, indicating that alcoholic subjects tested achieve self-definition by a balanced employment of the tendency to focus upon what they are, and a tendency to eliminate or reject what they are not.

To summarize, the results of the statistical treatment for hypotheses 1, 2, 3, and 4 appear to verify two assumptions inherent in the proposed theoretical model; that the alcoholic sees himself in control of his reinforcements, and the alcoholic's self-concept is negative upon entering abstinence.

Hypothesis 5 - Alcoholic subjects who remain abstinent will not differ significantly at the beginning of abstinence from those subjects who do not so remain, when compared according to pre-test P score, Net
Conflict score, and T/F ratio score on the Tennessee Self Concept Scale and the pre-test I-E score on the Rotter I-E Scale.

The t test comparison of pre-test mean scores for alcoholics who did not remain abstinent over a two-month period reveals no significant differences on either the Rotter I-E Scale score or the P, T/F, and N/C Scale scores on the Tennessee Self Concept Scale. The researcher chooses not to reject the null hypothesis since there is no significant difference found in terms of perception of locus of control and self-esteem system at the beginning of abstinence for alcoholics tested.

Hypothesis 6 - There will be no significant difference between the group of alcoholics who remain abstinent and the group who do not so remain, when compared according to post-test P score, Net Conflict score, and T/F ratio on the Tennessee Self Concept Scale and the post-test I-E score on the Rotter I-E Scale.

The analysis of co-variance for the post-test mean I-E score and N/C score for abstainers and non-abstainers revealed an F ratio that was not significant (greater than the .05 level). The post-test mean scores on the Rotter I-E Scale for both abstainers and non-abstainers fell below the norm group mean score, indicating that the post-test group as a whole showed a leaning toward internal locus of control.

The analysis of co-variance for post-test mean P scores and mean T/F scores for abstainers and non-abstainers yielded significant (P < .05) F ratios indicating a difference between the post-test means and that these groups are different with regard to these scores.

The abstaining group in the post-test results tended to show a higher P score than non-abstainers and their T/F score mean indicates
that abstainers achieve self-definition by a more balanced evaluation of positive and negative self-characteristics than do non-abstainers.

The researcher chooses not to reject hypothesis 6 in relation to the post-test I-E and Net Conflict scores; however, rejects the null hypothesis with regard to the post-test P score and T/F score on the Tennessee Self Concept Scale.

Hypothesis 7 - Alcoholic subjects who remain successfully abstinent will show no significant change over time in P score, Net Conflict score, and T/F ratio on the Tennessee Self Concept Scale and the I-E score of the Rotter I-E Scale.

For abstainers, the t test and correlation comparison of pre-test and post-test mean P scores yields a significant difference (P < .01), indicating that significant positive movement had taken place in terms of self-esteem for this group. The P score increase was highly consistent (r = .87) for each subject and significant movement (P < .05) was noted for the N/C mean score on the Tennessee Self Concept Scale; however, this movement was not significantly consistent for abstainers.

Movement on the Rotter I-E Scale and the T/F score on the Tennessee Self Concept Scale was not significant; however, the pre-test post-test scores on the Rotter I-E Scale were significantly consistent (r = .80; p < .01) and not significantly consistent for the T/F Scale score. The researcher rejects the null hypothesis for P score and N/C score in hypothesis 7, but chooses not to reject for I-E and T/F scores.

These results indicate that abstainers tend to remain internalizers during a two-month period, and that positive changes do take place in terms of these alcoholics' level of self-esteem. There is movement in the way in which abstainers perceive their positive and negative attributes.
Test results indicate that alcoholic subjects during abstinence tend to move from over-affirming positive attributes towards over-denying negative characteristics in relationship to the way they affirm positive ones.

Fitts (1965) indicates that individuals who show a negative N/C score tend to concentrate on "eliminating the negative." The researcher proposes that this movement between pre-test and post-test for abstainers may indicate a movement from "acquiescence conflict" to "denial conflict," (see p. 13), but at the same time the individual also shows an increased ability to balance positive and negative characteristics as indicated by the T/F Scale score.

Hypothesis 8 - Alcoholic subjects who do not remain successfully abstinent will show no significant difference over time in P score, Net conflict score and T/F ratio on the Tennessee Self Concept Scale on the I-E Score in the Rotter I-E Scale.

The t-test and correlation comparison of pre-test and post-test mean P scores for non-abstainers yields a significant (P < .05) negative movement for non-abstainers and a Pearson correlation coefficient reveals that this effect was significantly (R = .02; p < .01) consistent. The Rotter I-E score and the T/F and N/C scores on the Tennessee Self Concept Scale did not significantly move over time for non-abstainers.

The researcher chooses not to reject the null hypothesis except for the P score on the Tennessee Self Concept Scale. Correlation coefficients reveal that the I-E, P, and N/C scores move consistently from pre-test to post-test for non-abstainers. These results for the I-E and P scores are similar to the pre- and post-test mean score t-test and correlation comparisons for abstainers; however, the P score movement for non-abstainers was in the opposite (negative) direction and less
significant (P < .05 for non-abstainers, P < .01 for abstainers). Movement for the N/C score was more consistent for non-abstainers (r = .53; P < .05) than for abstainers (r = .33; P < .05).

**Interpretation of the Results**

In this study, the researcher found that abstainers and non-abstainers do not differ significantly with regard to Rotter I-E Scale means over a two-month period and that both groups tend to score consistently toward internal locus of control. Abstainers move significantly in a positive direction with regard to overall self-esteem and show change in the manner in which they balance their positive and negative self-characteristics. Non-abstainers tend to remain consistent with regard to self-definition, and this group shows significant negative movement in terms of self-esteem.

The researcher assumes that alcoholism is a process and, in part, a function of an inadequate self-concept reflecting a need for control in a dependent situation for the alcoholic. The maintenance of abstinence is viewed as an expression of self-confirmation and self-affirmation and may be a reflection of a modification of the alcoholic's self-concept.

The researcher assumes that the alcoholic engages alcohol to gain control of the negative aspects of his self-concept, as he believes that he is in control of his reinforcements and therefore can control the negative effects of repeated indulgence. He may use alcohol to repress or modify the negativity in his self-concept and tends to deny that his repeated use of alcohol may be responsible for his increasing sense of inadequacy.
Three basic ideas are reflected in these assumptions: (1) the alcoholic sees himself as in control of his reinforcements, (2) in a period of abstinence, the alcoholic modifies his self-image by changing his perceptions of the positive and negative aspects of his self-concept, and (3) Successful abstinence is an expression of a modification in the way the alcoholic maintains his self-concept.

Results from testing the hypotheses confirm the idea that the alcoholic sees himself as in control of his reinforcements. This is in accordance with the findings of Distefano et al. (1972), Goss and Morosko (1970), Gozale and Sloan (1971), and Carothers (1971). This preference for internality may contribute to the alcoholic's proclivity and to addiction, and reveals a dilemma for the alcoholic who wishes to remain abstinent. The alcoholic when entering abstinence must adopt ways of controlling his reinforcements without using alcohol.

In the proposed theoretical model, the researcher assumes that the alcoholic uses alcohol to avoid the personification of his inadequacies in terms of his self-image. Studies such as McClelland et al. (1971), Schilder (1941), White (1948), and Williams (1965) suggest how the effects of heavy alcohol consumption can be responsible for the alcoholic's low self-esteem in terms of the consequences of inebriation and the debilitating differential between the drug-state and sober-state.

It is in this context that the researcher questioned what relationship exists between perceived locus of control of reinforcements and self-esteem maintenance for the alcoholic who attempts abstinence. Fitch (1970) reports that low self-esteem subjects who receive failure feedback attribute significantly more causality to internal forces that do high self-esteem subjects who receive failure feedback. Vanderpool (1969)
concludes that the alcoholic while drinking does not enhance his self-esteem, but undermines his already poor sober self-concept.

Another element which may be important to the relationship between internality and low self-esteem for the alcoholic is Efran's finding (Rotter, 1966) that people who score toward the internal end of the Rotter I-E Scale tend to significantly repress failures. This may be relevant to the stance of alcoholics commencing abstinence in this study as their T/F scores on the Tennessee Self Concept Scale indicate they "over-affirm the positive."

These findings suggest that when the alcoholic enters abstinence, he is faced with the challenge of reinterpreting his sense of control through a self-esteem system which tends to over-affirm positive characteristics. The negative consequences of his alcoholic behavior are interpreted by the internally oriented alcoholic as his own fault. This interpretation adds impetus for some form of self-concept modification or a return to drinking.

An alternative to these interpretations would be based upon the assumptions of Fox (1966), Keller (1962), and Sherfy (1955) who attempt to establish premorbid personality characteristics or disease process which re-occur to undermine successful abstinence. Milt (1971), Syme (1957), and Plaut (1967) negate the idea of an alcoholic personality or specific syndrome in favor of describing constellations of factors which appear at different points in the process of alcoholism.

The researcher asserts in the theoretical model that the major dynamic inherent in the maintenance of sobriety is self-acceptance and self-affirmation. The assumption is that the abstinent alcoholic acknowledges the positive and negative characteristics of his self-concept
on a more realistic plane than self-indulgence. He allows himself to affirm what is positive about himself and reject those negative aspects which do not reflect what he is but are products of unrealistic self-expectation and past inadequate behavior.

Significant movement in the Net Conflict Scale for abstainers indicates that this group tends to concentrate upon eliminating negative characteristics. Fitts (1966) terms this effect "denial conflict" and sees it as a contributor to a low self-esteem score. The alcoholic may, however, be eliminating negative aspects which are not truly authentic; for example, introjected and socially motivated guilt feelings which are appropriate to drinking behavior but not to sober functioning.

In this tense, effective abstinence coincides with a more balanced appraisal of positive and negative characteristics within the alcoholic's self-concept and would be analogous to the process of grieving as a "letting go" of parts of the self-concept which are no longer appropriate. This direction could produce an effective modification of the self-concept while maintaining the stance of the internalizer. The alcoholic who is no longer drinking retains the opportunity to maintain control as well as moving toward a more realistically positive appraisal of self. In other words, he modifies his dependency from alcohol to a self-reliance based on more appropriate self-evaluation.

A return to drinking would not support further movement in these directions. Test results indicate that non-abstainers show a significantly negative movement in self-esteem but do not change significantly with regard to self-definition. The return to drinking after asserting to helping persons that the alcoholic will control his drinking may be responsible for the negative change in self-esteem as internally oriented persons tend
to blame themselves for failures. The lack of significant change with regard to self-definition may suggest a need to maintain defenses by over-affirming the positive characteristics of self in the aftermath of failure to control alcohol.

The successful abstainer can accomplish self-concept modification using treatment variables such as support psychotherapy and Antabuse to assess his positive characteristics more realistically and gradually eliminating distorted self-perceptions and negative aspects of past behavior because his internality is a positive motivating factor in the absence of alcohol indulgence.

Appendices 1 and 2 list treatment variables as well as age, sex, race, level of education, and work involvement for abstainers and non-abstainers. In this study, individuals in both groups entertained treatment in psychotherapy and/or with Antabuse; however, the base data does not suggest that these were solely instrumental in assuring successful abstinence and may give support to the idea that other factors may be more important.

Implications for the Counselor and Future Research

A fundamental assertion in this study is that alcoholism is a complex process, alternating between abstinence and indulgence, and that part of this process concerns the relationship between alcohol and the self-concept of the alcoholic. This research supports the idea that significant changes occur in the self-concept of alcoholics attempting abstinence over a two-month period. The counselor who works with the alcoholic in process works primarily in two areas: (1) helping the alcoholic to
withdraw from dependency on alcohol, and (2) providing support to the abstinent alcoholic in order to help him maintain a prolonged sobriety.

Although this research does not focus on the variables which promote the drinking alcoholic to commence abstinence, it does illuminate elements which characterize the alcoholic when entering abstinence. The 30 alcoholics who participated in this study were persons who were significantly oriented to internal locus of control and characterized by significantly low self-esteem scores.

Respecting the alcoholic's predeliction for internal control and an understanding of the self-esteem problems of the alcoholic commencing abstinence are important factors in good counseling support of these persons. The elemental view that the alcoholic merely needs to stop drinking is given added dimension as we see the alcoholic as needing to be effective for himself and work out negative facets of his experience with alcohol.

Personality factors which are self-destructive when the alcoholic is involved in heavy drinking may be used as strengths when support is provided. An internal locus of control is considered a healthy orientation for most persons and probably is responsible in part for some of the dramatic changes which alcoholics can produce in their lives with sustained support for their self-esteem problems. The clinician who works with alcoholics over time must respect the alcoholic's need for accurate negative feedback and realistic positive assessment.

The researcher proposed a theoretical framework in this study in part for its heuristic value in generating future research. The propositions that "alcohol is a consciousness-altering drug" and "alcoholism is a cyclical consciousness of self" are ideas which lend themselves to empirical as well as theoretical research. Investigating the behavior of
the drinking alcoholic is a difficult task, but may produce individual elements which are thematically consistent from the drug-state to the sober-state. This information would be invaluable as a diagnostic tool as well as a basis from which to evaluate change and the outcome of treatment.

Other areas suitable for investigation related to this research are the processes of dependency, self-confirmation, and self-definition which are beyond the scope of the empirical scales used in this research. A working knowledge of the alcoholic in process, whether abstinent or non-abstinent, is fundamental to effective intervention. Alcoholism, like other historically misunderstood conditions, can be appreciated more as a human personal process than as an individual moral failure.

Future research might well be addressed to areas which reflect this central theme of alcoholism as a personal process. The researcher believes that we need to study individuals who are alcoholic and retreat from concepts of alcoholism as a disease entity or personality type. This study and related research gives credence to the idea that the self-concept is fertile ground for revealing aspects of individuals which constitute the alcoholic process.
APPENDIX 1

Abstinent Subjects' Demographic Information as to Age, Sex, Race, Treatment, Level of Education, and Work Involvement during Course of Study

<table>
<thead>
<tr>
<th>Subject #</th>
<th>Age</th>
<th>Sex/Race</th>
<th>Treatment</th>
<th>Level of Education (last grade completed)</th>
<th>Work Involvement During Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>W/M</td>
<td>None</td>
<td>12</td>
<td>Laborer</td>
</tr>
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<td>2</td>
<td>67</td>
<td>W/M</td>
<td>None</td>
<td>12</td>
<td>Not Employed</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>W/M</td>
<td>Psychotherapy</td>
<td>14</td>
<td>Medical Administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Antabuse</td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>35</td>
<td>W/M</td>
<td>Antabuse</td>
<td>12</td>
<td>Not Employed</td>
</tr>
<tr>
<td>5</td>
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<td>W/M</td>
<td>Antabuse</td>
<td>9</td>
<td>Bartender</td>
</tr>
<tr>
<td>6</td>
<td>21</td>
<td>W/M</td>
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<td>12</td>
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Mean age: 41
Mean level of education: 11
APPENDIX 2

Non-abstinent Subjects' Demographic Information as to Age, Sex, Race, Treatment, Level of Education, and Work Involvement during Course of Study

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<tr>
<th>Subject #</th>
<th>Age</th>
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<th>Treatment</th>
<th>Level of Education (last grade completed)</th>
<th>Work Involvement During Study</th>
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Mean age: 45

Mean level of education: 11
# APPENDIX 3

Table Listing Base Data for Abstainers and Non-abstainers

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<th>Pre-test</th>
<th>Post-test</th>
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<table>
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<th>Post-test</th>
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APPENDIX 4

QUESTIONNAIRE

Name: __________________________
Date: __________________________

Please check the appropriate statement which describes your drinking habits within the last two months. "Intoxicated" means having consumed an alcoholic beverage to a point where you could no longer say or feel you were sober. Check only one statement.

____ I have consumed alcohol in the last two months but did not feel intoxicated.
(If you checked this statement, on how many occasions did you consume alcohol?)

____ I have not consumed any alcohol in the last two months.

____ I have been intoxicated one time for no more than 48 hours.

____ I have been intoxicated no more than two times in the last two months.

____ I have been intoxicated several times in the last two months.

I give the researcher permission to use this information and test results in a research project. I understand that this information is confidential in that my name will not be revealed. The results of this testing can be made available to me by my request only after I have been retested in two months.

________________________________________
Signature

________________________________________
Witness
BIBLIOGRAPHY


Fish, B., & Karabenick, S. A. "Relationship Between Self Esteem and Locus of Control." Psychological Reports, 29:784, December, 1971.


Robins, L. N., Bates, W., & O'Neal, P. "Adult Drinking Patterns of
Former Problem Children." in Society, Culture, and Drinking

Rosenberg, S. First Special Report to the United States Congress on
Alcohol and Health. Rockville, Maryland: Department of Health,

Rotter, J. "Generalized Expectancies for Internal Versus External
Control of Reinforcement." Psychological Monographs: General

Ryckman, R. M., & Sherman, M. F. "Relationship Between Self Esteem
and Internal-External Control for Men and Women." Psychological

Schilder, P., "Psychogenesis of Alcoholism." Quarterly Journal of
Studies of Alcoholism, 2:77-79, 1941.

Schroeder, P. "Client Acceptance of Responsibility and Difficulty

Sherfy, M. J. "Psychopathy and Character Structure in Chronic
Alcoholism," in Etiology of Chronic Alcoholism, Diethelem, O.,

Smith, C. E., Pryer, M. W., & Distefano, M. K. "Internal-External
Control andSeverity of Emotional Impairment Among Impairment
Among Psychiatric Patients." Journal of Clinical Psychology,

Storm, T., & Smart, R. G. "Dissociation: A Possible Explanation of
Some Features of Alcoholism and Implication for its Treatment."

of the Literature." Journal of Counseling Psychology, 8:170-78,
1961.

Syme, L. "Personality Characteristics and the Alcoholic: A Critique
of Current Studies." Quarterly Journal of Studies on Alcoholism,

Throop, W. F., & MacDonald. A. P. "Internal-External Locus of Control:

Vanderpool, J. A. "Alcoholism and the Self Concept." Quarterly

Wexberg, I. E. "Alcoholism as a Sickness." Quarterly Journal of Studies


BIOGRAPHICAL SKETCH

Michael A. Harrell was born in New York City on June 3, 1940, and has resided most of his life in Coral Gables and Gainesville, Florida. He attended the University of Florida in both undergraduate and graduate schools and earned a Bachelor of Arts in Education degree in English, speech, and journalism and a Master of Education degree in counselor education.

The author has taught in public high school and junior college as well as the University of Florida until beginning work for the Doctor of Philosophy degree at that institution. After completing classwork, the author has worked for five years in a Community Mental Health Center as a psychotherapist and clinician, and with alcoholic persons in the capacity of coordinator of drug and alcohol programs.

Married to Caryl Crosby in August, 1969, the author currently lives in Gainesville, Florida with his wife, daughter Andrea, and an expected event due in March, 1977.
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Larry Loesch, Chairman
Assistant Professor of Education

David Lane
Professor of Counselor Education

Audrey Schumacher
Professor of Psychology

James G. Joiner
Assistant Professor of Rehabilitation Counseling
This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1976

[Signature]
Dean, College of Education

[Signature]
Dean, Graduate School