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ATTITUDES AND ALCOHOL--THE USE OF THE SEMANTIC DIFFERENTIAL
WITH DIFFERENT PROFESSIONAL AND DRINKING POPULATIONS
IN EAST TENNESSEE

A Dissertation
Presented for the
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DEDICATION

This dissertation is dedicated to my father, Robert E. Banks, and my mother, Helen M. Banks.

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ABSTRACT

The purpose of this study was to determine attitudinal differences of select professional groups and drinking populations toward persons who were nonusers and persons who consume beverage alcohol. The professional groups consisted of psychologists (N = 27), social workers (N = 23), ministers (N = 20), vocational rehabilitation counselors (N = 10), and nurses (N = 21). The drinking populations were made up of individuals who were D.W.I. students (N = 24), Alcoholics Anonymous members (N = 22), half-way house residents (N = 19), and patients at both nonmedical (N = 33) and medical (N = 22) detoxification centers.

A modified Semantic Differential Scale was utilized. The modification consisted of taking out the midpoint or zero value so there was a forced positive or negative choice. The statistical analysis utilized both the Kruskal-Wallis one way analysis of variance by ranks and analysis of variance. Duncan's test for posthoc multiple comparisons was employed when the overall F ratio of the analysis of variance was found to be significant.

Every professional population as well as every drinking population had significant attitudinal differences within each group. However, the data from the statistical analyses showed mixed results when comparing the attitudes among the two populations. There also was a significant difference in attitudes between the professional populations

and the drinking populations.

The conclusions drawn from this investigation were:

1. Professionals working with the nonuser and consumer of beverage alcohol have attitudinal differences.

2. Professionals working with the nonuser and consumer of beverage alcohol have divergent opinions in relation to the concepts Abstainer and Social Drinker.

3. The drinking population has attitudinal differences toward the nonuser and consumer of beverage alcohol.

4. The drinking populations have divergent opinions toward the nonuser and consumer of beverage alcohol.

5. The professional and drinking populations have attitudinal differences toward the nonuser and consumer of beverage alcohol.

There were several recommendations. Included were suggestions for instructors of D.W.I. schools and that educational institutes need to have programs in the area of alcohol studies. It was also recommended that replication of the study be conducted in other regions throughout the country.

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CHAPTER I

INTRODUCTION

The problem of excessive drinking and alcoholism has been growing at alarming rates with estimates varying from 10 to 13 million Americans having drinking problems. These people directly affect others including parents, spouses, children, and co-workers in a negative manner. Examples range from the spouse who wonders if their wife or husband will drive safely home from work to the child who hears his parents arguing frequently and cries himself to sleep. When considering the total number of people directly affected by alcohol, the numbers become staggering. The magnitude of the problem is demonstrated by the fact that alcoholism is now identified as the fourth most significant health problem in the United States (Heinemann, 1974). The behavior connected with beverage alcohol use interacts with pre-existing cultural attitude sets in schools, professional groups, and the news media (Lief, et al., 1973). All one has to do is turn on the television set to be inundated with the various attitudes of our society toward alcohol consumption. The range is from beer commercials promoting joie de vivre with their products to blatant alcoholism depicted in soap operas.

Ambivalence in society's attitudes toward beverage alcohol is understandable. Its consumers use it in a variety of ways (beer, wine, mixed drinks), for a number of

different reasons and in many settings. Alcohol consumption is witnessed from celebrations of birth to wakes for the dead. Bales (1959) described four attitudes toward drinking:

The first is an attitude which calls for complete abstinence. For one reason or another, usually religious in nature, the use of alcohol as a beverage is not permitted for any purpose. The second . . . a ritual attitude . . . is also religious in nature, but it requires that the alcoholic beverages . . . should be used in the performance of religious ceremonies. The third . . . the carnival attitude, drinking is a "social" rather than a religious ritual. And the fourth type . . . a utilitarian attitude . . . includes medicinal drinking and other types calculated to further . . . personal satisfaction; . . . it is possible to drink for utilitarian purposes in a group and with group approval . . . the utilitarian attitude, if commonly held, is the one of the four types likely to lead to widespread compulsive drinking.

In East Tennessee there appears to be no one cultural attitude toward drinking due to a great number of subgroups which influence drinking behaviors. These attitudinal differences lead to problems in depicting a "norm" for this population. On one hand, there is a conservative, teetotaling population while on the other hand, there is a major university with a large alcohol drinking population. These types of populations are not unique to this region, but serve to point out the wide range of nondrinking/drinking behaviors and attitudes.

These differing attitudinal formations are complex and may have far reaching results. For example, one only needs to look at the results of politics to see the confusion surrounding the problem of alcohol. Within the past several

years in a budgetary-cutting action, the only state supported inpatient facility for alcoholics in East Tennessee ceased operation. More recently the state has passed strict penalties for individuals convicted of D.W.I. The problem arises when an alcoholic needs inpatient treatment and is unable to afford private services. It appears as if the alcoholic is being punished but has no resources for help. Does this problem arise because of the attitudes of law makers and citizens?

Attitude studies enable us to investigate both the amount and direction of environmental influence in the determination of alcoholism (Goldenbert, 1960). Just as it is important to be cognizant of the general community's attitudes toward problem drinking and alcoholism, it is vitally important to know the attitudes of the groups of individuals who deal with this population. Attitudes of the professionals can directly affect the relationship between themselves, the problem-oriented population, and treatment outcome.

It is also important to find out if there is a difference between attitudes of confirmed drinking populations toward the alcoholic and the professionals' attitudes toward the alcoholic. If the attitudes of these two populations are different, then the therapeutic relationship may be hindered.

I. PURPOSE OF THE STUDY

The purpose of this study was to determine attitudinal differences of select professional groups and drinking populations toward persons who were nonusers and persons who consume beverage alcohol.

II. STATEMENT OF THE PROBLEM

This study was based on the concept that the attitudes of one person toward another plays a significant role in determining how one individual relates to the other.

Based on this concept, this study sought to answer the following questions:

1. Were there differences in attitudes within each professional group toward the nonuser and consumer of beverage alcohol?

2. Were there differences in attitudes among the professional groups toward the nonuser and consumer of beverage alcohol?

3. Were there differences in attitudes within each drinking population toward the nonuser and consumer of beverage alcohol?

4. Were there differences in attitudes among the drinking populations toward the nonuser and consumer of beverage alcohol?

5. Were there differences in attitudes between the professional groups and drinking groups toward the non-user and consumer of beverage alcohol?

III. HYPOTHESES

For the purposes of this investigation, the following null hypotheses were tested:

1. There were no differences in attitudes within each professional group toward the nonuser and consumer of beverage alcohol.
2. There were no differences in attitudes among the professional groups toward the nonuser and consumer of beverage alcohol.
3. There were no differences in attitudes within each drinking population toward the nonuser and consumer of beverage alcohol.
4. There were no differences in attitudes among the drinking populations toward the nonuser and consumer of beverage alcohol.
5. There were no differences in attitudes between the professional groups and drinking groups toward the nonuser and consumer of beverage alcohol.

IV. NEED FOR THE STUDY

In exploring the massive amount of literature in the area of alcohol use and abuse, it is evident different populations have many dissimilar attitudes toward the alcoholic. Although a great number of writers have observed that the personal views of professionals toward the alcoholic and problem drinker is an important factor in treatment, the

problem has seldom been explored systematically (Mogar, 1969).

Nurses' attitudes have been revealed as being inconsistent. Although a majority of the literature reveals the attitudes to be negative, there are reports where attitudes are positive (Ferneau, 1967 and Linsky et al., 1965). Ferneau and Morton (1968) stated that the attitudes of the public have been subjected to relatively sophisticated scrutiny while those attitudes of the helping professions have been more informal or secondary to a main issue. They go on to state that the need for research into attitudes is heightened by the increasing scope and the therapeutic focus in relation to the problem of alcoholism.

Other professional populations either have a dearth of literature, which is mostly negative, or no literature at all. Although our total knowledge concerning drug and alcohol-related attitudes has increased in the past decade, it remains inconclusive at best (Kinder, 1975).

Authors from the various professional fields have suggested further studies be made in the area of attitudes. Hart (1976) and Pederson and Carlson (1981) both advocate further research with the rehabilitation counselor and his attitude. Dorsch et al. (1969), with their multi-professional population, not only recommended replication of their study, but also that it should be done on a yearly basis so as to measure the changes in professional awareness.

V. DELIMITATIONS OF THE STUDY

The delimitations of this investigation were as follows:

1. The population was delimited to people residing within the 16 counties that make up the East Tennessee Development District.
2. The professional populations were delimited to those individuals who were in a position to be called upon to render service to the alcoholic or problem drinker or to their family.
3. The drinking populations were delimited to those individuals who were:
 - a. Enrollees in a D.W.I. school.
 - b. Patients in their first two weeks of treatment at a nonmedical detoxification center.
 - c. Patients in their first two weeks of treatment at a medical detoxification center.
 - d. Members of an Alcoholics Anonymous group.
 - e. Residents of a half-way house facility.

VI. LIMITATION OF THE STUDY

The study was limited to the degree that the directors or administrators of the medical and nonmedical detoxification centers, the D.W.I. school, the local hospital, and the half-way house, as well as the Alcoholics Anonymous group, allowed the gathering of data.

VII. BASIC ASSUMPTIONS

1. Responses to the Semantic Differential Scale were honest and accurate.
2. The Semantic Differential Scale was a valid and reliable instrument for measuring attitudes.
3. Attitudes could be defined and measured.

VIII. DEFINITIONS

1. Alcoholic: generally thought to be a person who has lost control over the ability to stop the ingestion of beverage alcohol once he has begun to drink.
2. Alcoholism: a chronic behavioral disorder manifested by repeated drinking of alcoholic beverages in excess of the dietary and social uses of the community and to an extent that it interferes with the drinker's health and/or his social or economic functioning; some degree of habituation, dependence, or addiction is implied (Dorland, 1974; and Becker, 1979).
3. Attitude: a learned predisposition to respond to an object in a consistently favorable or unfavorable manner (Allport, 1935).
4. Beverage Alcohol: ethyl alcohol, C_2H_5OH , in beverage form.
5. Detoxification: the safe removal of a toxin from the body with relatively few symptoms (Becker, 1979).
6. Drinking Population: those individuals who have

experienced problems due to excessive ingestion of beverage alcohol.

7. D.W.I.: driving under the influence of beverage alcohol. By law in the State of Tennessee it is .10 percent or greater blood alcohol concentration.

8. East Tennessee Development District: one of the nine development districts in the State of Tennessee. This district includes Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane, Scott, Sevier, and Union counties.

9. Medical Detoxification: the detoxification of an individual under medical supervision. This mode of detoxification implies the use of prescription medication to alleviate the symptoms of withdrawal.

10. Nonmedical Detoxification: the detoxification of an individual without medical supervision or use of prescription medication.

11. Problem Drinker: usually thought of as an individual who consumes beverage alcohol to the extent that it interferes with his normal functioning (physical, psychological, social, or economic).

CHAPTER II

REVIEW OF RELATED LITERATURE

The literature regarding professionals' attitudes and drinking populations' attitudes toward problem drinking and alcoholism shows a lot of attitudinal variation. For the purpose of the study, the following areas were reviewed: general findings regarding the use of the semantic differential technique in assessing attitudes; attitudes of nurses, social workers, psychologists, vocational rehabilitation counselors, ministers, D.W.I. students, Alcoholics Anonymous members, half-way house residents, and patients at both nonmedical and medical detoxification centers.

I. GENERAL FINDINGS REGARDING THE USE OF THE SEMANTIC DIFFERENTIAL TECHNIQUE IN ASSESSING ATTITUDES

The researcher who wishes to assess various populations' attitudes toward alcohol use is in a bind. There are a number of techniques available with no one technique being preferable. In fact, there is some research evidence suggesting that often different techniques yield essentially similar results (Veevers, 1971). The amount of time and effort needed to devise and utilize various techniques to measure attitudes varies enormously. In the area of problem drinking and alcoholism, the simpler approaches

would save a considerable amount of time and effort and still yield results highly comparable with more complex methods (Veevers, 1971).

The semantic differential technique (S.D.) was developed by Osgood and his associates and can be regarded as a limited association technique which readily relates aspects of attitude on three components--evaluative, potency, and activity (Osgood et al., 1957). The S.D. is a useful, reliable, and valid measure of attitude (Marks, 1965; Marks, 1966; and Osgood, 1957). It is fairly easy to administer, it closely reflects clinical observation of changes, and its scores can be treated statistically (Marks, 1968).

The S.D. has been used as a measure of attitude in a wide variety of projects. Osgood et al. (1957) reported exploratory studies in which the S.D. was used to assess attitude change as a result of mass media programs and as a result of messages structured in different ways. The S.D. has been used by other investigators to study attitude formations (Barclay and Thurmin, 1963), attitudes toward organizations (Rodefild, 1967), attitudes toward jobs and occupations (Triandis, 1959; Gusfield and Schwartz, 1963), and attitudes toward minorities (Williams, 1954; 1966).

In his article on measurement of sexual attitudes, Marks (1968) utilized the S.D. In this writing the author stated that the general evaluative scales of the S.D. were

valuable indicators of clinical change in transvestites and fetishes during faradic aversion treatment. He stated that the instrument was adaptable enough for an intensive study of an individual patient, but it was simple enough to administer to a large group of patients.

Marks (1965) used the S.D. technique to demonstrate its usefulness relevant to certain psychiatric problems, especially when utilized in the context of other data, i.e., different patterns of meaning can be shown for contracting psychiatric syndromes. This was done in matched groups of obsessive, psychopathic, and control inpatients to test ideas about their aggression and guilt. The author stated that the scores were reasonably stable and ran parallel to clinical events.

Bohnenblust (1980), in his study to determine the relationship between values and health-related attitudes, utilized the S.D. technique. The author found no relationship between values and attitudes, but explained that if he had utilized fewer "major concepts" in the S.D. technique, he may have acquired a more accurate measurement.

II. RELATED STUDIES UTILIZING THE SEMANTIC DIFFERENTIAL TECHNIQUE

The use of the S.D. technique has been shown to be effective over a wide range of studies. There have been several studies in which the instrument has been utilized

to assess attitudes and alcoholism.

A much publicized event, the acknowledgement by Wilber Mills, former influential Chairman of the House Ways and Means Committee, to being an alcoholic was the topic of research by Tolor and Tamerin (1976). Subjects were asked to rate Representative Mills as a person on a number of semantic differential scales. It was hoped that fundamental attitudes toward alcoholism and alcoholics would be disclosed. The authors found that reaction patterns did differ consistently in accordance with sex and past drinking experiences of the respondent groups.

In a study of stigmatization of problem drinkers, Stafford and Petway (1977) found that drinking persons of both sexes were greatly stigmatized and that their spouses were stigmatized to a lesser extent. This study was done by a random sample of general public; however, it was noted that this population consisted primarily of white, middle-class men and women from an urban area.

Rule and Phillips (1973) published an interesting article utilizing the S.D. technique. They found that a person whose excessive drinking was presented as the result either of illness (alcoholism) or of a behavior problem was less favorably evaluated than one whose drinking was presented as a behavior problem labeled "alcoholism." The results were particularly interesting in light of the fact that many programs try to convince the public that

alcoholism is an illness.

Fisher et al. (1975; 1976) utilized the S.D. in assessing the attitudes of physicians. In the first article it was found that family-practice residents rated alcoholics as weaker, sicker, and more hopeless and aimless than average persons. In the second article, three groups consisting of first- and second-year medical students and housestaff (residents and interns) differed significantly in their attitudes toward alcoholics. Mean ratings by the housestaff were lowest and the ratings by the second-year students were lower than those of the first-year students on five of the six adjective pairs on which the groups differed significantly.

In an article which utilized two attitude instruments, Kilty (1975) used both the S.D. and opinion items. Analysis of the responses of graduate students, professional social service agency workers, and community residents suggested that professionals tend to reflect the opinions and biases toward alcoholism of the community within which they work.

Mackey (1969) utilized four populations in his study-- police officers, public welfare workers, school guidance counselors, and mental health professionals. The results of the S.D. instrument were as follows:

1. There was an overall trend for respondents to ascribe desirable characteristics to those concepts identified with normalcy.

2. This trend was reversed in the ratings of concepts identified with alcoholism.

3. The profiles of mean ratings showed that relatively undesirable characteristics were associated with alcoholics.

4. The alcoholic was viewed with more passivity and importance by mental health professionals and with greater mystery and strangeness by police officers and guidance counselors.

Mackey concludes that although the underlying dynamics may vary, the result of such views may be similar--rejection of the alcoholic as a person.

In reviewing the literature of related studies on alcoholism and attitudes, there appears to be a negative bias on both the professional and lay person's part.

III. NURSES AND ATTITUDES

The first of the professional populations to be examined are the nurses. The amount of literature on nurses' attitudes toward the problem drinker and alcoholic is the most abundant of all the populations in this study. The importance of nurses' attitudes toward the alcoholic has been more than adequately endorsed (Sterne and Pittman, 1965; Golder, 1956; Hayes and Gazaway, 1964; Hughes et al., 1958; Mendelson, 1960; and Ferneau and Morton, 1968).

Heinemann (1974) indicated that nurses are in a key

position to help alcoholic patients choose a course of treatment that may lead to abstinence from alcohol and improvement of health. This study also stated that attitudes can be a nurse's greatest asset or strongest deficit when relating with the alcoholic.

Nursing students appeared to be receiving the most comprehensive kind of training for their future responsibilities. More than 90 percent of the schools reported they trained their students in sociological, psychological, psychiatric, and medical facts of alcoholism (Einstein and Wolfson, 1970).

Sterne and Pittman (1965) found that nurses were considerably more moralistic about alcoholism than were physicians or social workers. They observed that psychiatric staff members who held moralistic attitudes toward alcoholism tended to be pessimistic regarding recovery and considered the alcoholic patient poorly motivated toward improvement. In contrast, staff members expressing illness-oriented attitudes toward alcoholism were more optimistic regarding patient motivation and recovery potential.

Linsky et al. (1965) found that nurses had more positive attitudes on scales measuring Treatment of Alcoholism and the Alcoholic and Alcoholism than patients were willing to grant them. The author stated that this observation may have, in part, been due to poor communication between nurses and alcoholic patients.

Ferneau (1967) examined the attitudes of nursing students before and after a period of affiliation in a psychiatric hospital. It was found that the students retained those positive attitudes with which they began the program, and their negative or neutral attitudes grew more positive.

However, a study was done which showed that negative attitudes of nursing personnel toward the alcoholic were constant over time. Schmid and Schmid (1973) administered tests to freshman nursing students which showed these students to be less accepting of alcoholics than of physically disabled persons and that in a two and one-half year follow-up these attitudes were unchanged.

Ferneau and Morton (1967) administered the Marcus Alcoholism Questionnaire to 31 registered nurses and nursing assistants in a neuropsychiatric hospital complex. Both groups viewed the alcoholic as more "weak willed" than did the general population sample of randomly selected students of the city of Toronto.

Moody (1971) found a significant positive correlation between nursing students' characteristics of authoritarianism and their custodial attitudes toward alcoholic patients.

Several editorials came out in the early 1970s which keyed in on nurses' attitudes toward the alcoholic. The article by Curlee (1971) exemplifies these writings. The author spoke about attitudes that have proven negative in

treating the alcoholic, including the assumption that all alcoholics are sociopaths or self-indulgent or that all alcoholics are seen as "infantile personalities."

In a follow-up of the Ferneau and Morton study (1968), Staub and Kent (1973) concluded that seeing the patient as "weak willed" would hamper treatment in that the alcoholic is classified prior to therapy and apparently knows the treatment team feels negatively about him.

In one of the most strongly worded articles, Cornish and Miller (1976) showed a test in which one population was given a case study with the alcoholic information and the other group was given the same case study without alcoholic information. As the authors stated:

The results of this study were somewhat overwhelming . . . This study tends to suggest that the negative attitudes toward the alcoholic patient by the nurse is quite pervasive in terms of the scope of attitudes found.

Wallston et al. (1976) showed how easily nurses are influenced by their negative, stereotyped views of alcoholics. The writer's findings confirmed that nurses generally respond more favorably to patients who are not labeled "alcoholics."

The problem is not to be associated with our country alone. In a survey in South Australia, Van and Gabrynowicz (1977) found uncertainty and confusion in the minds of health professionals, including nurses, on all aspects of alcoholism. It appeared that the etiology of alcoholism

was uncertain, but was often defined in psychosocial terms and that many doctors and nurses viewed alcoholism as a moral disease. The authors concluded that these professional populations need to adopt the same objective attitude that they have toward patients suffering from other conditions.

In an attempt to replicate the Ferneau study (1967), Harlow and Goby (1980) wished to find out if formal instruction had an effect on attitude. They found that the nursing students in a treatment program for alcoholism improved both their knowledge and attitudes toward alcoholic patients. It was found that this improvement in knowledge and attitude remained over time.

Overall, several factors are prominent. Schools of nursing do teach about alcoholism. Whether they influence the students' attitudes in a positive manner is not clear. There is widespread concern for the alcoholic population by the nursing profession as experienced in professional journals. The results of studies to change nurses' attitudes to a more positive frame of reference toward the alcoholic is mixed.

IV. SOCIAL WORKERS AND ATTITUDES

If one considers the numerous portals of entry into the social welfare system, one would quickly agree that there are many chances for the social worker to see the

alcoholic. There are probably an equal number of times that the social worker would encounter the family of the alcoholic. It is important to understand how the role of the social worker may differ than that of other professional populations. Chalfant and Kurtz (1972) view the social worker as a gatekeeper who represents the interests of the community. This means that the social worker's judgments are influenced by community definitions of social desirability. If in fact this is true, then alcoholics are judged very low. Studies by Tringo (1970) and Jones (1974) reveal that alcoholics have a strong negative rating. A review of articles summarized that, indeed, social workers are reluctant to deal with this difficult caseload.

Perhaps the most often quoted article is Bailey and Fuchs (1960) in which they describe the social worker's attitude as pessimistic. They state that these professionals have been reluctant to involve themselves in treatment relationships with alcoholics, whom they have regarded as unreliable and unrewarding clients.

Sapir (1958) stated:

Patterns of avoidance can and have grown into unwritten policies in many social agencies, both public and private, with the result that minimum service only is given to alcoholics once this problem is identified.

The most persistent theme throughout the body of literature has revolved around the inability of the social worker to achieve consistent and favorable results. Bailey (1960) stated that social workers tended to regard

nonpsychiatric treatment methods, with the exception of Alcoholics Anonymous, as relatively ineffective, and to be pessimistic about prognosis, no matter what the treatment method.

Bailey (1970) tried to find out if attitudes of social caseworkers changed after a 30 hour alcoholism training program. There were no significant changes in moral attitudes, and the major goal of the educational program, that of increasing optimism concerning the treatability of the alcoholic, was not attained. Kilty and Feld (1979) repeated this study and found no change in attitudes, only a slight change in knowledge and, most important, a decreased interest in working with alcoholics as a result of the program.

Other studies (Knox, 1973; Dorsch et al., 1964; Sterne and Pittman, 1965; Fisher et al., 1976; Hanna, 1978; Leake and King, 1977; and Mogar et al., 1969) reiterate the negative attitude due to the inability of the professional to achieve positive outcomes. Peyton et al. (1980) utilized both direct and indirect measures and found that graduate social work students showed a significant bias against alcoholic clients.

Knox (1973) found that 15 percent of the social workers surveyed reported that they would be willing to work full-time with alcoholics, 24 percent that they would spend one-half to three-quarters of their time, and

51 percent that they would spend one-fourth or less of their time with alcoholics, and 7 percent reported that they would not be willing to treat alcoholics at all. Nevertheless, the same study showed that social workers were more willing to treat alcoholics than were psychiatrists or psychologists.

Einstein and Wolfson (1970) found that social work students were apparently being trained to work almost exclusively with the problem drinker's psyche. They found that more than 40 percent of the schools do not cover the medical facts of alcoholism and less than 20 percent deal with the pharmacology of this problem. They also found that the legal aspects of alcoholism appear to be a minimal part of the social workers training and that the impact of this must be evaluated against the fact that in many civil commitments, the social worker is an integral part of the referral process.

Perhaps Kilty (1979) summed and stated the situation up best when he states that the field, i.e., treatment of alcoholism, is rampant with controversy and conflicting findings and that an objective appraisal of treatment effectiveness is not going to provide a sense of optimism. Certainly this is true when one looks at the aforementioned studies. The negative consistency of the social worker's attitudes toward the drinking population is noteworthy. Like the nursing population, further education in trying to make the social worker more positive toward the alcoholic

was unsuccessful. There was, however, the fact that social workers are willing to work with the alcoholic.

V. PSYCHOLOGISTS AND ATTITUDES

One of the least reported population's attitudes toward the alcoholic was that of the psychologist. There were several reports (Sterne and Pittman, 1965; Knox, 1973; Dorsch et al., 1969; Sowa and Cutter, 1974; and Mogar et al., 1967) which had psychologists among their populations in their studies. These reports classified psychologists in with psychiatrists and clinical social workers and/or other populations and the results were generalized for the total population.

One of the most frequently quoted papers was by Knox (1969). Responses to a survey on alcoholism from 480 psychologists employed by the Veterans Administration were evaluated. The results were that the psychologists (1) were not committed to the disease concept, and (2) were in favor of removing the alcoholic from jail and placing treatment responsibility in hospitals, although they considered treatment benefits limited at best and did not wish to be associated with it personally to any degree.

Insight into this dilemma came from Einstein and Wolfson (1970):

- The psychology students, . . . are being trained programatically; they are being taught the psychology of alcoholism and little else. When one considers that they are called upon to test patients whose

responses may be contaminated by the effects of alcohol, to treat patients who may have serious medical as well as psychological problems, to explain the patient's present level of functioning to family and/or employer, and to make appropriate referrals, one might conclude that their training is inadequate.

As a group, the 307 schools place their major emphasis in training upon the sociological and psychological facets of alcoholism. Their message is learned well by their students: the problem drinker is a psychological problem to the community. Since the community is here to stay, the professional is, in essence, being told to see to it that his patient does not become too much of a nuisance to the rest of us.

Certainly the lack of studies is noteworthy.

Psychologists are among the most prolific publishing populations. Surveys by students and professionals are written and published every month. Avoidance of the alcoholic population by psychologists appears to be what is happening.

VI. VOCATIONAL REHABILITATION COUNSELORS AND ATTITUDES

The Vocational Act (Public Law 565, 1964) states that the vocational rehabilitation counselor is responsible for ". . . all of the health, personal, and social problems related to the disabled individual's best possible vocational adjustment." Alcoholics are often disabled, physically and/or mentally, as a consequence of their ingestion of alcohol. They have hangovers and a high incidence of illness which disable them from working for varying lengths of time. Observer and Maxwell (1959) noted that problem drinkers had a much higher incidence of absenteeism than did their control population. Alcoholics

develop a variety of physical and mental problems such as cirrhosis of the liver and delirium tremens which also impede their normal social and vocational habits or schedules.

Attitudes by vocational rehabilitation counselors toward the alcoholic, for the most part, are ambivalent. This ambivalence stems from the counselor knowing the alcoholic needs professional assistance and from the omnipresent need of the counselor to have the client productively employed. A number of states stress the latter point so strongly that an individual counselor's promotion depends on the number of successful closures. Rehabilitation of the alcoholic is usually a long-term matter requiring a lot of investment on part of the professional. The vocational rehabilitation counselor knows this and is caught in a bind--to invest in a high risk, long term individual or to go after the short term, quick closure client and have his record look good.

Hart (1976) noted that no research had been done with rehabilitation counselors, and corrected this deficiency. The number of subjects in his study was six, which was noted, and that one could not generalize from this small number of subjects. The results were that the counselors were viewed as positive and therapeutic in their view of the alcoholic and his alcoholism. These counselors believed that alcoholism was an illness, alcohol was highly addicting

and seemed to accept the disease concept of alcoholism.

Other studies relating to vocational rehabilitation counselors' attitudes are very general in nature. For example, Schofield and Kunce (1971) demonstrated that individualistic attitudes toward specific disability groups led to arbitrary decisions about counselors' service-delivery behavior. Cook et al. (1976) found that biasing attitudes also affect counseling effectiveness.

There are a number of studies which deal with the vocational rehabilitation counselor's attitude toward the physically disabled (Anthony and Carkluff, 1970; Appell, Williams, and Fishell, 1963; Arnholter, 1963; Bell, 1962; Dickie, 1967; Downes, 1967; Janicki, 1970; and Welsch, 1974). The majority of the studies dealt with spinal cord injuries and used the Attitude Toward Disabled Persons Scale (ATDP) developed by Yuker and Block in 1960 and discussed in their monograph in 1970 (Yuker, Block, and Young, 1970). The results of these studies were inconsistent. While some of the studies found the attitudes of the counselors more positive, others found them more negative, and others found no difference.

In a review of research, Schneider and Anderson (1980) stated that the greatest stigma is attached to conditions that make behavior unpredictable, with a component that in lay terms might be described as "lack of willpower." Certainly, if one phase could be picked out

throughout history describing the alcoholic, it is that he is unpredictable and lacks willpower.

VII. CLERGY AND ATTITUDES

Any understanding of the clergy and its attitude toward alcoholism and drinking must be looked at from a historical perspective. Only two generations ago our nation was in an era of enforced prohibition, a movement largely associated with the church. Although prohibition was repealed, the schism which was present in the church concerning ingestion of alcohol at that time still exists.

There have been two organizations which have started up since prohibition that demand attention. The two groups, although not strictly within the confines of the church, have strong affiliation with this body. The first group is the Bowery Corps of the Salvation Army which was started in Detroit in 1939 (Conley and Sorensen, 1971). This group quickly spread to many other cities throughout the United States and was the first program of the Salvation Army aimed directly at helping the alcoholic.

It is important to differentiate between the Salvation Army approach to alcoholism and that of many church-sponsored rescue missions. In contrast to the multi-disciplinary nature of the Salvation Army's approach to treating the alcoholic, the mission's method is marked chiefly by an exclusivistic attitude toward the importance

of its own approach, with no awareness of need for consulting other professionals (Conley and Sorensen, 1971). This attitude not only separates the programs in a community physically but also separates them psychologically. This results in an overall weakening of the community toward its efforts to overcome the problems surrounding alcoholism.

Alcoholics Anonymous (AA) was formed in 1935 and has been one of the most successful programs to date in helping the alcoholic stay sober. Its program provides a basis for a way of life which is religious in its orientation. In effect, A.A., while not calling itself a church, is providing for its members what churches traditionally claim is their function: a meaning in life based on service to others, supported by a sharing and concerned community (Conley and Sorensen, 1971).

While there has been controversy throughout the history of these two highly visible and successful church-oriented programs, there has been remarkable inconsistency within the church itself. Wiltenburg (1958) stated that in few areas of human interest and behavior had there been less accord among ministers and clergy generally than in matters having to do with alcoholic beverage consumption. In this article, the author discussed what the Bible had to say about drinking and came to the conclusion that what was said in the Bible was confusing.

In reviewing literature, the clergyman, as personal

and family counselors, has been described as often being in a position to offer help to the alcoholic or his family, either through direct counseling or referral (Clinebell, 1962; Gardner, 1962; and Verdery, 1962). Yet the few studies made on this subject indicate that clergymen do not see a sizable proportion of the community's problem drinkers (Straus, 1958; Wolch, 1957; and Reidenbach, 1958).

In his study, concluded over a decade later, Stephan (1971) stated clergy felt drug usage and alcoholic problems were most difficult to counsel. He also stated that these areas were among the least frequently brought to the clergy supporting the findings of the previously mentioned studies.

In a four year research project, Dorsch et al. (1969) discovered that the clergy were hampered by a number of factors. Some of these were difficulty in obtaining hospital care for the alcoholic patients, lack of patient motivation, and the feeling that the area of the patient's prime concern was not alcoholism. In addition, the clergy stated that the differences in demonstrated attitudes toward alcohol do not encourage consistency in attitudes.

There have been several programs and task forces set up interdenominationally to deal with the problem of alcohol from the church point of view. In 1967 the National Council of Churches Task Force on Alcohol Problems was appointed. The NCC Task Force consisted of 35 church and alcohol authorities whose attitudes toward use of beverage alcohol

ranged from strong commitment to abstinence as preferred behavior to complete acceptance of "responsible drinking."

Dr. Thomas Price described the significance of the report:

The major achievement of the Report was to lift the issue of alcohol above the parochial interests of a single denomination, and to place it before the whole religious community as a concern of the total society (Conley and Sorensen, 1971).

In a very small but potent study, Moss (1975) found a reluctance on part of Episcopal ministers to even answer a questionnaire. In quoting an interview with the Reverend James T. Golder, President of the Recovered Alcoholic Clergy Association, Moss found:

Where alcoholism is concerned there is defensiveness in the church . . . There is a fear on the part of our clergy to deal with it among themselves as well as among their parishioners. This fear is grounded in the National Church's refusal to recognize the problem as a serious illness. Our last General Convention (Fall 1973) made that evident. Of over 200 booths displaying literature, RACA had the only one which dealt with a specific health problem--the addictions. This unhealthy omission became more acute when the Program and Budget Committee decided not to allocate funds for a ministry to alcoholic priests or laymen.

Upon revising his questionnaire, Moss received the following information from 100 parish priests:

1. An overwhelming majority (91 percent) of clergy felt that the Episcopal Church has not been effective in treating alcoholism.
2. Nearly 50 percent of the clergy were unable to decide whether or not the Episcopal Church should be actively involved in the rehabilitation of alcoholics.
3. A great percentage of these same priests (45 percent) felt that the Diocese of Chicago ought to concentrate its attention on special training for parish ministers interested in counseling the alcoholic. A very small minority (6 percent) supported the

improvement and/or expansion of the Cathedral Shelter (a half-way house and emergency rehabilitation center for the "high-risk" or "revolving-door" alcoholic.)

4. While 56 percent of the sample believed that sermons on addiction and intemperance were appropriate, 44 percent were not in favor of such socially-oriented messages coming from the pulpit.

5. Sixty percent of the Clergy were aware that alcoholism is a more serious problem than drug addiction.

6. Sixty-three percent of the clergy sampled strongly disagreed with the statement: "The parish priest often avoids contact with the alcoholic because the needs of the latter are similar to the kind which motivate men to enter the ministry." Ten percent of the sample agreed, and when cross-tabulated, these individuals reflected the strongest interest and the greatest knowledge on the subject.

7. Forty-three percent of the population did not have and/or were not interested in dispensing literature on alcoholism from their tract racks.

8. Twenty-four percent of the population said that they were not concerned with expanding their knowledge in the area of alcohol studies. Forty percent replied, "I do not really care, one way or the other."

9. Fifty-seven percent said that they believed Alcoholics Anonymous to be a "good to excellent" referral source; 43 percent said that they "did not know."

10. Sixty-six percent supported the view that "a parish library ought to include books on alcoholism." The remaining 34 percent either strongly disagreed or refused to take a position.

Clinebell (1971) admonished the Church and stated:

The church's most important task, in relationship to the problem of alcoholism is prevention. . . . If a substantial share of the religious organizations in our country would undertake an enthusiastic and realistic program of prevention, America's fourth largest public health problem could be brought under control and hundreds of thousands of persons would be protected from being alcoholics.

Certainly there appears to be tremendous ambiguity between the philosophy of the Church and the practical workings of this body. It is important to keep abreast of

the attitudes of this very large and powerful part of our society.

In reviewing the literature on the professional populations, there appears an overall negative theme. Nurses and social workers are more aware of this negativity and expressed their concern in their literature.

VIII. DRINKING DRIVERS AND ATTITUDES

The first of the drinking populations to be examined were the drinking drivers. Motor-vehicle accidents have ranked as the number one cause of accidental deaths every year since 1949 and drinking is indicated to be a factor in at least one-half of the fatal motor-vehicle accidents (Huffman, 1981).

Hart (1977) directed his study to survey the attitudes regarding alcoholism among those that drink under the influence of alcohol. He interviewed 94 male drinking drivers who were clients of an Alcohol Safety Action Project. These drinking drivers were positive in their belief that periodic excessive drinkers can be alcoholics and negative in their attitude regarding alcoholism as an illness. It was noted that apart from these two factors, the drinking drivers were equally ambivalent in their attitudes toward alcoholism and the alcoholic when compared to the control group with Marchs' criterion.

IX. ATTITUDES OF OTHER POPULATIONS

After an extensive search to find related studies on the attitudes toward alcoholics or problem drinkers by Alcoholics Anonymous members, half-way house residents, nonmedical detoxification patients, and medical detoxification patients, no literature was revealed. The search included Medlars II, Sociological Abstracts, and PASAR.

CHAPTER III

METHODOLOGY

I. OVERVIEW

The purpose of this study was to determine attitudinal differences of select professional groups and drinking populations toward persons who were nonusers and persons who consume beverage alcohol. This study sought to answer the following questions:

1. Were there differences in attitudes within each professional group toward the nonuser and consumer of beverage alcohol?

2. Were there differences in attitudes among the professional groups toward the nonuser and consumer of beverage alcohol?

3. Were there differences in attitudes within each drinking population toward the nonuser and consumer of beverage alcohol?

4. Were there differences in attitudes among the drinking populations toward the nonuser and consumer of beverage alcohol?

5. Were there differences in attitudes between the professional groups and drinking groups toward the non-user and consumer of beverage alcohol?

II. SAMPLE SELECTION

The populations in this study consisted of five professional groups and five drinking groups in East Tennessee. A description of each sample population is as follows.

The nursing population came from Blount Memorial Hospital in Maryville, Tennessee. Several hospitals were contacted as well as a private nursing service. The private nursing service stated that they did not work with patients who had alcohol problems and did not wish to participate in the study. One hospital also did not wish to participate in the study due to the fact that the study would take too much time. Another hospital stated they would be willing to participate, but all forms would have to be approved by several groups of people who met at various times during the month.

The director of personnel coordinated the efforts at Blount Memorial Hospital. The nurses came from various sections and shifts of the hospital inclusive of the alcohol ward, the psychiatry ward, emergency room, and general nursing population. There were L.P.N.'s, R.N.'s, and B.S.R.N.'s in the population.

The social workers came from two sources. The first group consisted of all social workers who were listed in the various telephone directories in the East Tennessee

Development District. The individuals who were listed under Social Workers or those who were listed under Marriage and Family Counselors with a M.S.W. or A.C.S.W. or Psychiatric Social Worker were mailed the instrument.

The second group of social workers was made up of those individuals who worked at the Child and Family Services Department in Knoxville. All of these social workers had caseloads which included families with alcohol problems.

All the licensed psychologists in private practice who were listed in the telephone directories in the E.T.D.D. were mailed the instrument.

A sample of churches listed in the telephone directory was utilized and the ministers were mailed the instrument. Since there were so many Baptist ministers in the telephone directories of the E.T.D.D., they were assigned consecutive numbers. A table of random numbers (Dunn, 1977) was utilized and the first 20 were mailed the instrument. The same process was utilized with the Methodist, Presbyterian, and Lutheran utilizing proportionally less numbers. All denominations were mailed instruments. This was done in an effort to get a cross-section of responses.

All vocational rehabilitation counselors in the E.T.D.D. were either mailed or the instrument was placed in their mailbox.

Two groups of Alcoholics Anonymous members

participated in the study. Both groups consisted of members who came from all over the E.T.D.D. The anonymity of the members was not violated in any way. The release forms were signed with only the first initial of the last name.

There were two populations of half-way house members. One was male, the other female. Both of the half-way houses are located in Knoxville.

The enrollees in the D.W.I. school were from several locations in the E.T.D.D. The majority came from Sevier County.

The patients in a nonmedical detoxification facility came from the Detoxification Rehabilitation Institute. The instruments were given to the patients on their fourth day at the facility. This was done in order to minimize the effect of learning on the attitudes of the patients.

The patients in the medical detoxification center came from St. Mary's Hospital. Here again the instrument was given between the fourth and seventh day from admission in order to minimize the amount of attitudinal change which may come about from the therapy given.

The individuals in the drinking population were identified as problem drinkers or alcoholics due to the fact of where they were.

III. INSTRUMENTATION

A modified Semantic Differential (S.D.) developed by Osgood, Suci, and Tannenbaum (1957) was utilized. The S.D. measures an individual's reactions to stimulus words and concepts by means of bipolar adjectives at each end of a six point scale. An example of an S.D. scale is:

Concept: Myself



A number of basic considerations are involved in S.D. methodology.

1. Bipolar adjective scales are a simple, economical means for obtaining data on people's reactions. With adaptations, such scales can be used with adults or children, persons from all walks of life, and persons from any culture.

2. Ratings on bipolar adjective scales tend to be correlated, and three basic dimensions of response account for most of the covariation in ratings. The three dimensions which have been labeled Evaluation, Potency, and Activity (E.P.A.), have been verified and replicated in a variety of studies.

3. Some adjective scales are almost pure measures of E.P.A. dimensions; for example, good-bad for Evaluation, powerful-powerless for Potency, and fast-slow for Activity (Heise, 1970).

The modification of Osgood's S.D. was the elimination of the middle of zero point on his seven point scale. Several authors have supported the idea of a forced choice, i.e., the elimination of the ambivalent or zero point.

Kaplan (1972) stated:

Allowing an ambivalent "neutral" response in the context of single-marking instructions produces a fundamental change on the interpretation of the S.D. instructions. . . . In effect, subjects are not rating the "net" (Y minus X) qualities of the concept.

A major factor in the use of the S.D. was the choice of bipolar adjectives (scales). These scales must include the E.P.A. dimensions. More than one scale for each dimension was desirable since this improves the reliability of factor scores (Heise, 1970). Lemon (1973) outlined an approach for selecting adjective pairs. Potentially useful adjective pairs are identified and then a pilot study is conducted in order to determine the loadings for particular pairs. Those adjectives found to have high loading on the evaluation factor would be used, while others are to be discarded. Heise (1970) stated that many studies avoid the pilot study by utilizing published factor analytic studies incorporating those scales which are relevant to the concept domain of interest. In this study adjectives utilized in the studies of Fisher (1975), Mackey (1969), and Stafford and Petway (1977) were incorporated in the selection process.

Validity and reliability were also factors to be

considered in attitude measurement. Osgood (1957) cited a test-retest correlation of 0.85. Numerous other studies have supported the reliability of S.D. ratings as attitude measurements (Nickols and Shaw, 1964; Tittle and Hill, 1967). Validity has been demonstrated by Osgood and associates (1957). Heise (1969), in a review of studies on the S.D., confirmed the aspects of validity and reliability.

IV. COLLECTION OF DATA

The data for this study were collected during the Summer, 1981. Permission to administer the instrument was received from the directors or administrators of the various agencies involved. Subjects were given the option of either participating or not participating in the study. All individuals who participated were required to sign an Individual Informed Consent Form. This form was kept separate from the instrument and general information form for confidentiality.

There were two methods of collection of data. Where the populations were scattered, as in the cases of ministers, some vocational rehabilitation counselors, psychologists, and social workers in private practice, a mailing was conducted (Table 3-1).

When the populations were concentrated, as in the cases of nurses, all drinking populations, some vocational rehabilitation counselors, and some social workers, the investigator delivered the instrument (Table 3-2). The

TABLE 3-1. Response Rate of Populations (Professional)

	Number of Instruments				Rate In Percent
	Mailed	Delivered	Returned	Discarded	
Nurses	--	30	21	-	70
Ministers	51	--	20	1	39.2
Social Workers					
Private Practice	18	--	9	-	50
Agency	--	20	14	-	70
V.R. Counselors	4	16	10	-	50
Psychologists	<u>62</u>	<u>--</u>	<u>27</u>	<u>2</u>	<u>43.5</u>
Total	135	66	101	3	

TABLE 3-2. Response Rate of Populations (Drinking)

	Number of Instruments			Rate In Percent
	Delivered	Returned	Discarded	
Alcoholics Anonymous	30	22	--	73.3
Medical Detoxification	30	23	1	76.6
Nonmedical Detoxification	35	33	--	94.3
Half-Way House				
Female	20	9	--	45
Male	20	10	--	50
D.W.I. Students	30	27	3	90

investigator also administered the instrument at the medical detoxification center, the D.W.I. school, and the Alcoholics Anonymous groups. At the other sites, the director or administrator went over the procedures and administered the instrument. This later was picked up by the investigator.

V. STATISTICAL DESIGN

The Semantic Differential (S.D.) technique yields data which are controversial in scale. There are differences within the literature as to which scale, ordinal or interval, the S.D. is placed. Huffman (1972) discussed the case for interval level data to be used in research data. The problem was also discussed with Dr. Alan H. Lasater, Professor, Department of Statistics, The University of Tennessee. His recommendation to this controversy was to examine both parametric and nonparametric tests if the analyses were not consistent. He also suggested that both analyses be presented in the data. He stated that the Kruskal-Wallis one-way analysis of variance by ranks and analysis of variance were appropriate for each level.

The Kruskal-Wallis one-way analysis of variance by ranks (referred to from now on as simply the Kruskal-Wallis test) was used for deciding whether k independent samples are from different populations (Siegel, 1976). There are two assumptions for the test: (1) that the variable under study has an underlying continuous distribution and

(2) that there was an ordinal level of measurement. The Semantic Differential meets both those requirements.

In the explanation of the test (Kruskal, 1952) there was an important aspect which was pertinent to this paper. That was, when the population was greater than five, which was true in this case, then the Kruskal-Wallis test was distributed as chi-square with $df = k-1$. The formula for the Kruskal-Wallis test was (Siegel, 1956):

$$H = \frac{12}{N(N+1)} \sum_{j=1}^k \frac{R_j^2}{n_j} - 3(N+1)$$

where: k = number of samples

n_j = number of cases in j the sample

$N = \sum n_j$ = the number of cases in all samples

combined

$\sum_{j=1}^k$ = directs one to sum over the k sample
(columns)

The S.D. yields scores which are totals of values from one to six assigned to choices which are actually ordinal level, that is, very closely related, quite closely related, only slightly related to one bipolar adjective or the other. Because each score is given a number based on a Likert-type scale, a number of studies have assumed interval level data (Wallston, 1976 and Marks, 1965).

An alpha level of 0.05 was utilized as the criterion for rejecting the null hypotheses. When the analysis of

variance showed significance, Duncan's New Multiple Range Test for computing posthoc comparisons of group means was utilized.

VI. STATISTICAL ANALYSIS

The scoring of the results of all data gathering instruments was done by hand. The results were sorted by populations.

All data were then transferred to code sheets from which computer cards were punched. Using the computer program Statistical Analysis System (S.A.S.), The University of Tennessee Computing Center ran the final data analyses.

VII. SUMMARY

The data in this study were collected from 10 different professional and drinking populations located in the East Tennessee Development District. The data were collected during the Summer of 1981.

A Kruskal-Wallis test and an analysis of variance were computed for each of the 10 groups on seven concepts of the Semantic Differential. Where significance was found with the A.N.O.V.A., Duncan's New Multiple Range Test was utilized.

CHAPTER IV

ANALYSIS OF DATA

I. INTRODUCTION

The purpose of this chapter was to present the analysis of data. The data were collected by administering a paper and pencil instrument--a modified semantic differential scale. For the purposes of analyzing the data, this chapter was divided into four sections. The first section dealt with descriptive characteristics of the subjects.

The second section dealt with the first and third null hypotheses, which were:

1. There were no differences in attitudes within each professional population toward the nonuser and consumer of beverage alcohol.

3. There were no differences in attitudes within each drinking population toward the nonuser and consumer of beverage alcohol.

The third section contained the analysis of data regarding the second and fourth null hypotheses, which were:

2. There were no differences in attitudes between the professional populations toward the nonuser and consumer of beverage alcohol.

4. There were no differences in attitudes between

the drinking populations toward the nonuser and consumer of beverage alcohol.

The fourth section dealt with the analysis of data regarding the fifth null hypothesis, which was:

5. There were no differences in attitudes between the professional populations and drinking populations toward the nonuser and consumer of beverage alcohol.

The Kruskal-Wallis test and an analysis of variance were employed to determine whether there were differences within or between the various populations. Duncan's New Multiple Range Test was utilized to make posthoc comparisons of the means if there was an overall significant F ratio with the analysis of variance.

II. DESCRIPTIVE CHARACTERISTICS

Sex

There were 62 males, or 61.4 percent, in the professional populations. There were 39 females, or 39.6 percent, in the same populations. There were 85 males, or 70.8 percent, in the drinking populations. There were 35 females, or 29.2 percent, in the same populations (Table 4-1).

Age

Table 4-2 presented the age characteristics of the populations. There appeared to be an age discrepancy among the 10 populations. While ministers had 65 percent above 40 years old, the other end of the spectrum was the D.W.I.

TABLE 4-1. Sex of the Populations

	Professional Populations					Total	Percent
	Nurses	Ministers	Social Workers	V.R. Counselors	Psychologists		
Number of Males	6	20	7	6	23	62	61.4
Number of Females	15	0	16	4	4	39	38.6
Total	21	20	23	10	27	101	100.0
	Drinking Populations					Total	Percent
	A.A.	Med Detox	Non-Med Detox	Half-Way House	D.W.I.		
Number of Males	18	18	21	10	18	85	70.8
Number of Females	4	4	12	9	6	35	29.2
Total	22	22	33	19	24	120	100.0

TABLE 4-2. Age of the Populations

Population *	Age Range			
	20-30	31-40	41-50	51-60 > 61
Nurses	10 (47.6)	6 (28.6)	1 (4.8)	4 (19.0) ---
Ministers	1 (5.0)	6 (30.0)	10 (50.0)	2 (10.0) 1 (5.0)
Social Workers	11 (47.8)	7 (30.4)	2 (8.7)	3 (13.0) ---
V.R. Counselors	1 (10.0)	5 (50.0)	4 (40.0)	--- ---
Psychologists	1 (3.7)	15 (55.5)	5 (18.5)	5 (18.5) 1 (3.7)
A.A. Members	4 (18.2)	6 (27.3)	9 (40.9)	2 (9.1) 1 (4.5)
Med Detox Patients	3 (13.6)	6 (27.3)	9 (40.9)	3 (13.6) 1 (4.4)
Non-Med Detox Patients	11 (33.3)	16 (48.5)	4 (12.1)	2 (6.0) ---
Half-Way House Residents	3 (15.8)	6 (31.6)	8 (42.1)	1 (5.3) 1 (5.3)
D.W.I. Students	17 (70.8)	1 (4.2)	3 (12.5)	3 (12.5) ---
Total	62	74	55	25 5
Percent of Total Population	(28.1)	(33.5)	(24.9)	(11.3) (2.2)

* Given in numbers followed by percentages in parentheses.

students who had nearly 71 percent under 31 years old. There also appeared to be a significant age difference between the nonmedical and medical detoxification patients. The nonmedical patients were significantly younger than the medical patients. Also, over 75 percent of the nurses were under 41 years old with nearly 50 percent under 31 years old.

III. ANALYSIS OF THE PROFESSIONAL POPULATIONS

The total number of professional participants was 104. Incorrect or incomplete data forms were returned by three participants and their data were excluded from the study. Forms were mailed to psychologists, ministers, and social workers in private practice (see Appendix A).

There were 62 instruments mailed to the psychologists in private practice listed in the telephone directories of the East Tennessee Development District (E.T.D.D.). Twenty-nine (29) of these instruments were returned. Two of these were discarded due to incorrect or incomplete data. This represented a 43.5 percent rate of response.

Fifty-one (51) of the instruments were mailed to a random sample of ministers in the E.T.D.D. The response was very poor with only 12 forms being returned. A telephone call was made two weeks after the forms were mailed. There were two reasons for the poor return. First, a number of ministers were on vacation and, second, a number refused

to fill out forms. However, the telephone call did help because nine more forms were returned. One of these was discarded due to incomplete data. This represented a 39.2 percent rate of response.

Of the 18 instruments mailed to social workers in private practice listed in the telephone directories, nine were returned. This represented a 50 percent rate of response.

The remaining forms were carried to various sites for the rest of the professional populations to complete. This was done for two reasons. First was the fact that the populations were centrally located. The second reason was cost. It was much less expensive to deliver the forms than to mail them with self-addressed stamped return envelopes. In each case, the questionnaire was explained by the researcher to a member of the staff of the organization who then gave the instrument to the professionals to be completed. The completed instruments were picked up after a two week interval. The rate of return was higher for these professional populations than was the mail out.

There were 20 instruments left for the social workers, of which 14 were completed. This represented a 70 percent return rate. This return rate was matched by the nursing population. There were 30 instruments left for the nurses of which 21 were completed.

The return rate for vocational rehabilitation

counselors was 50 percent. This represented 10 instruments returned out of 20 delivered. In the E.T.D.D. there were only 20 vocational rehabilitation counselors. At the time the attitude survey was being conducted, there were rumors going around about drastic cuts in the organization. Along with these rumors, however, came more forms to fill out for the counselors. These two factors may have influenced the return rate of the instruments (see Table 3-1, p. 41).

IV. ANALYSIS WITHIN POPULATIONS

Some of the questions to be looked at were the attitudes of each population toward the seven concepts. This was necessary to see if there were any differences within each population. For example, did any of the populations feel that the concept abstainer was semantically different than the concept problem drinker or some other concept?

Table 4-3 indicates that all the professional populations substantially exceeded the critical χ^2 value of the Kruskal-Wallis test. The chi-square range was from 51.29 for the vocational rehabilitation counselors to 129.64 for the psychologists. The criterion statistic for the Kruskal-Wallis one-way analysis of variance was calculated to be 12.59 (6 and 1 degrees of freedom when $\alpha = 0.05$). All populations had test statistics for the one-way A.N.O.V.A. which were calculated to be significant beyond the 0.0001 level.

TABLE 4-3. Kruskal-Wallis Test Results of Within Professional Populations' Attitudes Toward All Concepts

Populations	N	χ^2	D.F.	Probability
Nurses	21	98.32	6	.0001
Ministers	20	90.02	6	.0001
Social Workers	23	104.45	6	.0001
V.R. Counselors	10	51.29	6	.0001
Psychologists	27	129.64	6	.0001

*Note: Critical value of χ^2 at 0.05 is 12.59.

An analysis of variance was utilized to test for differences of attitudes within each professional population. The analyses have been presented in Tables 4-4 through 4-8. Where an overall F ratio was found to be significant, Duncan's test for posthoc multiple comparisons was utilized to determine which group means differed.

The analysis of variance for Nurses (Table 4-4) indicated an overall computed F of 49.85. The criterion of F for 6 and 140 degrees of freedom was 2.57 at the 0.05 level of confidence. Since the computed F was greater than the criterion F, the null hypothesis that there was no significant difference within the nursing population was rejected.

TABLE 4-4. Analysis of Variance Within the Nursing Population Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	15119.02	6	2519.84	49.85	2.57	0.0001
Residual	7076.67	140	50.55			
Total	22195.69	146				

A significant F of 45.77 (Table 4-5) was obtained for the ministers. The criterion for 6 and 133 degrees of freedom was 2.60 at the 0.05 level of confidence. Thus, the null hypothesis that there was no significant difference within the ministerial population toward the seven concepts was rejected.

TABLE 4-5. Analysis of Variance Within the Ministerial Population Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	10597.07	6	1766.18	45.77	2.60	0.0001
Residual	5132.10	133	38.59			
Total	15729.17	139				

The analysis of variance for Social Workers (Table 4-6) indicated an overall computed value of F of 45.82. The criterion of F for 6 and 154 degrees of freedom was 2.53. Since the computed F was greater than the criterion F , the null hypothesis that there was no significant difference in attitudes within the social work population was rejected. This was a very diverse professional group in that both the social workers who were in private practice and those who worked for the government, i.e., public practice, were utilized.

The lowest, but still significant, F was obtained by the Vocational Rehabilitation Counselors. Their F was 36.01. The criterion F for 6 and 63 degrees of freedom was 3.22 (Table 4-7). Again, the null hypothesis that there was no significant difference within this professional population was rejected.

The last group of professionals, the Psychologists, had an F of 74.01. This was the highest F among the professional populations and greatly exceeded the criterion F of 2.47 (Table 4-8). Thus, the null hypothesis that there was no significant difference in attitude within the group of psychologists was rejected.

Duncan's test (Table 4-9) for all the professional populations showed a significant trend toward homogeneity of attitudes. Concept 2--Social Drinker, Concept 4--Problem Drinker, Concept 3--Individual Guilty D.W.I., Concept 5--

TABLE 4-6. Analysis of Variance Within the Social Worker Population Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	8957.54	6	1492.92	45.82	2.52	0.0001
Residual	5017.74	154				
Total	13975.28	160				

TABLE 4-7. Analysis of Variance Within the Vocational Rehabilitation Counselor Population Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	6269.94	6	1044.99	36.01	3.22	0.0001
Residual	1828.00	63	29.01			
Total	8097.94	69				

TABLE 4-8. Analysis of Variance Within the Psychologist Population Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	13751.01	6	2291.83	74.01	2.47	0.0001
Residual	5635.55	182	30.96			
Total	19386.56	188				

TABLE 4-9. Duncan's Multiple Range Test Results for Analysis of Variance Scores Within Each Population for Which Overall F Ratios Were Significant (See Appendix D for Population Mean Scores)

Population	Highest Mean			Lowest Mean			
Nurses	<u>1</u>	<u>7</u>	2	<u>4</u>	3	<u>5</u>	<u>6</u>
Ministers	<u>1</u>	<u>7</u>	2	<u>4</u>	3	<u>5</u>	<u>6</u>
Social Workers	7	<u>1</u>	<u>2</u>	<u>4</u>	3	<u>5</u>	<u>6</u>
V.R. Counselors	<u>7</u>	<u>1</u>	<u>2</u>	<u>4</u>	3	<u>5</u>	<u>6</u>
Psychologists	<u>7</u>	<u>1</u>	2	<u>4</u>	3	<u>5</u>	<u>6</u>
A.A. Members	7	1	2	<u>5</u>	3	<u>4</u>	<u>6</u>
Med Detox	<u>1</u>	<u>7</u>	2	<u>4</u>	3	<u>5</u>	<u>6</u>
Non-Med Detox	<u>7</u>	<u>1</u>	2	<u>5</u>	<u>4</u>	<u>3</u>	<u>6</u>
Half-Way House	<u>7</u>	<u>1</u>	2	<u>4</u>	<u>5</u>	<u>3</u>	<u>6</u>
D.W.I. Students	<u>1</u>	<u>7</u>	<u>2</u>	3	<u>4</u>	<u>5</u>	<u>6</u>

1 = Abstainer

2 = Social Drinker

3 = Individual Guilty D.W.I.

4 = Problem Drinker

5 = Alcoholic

6 = Skid Row Drunk

7 = Recovering Alcoholic

Groups not sharing a common underline differed from each other at the 0.05 level of confidence.

Alcoholic, and Concept 6--Skid Row Drunk, maintained the same position in Duncan's test. Also noteworthy was the fact that there was no significant difference in attitudes between Concepts 4, 3, 5, and 6 for within the professional populations. Also, ministers and psychologists had a tendency to view the concepts in the same way.

Table 4-10 indicated that all the drinking populations, like the professional groups, substantially exceeded the critical χ^2 value of the Kruskal-Wallis one-way analysis of variance test. The criterion statistic for the Kruskal-Wallis was again calculated to be 12.59 (6 and 1 degree of freedom when $\alpha = 0.05$). All populations had test statistics which were significant beyond the 0.0001 level. The chi-square range was from 68.43 from the D.W.I. students to 164.33 for the nonmedical detoxification patients.

TABLE 4-10. Kruskal-Wallis Test Results of Drinking Populations Toward All Concepts

Population	N	χ^2	D.F.	Probability
A.A. Members	22	102.41	6	0.0001
Med Detox	22	103.45	6	0.0001
Non-Med Detox	33	164.33	6	0.0001
Half-Way House	19	79.24	6	0.0001
D.W.I.	24	68.43	6	0.0001

The analysis of variance test for within the five drinking populations have been shown in Tables 4-11 through 4-15. Where an overall F ratio was found to be significant, Duncan's test for posthoc comparison was utilized to determine which group means differed.

The analysis of variance for Alcoholics Anonymous group members (Table 4-11) showed an overall computed F of 53.07. The criterion of F for 6 and 147 degrees of freedom was 2.56 at the 0.05 level of confidence. Since the computed F was greater than the criterion F, the null hypothesis that there was no significant difference in attitude within this drinking population was rejected.

A significant F of 62.10 (Table 4-12) was obtained for the Medical Detoxification Patients. The criterion for 6 and 147 degrees of freedom was 2.56. Since the computed F was greater than the criterion F, the null hypothesis was rejected for this population.

The analysis of variance for the Nonmedical Detoxification Patients showed an overall computed F of 118.35, the highest of the drinking populations. The criterion F for 6 and 224 degrees of freedom was 2.36. Since the computed F was greater than the criterion F, the null hypothesis was rejected. This also was the largest population in the study (Table 4-13).

The Half-Way House Residents showed an overall computed F of 32.15 which was significantly above the computed

TABLE 4-11. Analysis of Variance Within Alcoholics
Anonymous Members Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	13968.17	6	2328.03	53.07	2.56	0.0001
Residual	6448.05	147	43.86			
Total	20416.22	153				

TABLE 4-12. Analysis of Variance Within Medical Detoxifi-
cation Patients Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	19192.52	6	3198.75	62.10	2.56	0.0001
Residual	7572.32	147	51.51			
Total	26764.84	153				

TABLE 4-13. Analysis of Variance Within Nonmedical Detox-
ification Patients Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	27740.83	6	4123.47	118.35	2.36	0.0001
Residual	8750.61	224	39.07			
Total	36491.44	230				

F of 2.65 for 6 and 126 degrees of freedom (Table 4-14). This population was in two distinct groups. One was a male half-way house, the other, a female half-way house. Their populations were significantly different, not only due to gender, but also due to age. The females were younger, on the whole, with their mean age in the 21-30 year age bracket. The difference may have affected the attitudes of these two populations. Certainly both these populations have been stereotyped in song and life. One only has to go to an A.A. meeting to see the middle aged recovering male alcoholic. Books such as Go Ask Alice and real life people such as McKenzie Phillips and Carol Burnett's daughter have depicted the female population.

The final group, the D.W.I. students, also had a significant computed F of 19.08. The criterion F for 6 and 161 degrees of freedom was 2.57 at the 0.05 level of confidence. The computed F was the lowest for all groups, both professional and drinking. The null hypothesis, however, was still rejected (Table 4-15).

Duncan's Test (see Table 4-9) for all the drinking populations showed that only Concept 2--Social Drinker and Concept 6--Skid Row Drunk, were consistent.

A most dramatic picture was presented by Duncan's Test (see table 4-9). Concept 1--Abstainer, and Concept 7--Recovering Alcoholic, were seen as the most positive by all populations though their position rotated between

TABLE 4-14. Analysis of Variance Within Half-Way House Residents Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	13535.77	6	2255.96	32.15	2.65	0.0001
Residual	8841.79	126	70.17			
Total	22377.56	132				

TABLE 4-15. Analysis of Variance Within D.W.I. Students Toward All Concepts

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	9938.57	6	1656.43	19.08	2.51	0.0001
Residual	13977.71	161	86.82			
Total	23916.28	167				

populations. Concept 2--Social Drinker, greater than one-half of the time, stood alone, but always retained the same position of third. Concept 6--Skid Row Drunk, like Concept 2--Social Drinker, was consistent in its position. It was rated the lowest by all the populations. Noteworthy was the fact that only nonmedical detoxification patients separated Concept 6 from Concepts 4 and 5. Also of interest

was the high rating D.W.I. students gave to Concept 3-- Individual Guilty of Driving While Intoxicated. Concepts 3, 4, 5, and 6 all clustered and all have negative connotations.

The findings of within population attitudes were significant. Overall, the Kruskal-Wallis test and the analysis of variance test agreed totally. They both rejected the null hypotheses that there was no significant difference in the attitudes within each of the 10 groups of the two populations at the 0.05 level of confidence.

V. ANALYSIS BETWEEN POPULATIONS

Again, utilizing the Kruskal-Wallis one-way analysis of variance and analysis of variance, the null hypothesis that there was no significant difference in attitudes between the various populations in each category was examined. When the within population tests were made, each population looked at all seven concepts at once. When the between population tests were conducted, the five populations that composed each category examined one concept at a time for comparison.

The chi-square results of the Kruskal-Wallis test were not as significant as the analysis of variance tests. Only one concept, Abstainer, exceeded the critical χ^2 value of 9.49 (Table 4-16). The analysis of variance on Concept 1--Abstainer, produced an F ratio of 5.32 which was

TABLE 4-16. Kruskal-Wallis Test Results for Attitudes Between All Professional Populations, One Concept at a Time

Concept	N	χ^2	D.F.	Probability
Abstainer	101	16.11	4	0.0029*
Social Drinker	101	6.39	4	0.172
Individual Guilty D.W.I.	101	1.95	4	0.7444
Problem Drinker	101	2.08	4	0.7203
Alcoholic	101	1.32	4	0.8381
Skid Row Drunk	101	2.82	4	0.5877
Recovering Alcoholic	101	0.72	4	0.9490

*Significant at 0.05 level

significant (Table 4-17). The criterion of F for 4 and 101 degrees of freedom was 2.45 at the 0.05 level of confidence. Since the computed F of 5.32 was greater than the criterion F of 2.45, the decision was made to reject the null hypothesis that there was no significant difference between the professional groups.

Concept 2--Social Drinker, was the first split decision on significance. The Kruskal-Wallis test resulted in a chi-square of 6.39 which did not exceed the critical value of 9.49 and therefore the null hypothesis could not be rejected (Table 4-16). However, the analysis of variance

TABLE 4-17. Analysis of Variance Test Between All Professional Populations on Concept 1--Abstainer

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	767.25	4	191.81	5.32	2.45	0.0006
Residual	3459.54	96	36.04			
Total	4226.79	100				

test had a calculated F of 2.68 which did exceed the criterion F of 2.45 (Table 4-18). As was previously mentioned, Dr. Alan Lasater stated that the ordinal or Kruskal-Wallis test results were to supercede the analysis of variance results if the two results disagreed. Therefore, the decision was to not reject the null hypothesis that there was no significant difference between the professional groups on Concept 2--Social Drinker.

TABLE 4-18. Analysis of Variance Test Between All Professional Populations on Concept 2--Social Drinker

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	319.63	4	79.91	2.68	2.45	0.0361
Residual	2861.74	96	29.81			
Total	3181.37	100				

Concept 3--Individual Guilty of Driving While Intoxicated, had agreement between the test results. Neither the Kruskal-Wallis or analysis of variance was significant and therefore fail to reject the null hypothesis (Tables 4-16 and 4-19). The Kruskal-Wallis had a test statistic which was calculated to be 1.95 which was significant at the 0.7444 level. The analysis of variance had an F of 0.73, well within the critical F of 2.45. Therefore, the null hypothesis was not rejected.

TABLE 4-19. Analysis of Variance Test Between All Professional Populations on Concept 3--Individual Guilty of Driving While Intoxicated

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	80.26	4	20.07	0.54	2.45	0.7086
Residual	3585.04	96	37.34			
Total	3665.30	100				

The test results for Concept 4--Problem Drinker (Tables 4-16 and 4-20) were not significant. The chi-square for the Kruskal-Wallis was calculated to be 2.08 and the F for analysis of variance was 0.73. The null hypothesis that there was no significant difference in attitudes of the professional populations toward the non-user and consumer of beverage alcohol was not rejected.

TABLE 4-20. Analysis of Variance Test Between All Professional Populations on Concept 4--Problem Drinker

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	109.67	4	27.42	0.73	2.45	0.5756
Residual	3619.97	96	37.71			
Total	3729.64	100				

The critical chi-square value of 9.48 for the Kruskal-Wallis test and critical F value of 2.45 for the analysis of variance test were not exceeded for Concept 5--Alcoholic. The chi-square value was calculated to be 1.32 and the calculated F was 0.25 (Table 4-21). The null hypothesis was not rejected.

Concept 6--Skid Row Drunk, was also not significant for either test. The chi-square value of 2.83 for the Kruskal-Wallis test and F value of 0.53 for the analysis of variance test (Tables 4-16 and 4-22) did not exceed the critical values of 9.48 and 2.45, respectively. The null hypothesis was not rejected.

Concept 7--Recovering Alcoholic, had the lowest values for any of the concepts for the professional populations. The test statistic for the Kruskal-Wallis one-way analysis of variance was calculated to be 0.72. This did not exceed the critical value of 9.49 (Table 4.16). For the analysis

TABLE 4-21. Analysis of Variance Test Between All Professional Populations on Concept 5--Alcoholic

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	37.87	4	9.47	0.25	2.45	0.9066
Residual	3579.99	96	37.29			
Total	3617.86	100				

TABLE 4-22. Analysis of Variance Test Between All Professional Populations on Concept 6--Skid Row Drunk

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	86.34	4	21.58	0.53	2.45	0.7111
Residual	3880.43	96	40.42			
Total	3966.77	100				

of variance, the calculated F was 0.14 (Table 4-23). The null hypothesis was not rejected.

Duncan's Test (Table 4-24) indicated that there was a great deal of overlapping on Concept 1--Abstainer. The nursing population rated the abstainer the highest and the social work population rated the abstainer the lowest. Only ministers differed from the other professionals in their rating of the social drinker. The ministers had the lowest

means for the social drinker and that was significant at the 0.05 level of confidence.

TABLE 4-23. Analysis of Variance Test Between All Professional Populations on Concept 7--Recovering Alcoholic

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	21.47	4	5.37	0.14	2.45	0.9673
Residual	5703.34	96	38.58			
Total	3724.81	100				

TABLE 4-24. Duncan's Multiple Range Test Results of Analysis of Variance Test for Semantic Differential Concepts Between Professional Groups for Which Overall F Ratios Were Significant (See Appendix E for Population Mean Scores)

Concept	Highest Mean			Lowest Mean	
Abstainer	<u>1</u>	<u>2</u>	<u>4</u>	<u>5</u>	3
Social Drinker	4	1	5	3	<u>2</u>

Groups not sharing a common underline differed from each other at the 0.05 level of confidence.

1 = Nurses

4 = V.R. Counselors

2 = Ministers

5 = Psychologists

3 = Social Workers

The drinking populations had conflicting test results on their attitudes between each other. The Kruskal-Wallis one-way analysis of variance had a critical value of chi-square of 9.49 with 4 degrees of freedom at the 0.05 level of confidence. The critical F value for 4 and 115 degrees of freedom when $\alpha = 0.05$ was 2.29.

Concept 1--Abstainer, was the first conflicting result. While the Kruskal-Wallis test had a nonsignificant test result of 7.67 and a probability of 0.1043 (Table 4-25), the F for the analysis of variance was 2.79 and a $PR > F$ of 0.0295 (Table 4-26). Since the ordinal level data was not significant, the null hypothesis that there was no significant difference in attitude between the drinking populations as regarding the concept of abstainer was not rejected.

The lowest values calculated in these drinking populations was by Concept 2--Social Drinker. The chi-square test statistic for the Kruskal-Wallis was 1.66 (Table 4-25). The F value for the analysis of variance was 0.23 (Table 4-27).

Concept 3--Individual Guilty of Driving While Intoxicated, was significant. The Kruskal-Wallis test statistic was calculated to be 13.62 which was significant beyond the 0.05 level (Table 4-25). The computed F for the analysis of variance was 4.66 and was also significant (Table 4-28). The null hypothesis that there was no significant difference in attitudes between the drinking populations toward the

TABLE 4-25. Kruskal-Wallis Test Results for Attitudes
Between All Drinking Populations, One Concept
at a Time

Concept	N	χ^2	D.F.	Probability
Abstainer	120	7.67	4	0.1043
Social Drinker	120	1.66	4	0.7985
Individual Guilty D.W.I.	120	13.62	4	0.0086*
Problem Drinker	120	1.85	4	0.7632
Alcoholic	120	9.33	4	0.0533
Skid Row Drunk	120	5.01	4	0.2867
Recovering Alcoholic	120	17.29	4	0.0017*

*Significant at 0.05 level

TABLE 4-26. Analysis of Variance Test Between All Drinking
Populations on Concept 1--Abstainer

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	855.41	4	213.85	2.79	2.29	0.0295
Residual	8805.18	115	76.57			
Total	9660.59	119				

TABLE 4-27. Analysis of Variance Test Between All Drinking Populations on Concept 2--Social Drinker

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	70.26	4	17.56	0.23	2.29	0.9206
Residual	8754.66	115	76.13			
Total	8824.92	119				

TABLE 4-28. Analysis of Variance Test Between All Drinking Populations on Concept 3--Individual Guilty of Driving While Intoxicated

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	778.15	4	194.54	4.66	2.29	0.0016
Residual	4798.65	115	41.73			
Total	5576.80	119				

individual who was guilty of driving while intoxicated was rejected.

The test results for Concept 4--Problem Drinker, were not significant. The chi-square value of the Kruskal-Wallis test was 1.85 (Table 4-25). The calculated F for the analysis of variance was 0.42 (Table 4-29). The null hypothesis could not be rejected in this case.

TABLE 4-29. Analysis of Variance Test Between All Drinking Populations on Concept 4--Problem Drinker

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	71.04	4	17.76	0.42	2.29	0.7971
Residual	4914.66	115	42.79			
Total	4985.70	119				

Concept 5--Alcoholic, had interesting test statistic results. The Kruskal-Wallis test was calculated to have a chi-square value of 9.33 which was significant beyond the 0.0533 level (Table 4-25). The analysis of variance test showed a significant F. The criterion F for 4 and 115 degrees of freedom was 2.29 at the 0.05 level of confidence. The calculated F was 2.70 (Table 4-30). The PR > F was 0.342. Since the Kruskal-Wallis test was not significant, the null hypothesis that there was no significant difference

in attitudes between the drinking populations toward the alcoholic was not rejected.

TABLE 4-30. Analysis of Variance Test Between All Drinking Populations on Concept 5--Alcoholic

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	602.57	4	150.64	2.70	2.29	0.0342
Residual	6422.75	115	55.85			
Total	7025.32	119				

Both the Kruskal-Wallis test and the analysis of variance were in agreement on Concept 6--Skid Row Drunk. The former was calculated to have a chi-square of 5.01 while the F for the latter was 1.34 (Tables 4-25 and 4-31, respectively). The null hypothesis was not rejected since both tests had values within their respective critical ranges.

TABLE 4-31. Analysis of Variance Test Between All Drinking Populations on Concept 6--Skid Row Drunk

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	217.88	4	54.47	1.34	2.29	0.2582
Residual	4663.29	115	40.55			
Total	4881.17	119				

Concept 7--Recovering Alcoholic, had the most significant test results of the drinking populations. The test statistic for the Kruskal-Wallis one-way analysis of variance was calculated to be 17.29 which was significant beyond the 0.0017 level (Table 4-25). The analysis of variance was calculated to have an F of 7.20 and a PR > F of 0.0001 (Table 4-32). It was decided to reject the null hypothesis on these results.

TABLE 4-32. Analysis of Variance Test Between All Drinking Populations on Concept 7--Recovering Alcoholic

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	1810.03	4	452.51	7.20	2.29	0.0001
Residual	7231.27	115	62.88			
Total	9041.30	119				

Duncan's Test (Table 4-33) indicated that those individuals enrolled in a D.W.I. school did not view themselves in a negative manner. Not only did they view themselves positively as indicated by their having the highest mean for Concept 3--Individual Guilty D.W.I., but also did not view themselves as having a problem with alcohol as revealed by their low rating of the alcoholic and recovering alcoholic. They evidently did not regard drinking as

a problem in that they had the lowest mean toward the abstainer and recovering alcoholic.

TABLE 4-33. Duncan's Multiple Range Test Results of the Analysis of Variance Test for Semantic Differential Concepts Between Drinking Groups for Which Overall F Ratios Were Significant (See Appendix F for Population Mean Scores)

Concept	Highest Mean			Lowest Mean	
Abstainer	<u>8</u>	<u>7</u>	<u>9</u>	<u>6</u>	10
Individual Guilty D.W.I.	<u>10</u>	<u>6</u>	<u>9</u>	<u>8</u>	7
Alcoholic	<u>6</u>	<u>8</u>	<u>9</u>	10	7
Recovering Alcoholic	<u>6</u>	<u>8</u>	<u>9</u>	<u>7</u>	10

Groups not showing a common underline differed from each other at the 0.05 level of confidence.

6 = Alcoholics Anonymous

7 = Medical Detoxification Patients

8 = Nonmedical Detoxification Patients

9 = Half-Way House Residents

10 = D.W.I. Students

Alcoholics Anonymous members also rated the individual who was guilty D.W.I. fairly high which may have indicated that a number of those A.A. members have been caught D.W.I. Alcoholics Anonymous members also rated the alcoholic and recovering alcoholic the highest. The former

suggested that they did not want to view themselves negatively and the latter suggested that there was a goal to be obtained which they held in high regard.

The group of half-way house residents were commonly in the middle while medical detoxification patients were negative in their attitude toward the individual guilty D.W.I., alcoholic, and quite negative toward recovering alcoholic.

VI. ANALYSIS BETWEEN PROFESSIONAL AND DRINKING POPULATIONS

Again, utilizing the Kruskal-Wallis test and the analysis of variance, the fifth null hypothesis was examined. Were there any differences in attitudes between the professional and drinking populations toward the nonuser and consumer of beveral alcohol? The critical value for the Kruskal-Wallis test was 3.84 (1 degree of freedom, $\alpha = 0.05$).

The results of the Kruskal-Wallis test have been shown in Table 4-34. The first concept, that of abstainer, was significant. The test statistic was calculated to be 13.31 which was significant beyond the 0.05 level.

Concept 2--Social Drinker, was not significant at the 0.05 level of significance. Concept 3--Individual D.W.I., was not significant. Concepts 4, 5, and 6--Problem Drinker, Alcoholic, and Skid Row Drunk, also had test statistics which were not significant.

TABLE 4-34. The Kruskal-Wallis Test Results of the Comparison of Attitudes Between the Professional and Drinking Populations, One Concept at a Time

Concept	N	χ^2	D.F.	Probability
Abstainer	221	13.31	1	0.0003*
Social Drinker	221	2.94	1	0.0864
Individual Guilty D.W.I.	221	0.70	1	0.4012
Problem Drinker	221	0.03	1	0.8548
Alcoholic	221	0.57	1	0.4509
Skid Row Drunk	221	1.23	1	0.2675
Recovering Alcoholic	221	14.93	1	0.0001*

*Significant at the 0.05 level

The final concept, Recovering Alcoholic, had the highest test statistic of 19.93 which was significant beyond the 0.05 level.

The analysis of variance test was significant (Table 4-35). The calculated F was 208.59 which was significant at the 0.05 level. However, it was noted that all concepts were taken at once. Duncan's Test was significant at the 0.05 level (Table 4-36).

TABLE 4-35. Analysis of Variance Test Results of the Comparison of Attitudes Between the Professional and Drinking Populations, All Concepts Taken at Once

Source of Variance	S.S.	D.F.	M.S.	F	F .05	PR > F
Model	134626.82	13	10355.91	208.59	1.73	0.0001
Residual	76108.36	1533	49.65			
Total	210735.18	1546				

TABLE 4-36. Duncan's Multiple Range Test Results for Analysis of Variance Test Scores Between the Seven Concepts for Which Overall F Ratios Were Significant--Total Population (See Appendix E for Concept Mean Scores)

Highest Mean					Lowest Mean	
<u>7</u>	<u>1</u>	2	<u>4</u>	3	<u>5</u>	6

Concepts not showing a common underline differed from each other at the 0.05 level of confidence.

1 = Abstainer

2 = Social Drinker

3 - Individual Guilty D.W.I.

4 = Problem Drinker

5 = Alcoholic

6 = Skid Row Drunk

7 = Recovering Alcoholic

VII. SUMMARY

This chapter has dealt with the presentation and analysis of data. The Kruskal-Wallis and analysis of variance tests which were calculated found significant difference in attitudes within both the professional and drinking populations. The tests had mixed results when comparing the attitudes among the two populations and concurred that there was a significant difference in attitudes between the professional groups and the drinking groups.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

The purpose of this study was to determine attitudinal differences of select professional groups and drinking populations towards persons who were non-users and persons who consume beverage alcohol.

The participants in this investigation consisted of five professional groups and five drinking groups in East Tennessee. The professional groups consisted of 21 nurses, 20 ministers, 23 social workers, 10 vocational rehabilitation counselors, and 27 psychologists for a total of 101 professionals. The drinking populations were made up of 22 Alcoholics Anonymous members, 22 medical detoxification patients, 33 nonmedical detoxification patients, 19 half-way house residents, and 24 D.W.I. students for a total of 120 individuals in these groups.

The instrument selected was a modified Semantic Differential Scale. The individual was asked to rate seven concepts. These concepts were abstainer, social drinker, individual guilty of D.W.I., problem drinker, alcoholic, skid row drunk, and recovering alcoholic.

The statistical methods utilized were the Kruskal-Wallis one-way analysis of variance and the analysis of of variance to determine if there were significant

differences among and between groups and populations. Where significant F ratios were obtained, Duncan's Multiple Range Test were applied to find out where the differences existed. If there were a difference in results between the two tests utilized, then the Kruskal-Wallis test results were utilized. The 0.05 level of significance was employed for rejecting the null hypothesis.

Procedures

The target populations in this study were located in the East Tennessee Development District. A mailing was utilized for those populations which were scattered throughout the area. For the more concentrated populations, the questionnaires were delivered and picked up by the researcher.

II. FINDINGS

The following findings were based upon analysis of the data collected in this study:

1. There were statistically significant differences in attitudes at the 0.05 level of significance within all the professional populations when using the Kruskal-Wallis one-way analysis of variance.
2. There were statistically significant differences in attitudes at the 0.05 level of significance within all professional populations when using the analysis of variance test.

3. The placement of concepts social drinker, individual guilty D.W.I., problem drinker, alcoholic, and skid row drunk were consistent throughout all five professional populations on Duncan's Test for within all professional populations.

4. There were statistically significant differences in attitudes at the 0.05 level of significance within all drinking populations when using the Kruskal-Wallis test.

5. There were statistically significant differences in attitudes at the 0.05 level of significance within all drinking populations when using the analysis of variance test.

6. The placement of concepts social drinker and skid row drunk were consistent throughout all five drinking populations on Duncan's Test for within all drinking populations.

7. The placement of concepts social drinker and skid row drunk were consistent throughout all 10 populations of the study on Duncan's Test for within populations.

8. Only the concept abstainer was statistically significant at the 0.05 level of significance for between professional populations when using the Kruskal-Wallis test.

9. The concepts abstainer and social drinker were statistically significant at the 0.05 level of significance for between professional populations when using the

analysis of variance test.

10. The concepts individual guilty D.W.I. and recovering alcoholic were statistically significant at the 0.05 level of significance for between drinking populations when using the Kruskal-Wallis test. The concept alcoholic had a probability of 0.0533 which was close to significance with this test.

11. The concepts abstainer, individual guilty D.W.I., alcoholic, and recovering alcoholic were statistically significant at the 0.05 level of significance for between drinking populations using the analysis of variance test.

12. The individuals enrolled in a D.W.I. school had the highest (most positive) mean for the concept individual guilty D.W.I. They also had the lowest (least positive) mean for the concepts abstainer and recovering alcoholic.

13. The concepts abstainer and recovering alcoholic were statistically significant at the 0.05 level of significance for between the professional and drinking populations using the Kruskal-Wallis test.

14. The calculated F was 208.59 which was significant at the 0.0001 level for the analysis of variance test for between the professional and drinking populations.

III. CONCLUSIONS

- As a result of the findings of this study, the following conclusions were drawn:

1. Professionals working with the nonuser and consumer of beverage alcohol have attitudinal differences that are manifested in three distinct groupings which are as follows: Abstainer and Recovering Alcoholic; Social Drinker; and Individual Guilty D.W.I., Problem Drinker, Alcoholic, and Skid Row Drunk.

All of the professional populations viewed the concepts Abstainer and Recovering Alcoholic positively. Social Drinker stood alone possibly because it means many things to many people and its definition varies depending on whom you are asking.

The professional populations had total consistency within their ranks around the last four concepts. The conclusion that is reached is that the professional views the problem drinker with the same attitude as he or she does the other three concepts. The needs of these four populations are different, but are viewed in the same manner.

2. Professionals working with the nonuser and consumer of beverage alcohol have divergent opinions in relation to the concepts Abstainer and Social Drinker. There was wide variation among the professionals regarding the concept Abstainer perhaps reflecting the values within the individual profession. Nurses and ministers rated this concept the most positive as compared to the other concepts. The attitudes of the professional populations were similar on the concept Social Drinker, with only the ministers differing.

3. The drinking population has attitudinal differences toward the nonuser and consumer of beverage alcohol which is manifested in three distinct groups: Abstainer and Recovering Alcoholic; Social Drinker; and Individual Guilty D.W.I., Problem Drinker, Alcoholic, and Skid Row Drunk. The last group contained a great deal of variation, especially within the D.W.I. students.

Defensiveness appears to have an effect on attitudinal differences of the drinking groups. For example, the D.W.I. students did not rate the concept Individual Guilty D.W.I. as negatively as the other members of the drinking population.

4. The drinking populations have divergent opinions toward the nonuser and consumer of beverage alcohol in relation to the concepts Abstainer, Individual Guilty D.W.I., Alcoholic, and Recovering Alcoholic.

It was apparent that no one drinking group wished to appear socially aberrant. A.A. members had the concept Alcoholic rated most positively. D.W.I. students rated the concept Individual Guilty D.W.I. most positively. With the concept Abstainer, both the medical and nonmedical detoxification patients valued it more positively, perhaps reflecting a goal to attain.

5. The professional and drinking populations have attitudinal differences toward the nonuser and consumer of beverage alcohol. While the concepts of Recovering Alcoholic

and Abstainer were not significantly different, the concepts of Social Drinker and Skid Row Drunk stood alone. The concepts of Problem Drinker, Alcoholic, and Individual Guilty D.W.I. were not different from each other but were different from all the other concepts.

IV. RECOMMENDATIONS

The following recommendations result from the findings, the conclusions, and the review of the literature.

1. Instructors of D.W.I. schools need to be aware of the attitudes of the students and have available means to measure these attitudes. They also need to have resources to help the students be aware of their attitudes and be able to assist the student if necessary. In light of the findings of this study, the educators in the D.W.I. schools should teach attitudinal development and values clarification. It would probably be helpful to have a standardized program.

2. Recommendations from past studies have included that educational institutes need to offer instruction in the area of alcohol studies. This study concurs with those recommendations. Classes need to be made available to keep the professional current as to treatment and available options as well as updating knowledge.

- 3. Professionals need to assess their attitudes toward alcohol. This may be done at workshops where they are employed or some other setting.

4. Employers need to assess their departmental policies toward alcohol-related problems vis-a-vis their clientele.

5. Regional studies should be conducted. A study might show greater or lesser differences in attitudes.

6. Research on attitudes of drinking populations need to be done on a pre- and post-test basis to find out if change has occurred during treatment.

7. Regional studies need to be conducted concerning misconceptions about alcohol and how they affect the attitude of the professional.

8. More intensive and comprehensive attitudinal studies need to be done with Alcoholics Anonymous and other self-help groups. This needs to be done on a pre- and post-test basis.

CHAPTER VI

THE STUDY IN RETROSPECT

The purpose of this study was to compare the attitudes of five professional populations with the attitudes of five drinking populations. This having been done, a retrospective analysis needs to be performed. Some of the highlights and problems that occurred will be reviewed.

It was a great concern that there were relatively few attitude studies done with professional populations, especially those populations one might describe as "front line." Since per capita alcohol consumption has greatly increased in the United States over the past two decades, it would appear important that professionals be concerned not only with this trend but also how it would affect them as professionals. With the ever increasing number of individuals consuming alcohol, the number of clients with primary, secondary, or tertiary problems connected with this substance would increase. Also the fact that these professional populations influence, if not dictate, the policy of a number of public and private agencies needs to be weighed.

It became apparent why there were so few studies involving the attitudes of professional populations. There were several types of resistance used by the professional populations. The first form of resistance was the refusal

to participate. This came in two forms. Either the professional did not mail back the package or the hospital or organization refused to participate. When asked why they did not wish to participate the majority of people stated that it took too much time. One very interesting response was given by a minister who, upon being called two weeks after the survey was mailed, stated that he had received five surveys or questionnaires in the past two weeks and was tired. He felt that ministers were the most surveyed population of all.

A number of forms were incorrectly filled out or mailed back without having been completed. Some answers to this and other forms of resistance may be found in Appendix F--General Information on Professional Populations. An average of over 81 percent of the professional populations have consumed beverage alcohol. Ninety-six percent of the professional population's work involves individuals who have alcohol problems. Sixty-seven percent stated that they counsel alcoholics, but only 28 percent felt that treatment of alcoholism is one of their competencies.

The researcher can only guess the problems behind these numbers. Does the respondent have a drinking problem? Do the professionals see such a high percentage of individuals who have alcohol problems? Is this a representative sample? How comfortable are these professionals working with the problem-drinking populations?

One of the highlights of this investigation was working with the various drinking populations. The majority were very cooperative and curious. They wanted to know if this attitude survey was going to help them to get assistance in the future.

The most vocal of the drinking populations was Alcoholics Anonymous. After the initial questions on anonymity were discussed and resolved, they consistently made highly derogatory statements about most of the professional populations in this study. They, however, appeared very sincere in wanting to correct the situation. A lot of the members stated that professionals visit an A.A. meeting. The members felt that a lot of the professionals have tunnel vision when regarding the alcoholic. The professionals only see the alcoholic as a lazy, slovenly, destitute individual who would do anything for a drink.

This viewpoint of the alcoholic by the professional was echoed by other drinking populations. A number of people felt that the professionals in the community did not understand them or their problems. How this attitude of the drinking population is influenced by denial or some other defense mechanism on their part is important, but it was evident that the feeling of rejection was there.

Perhaps some of the answers lie with the lack of educational background of the professionals (see Appendix F).

An average of less than 15 percent of the professionals have attended a school of alcohol studies. Around three-quarters of those who responded read regularly about the field of alcohol(ism). Around 53 percent of the respondents had attended a workshop, seminar, or symposia on alcohol(ism). Only a little over one-third (36.8 percent) have ever attended undergraduate or graduate university classes on alcoholism and less than one-third (30.4 percent) had ever had any inservice training in the area of alcohol(ism). Over one-half (56.9 percent) of the professionals have had on-the-job training/volunteer experience.

This overall lack of education may be a clue to the difference in attitudes between the professional groups as well as between the professional and drinking populations. This study shows that there is a need to educate the various professional populations. This may be accomplished through accreditation of those professionals who wish to work with the alcoholic population. A number of states now have this accreditation process, however, it is weak and receives little support from the various levels of government. Other means of education may be handled at the local colleges and universities. The department of continuing education could contract with a professor or expert in the community to offer courses. A number of different departments on campus have vested interest in educating their students in the area of alcohol.

Departments of psychology, social work, business, nutrition, and public health, as well as many others, have a need to have courses in alcohol studies offered.

The department of health education is unique among the various departments. Whereas the departments of psychology, social work, and others would educate their students to deal with the drinking population on a secondary or reactive basis, the department of health education deals with the problem on a primary or intervention basis, that is, before the individual's drinking has progressed to the problem stage. The ideas concerning new drinking ethics and new value systems through education are part of the focus of the National Institute of Alcoholism and Alcohol Abuse (N.I.A.A.A.). Health education is taught throughout an individual's formal education, and value systems concerning the use of alcohol can be put into the curriculum from elementary school to college. Potential health hazards such as Fetal Alcohol Syndrome or Fetal Alcohol Incidence are of concern to all professionals, but can most effectively be deterred through primary intervention.

In addition to the formal education, there are a number of other factors which can help solve the problem of attitudinal bias. Such factors include workshops, newsletters, professional associations, and a coordinating council or commission.

Most workshops are factually oriented, i.e., what are

the most current trends and ideas in a particular field. Workshops which attend to an individual's feelings and attitudes are not too prevalent. An open workshop enabling individuals to look at their values and understand what their values are in regard to alcohol can be helpful.

Local newsletters informing the community of what is going on in the field of alcohol is important. Also local news of what services are opening and closing is necessary.

A most important element is an active and viable coordinating council. In any one given community there are both public and private, profit and nonprofit organizations vying for monies and population. This can lead to waste and distrust. Overlapping of services can be controlled with an effective council. Proper information and communication can overcome distrust. Certainly the problem of alcoholism is great enough without these other factors being added. The coordinating council needs the support of the entire community and can help everyone.

It is important that research continues in the area of attitudes and alcohol. The public is becoming more and more aware of the negative aspects associated with alcohol abuse. More and stricter laws are being implemented to offset the tremendous number of fatalities on our highways. These laws are making counseling of problem drinkers mandatory. Business and industry have implemented employee assistance programs to help the alcohol abuser. All of

these positive efforts have taken time. Let us hope that the efforts continue into the future.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Allport, G. "Attitudes." In Handbook of Social Psychology, p. 818. Edited by C. Murchison. Worcester, Massachusetts: Clarke University Press, 1935.
- Anthony, W.A. and R.R. Carkhuff. "Effects of Training on Rehabilitation Counselor Trainee Functioning." Rehabilitation Counseling Bulletin 13:333-342, 1980.
- Appell, M.J., C.M. Williams, and K.N. Fishell. "Interests of Professionals in Fields of Exceptionality." Vocational Guidance Quarterly 12:43-45, 1963.
- Arnholter, E.G. "Attitudes Toward the Disabled." Rehabilitation Counseling Bulletin 6:26-30, 1963.
- Bailey, M.B. "Attitudes Toward Alcoholism Before and After a Training Program for Social Counselors." Quarterly Journal of Studies on Alcohol 31:669-683, 1970.
- Bailey, M.B. and E. Fuchs. "Alcoholism and the Social Worker." Social Work 5:14-19, 1960.
- Bales, R.F. "Cultural Differences in Rates of Alcoholism." In Drinking and Intoxication, p. 267. Edited by R.G. McCarthy. New Haven, 1959.
- Becker, C.E., R.L. Roe, and R.A. Scott. Alcohol as a Drug. Huntington, New York: Krieger Publishing Co., Inc., 1979.
- Bell, A.H. "Attitudes of Selected Rehabilitation Workers and Other Hospital Employees Toward the Physically Disabled." Psychological Reports 10:183-186, 1962.
- Chalfant, H.P. and R.A. Kurtz. "Factors Affecting Social Workers Judgments of Alcoholics." Journal of Health and Social Behavior 13:331-336, 1972.
- × Clinebell, H.J. "Pastoral Case of the Alcoholic's Family Before Sobriety." Pastoral Psychology 13:19-29, 1962.
- Clinebell, J.H. Quoted in P.C. Conley and A.A. Sorensen, The Staggering Steeple: The Story of Alcoholism and the Churches, p. 132. Philadelphia: Pilgrim Press, 1971.
- Conley, P.C. and A.A. Sorensen. The Staggering Steeple: The Story of Alcoholism and the Churches. Philadelphia: Pilgrim Press, 1971.

- Cook, D.W., J.T. Kunce, and S.H. Getsinger. "Perceptions of the Disabled and Counseling Effectiveness." Rehabilitation Counseling Bulletin 19:470-475, 1976.
- Cornish, R.D. and M.V. Miller. "Attitudes of Registered Nurses Toward the Alcoholic." Journal of Psychiatric Nursing and Mental Health Services 37(5):659-665, 1976.
- Curlee, J. "Attitudes that Facilitate or Hinder the Treatment of Alcoholism." Psychotherapy: Research and Practice 8:68-70, 1971.
- Dickie, R.E. "An Investigation of Differential Attitudes Toward the Physically Handicapped, Blind Persons, and Attitudes Toward Education and Their Determinants Among Various Occupational Groups in Kansas." Dissertation Abstracts 28:1702A, 1967, Michigan State University.
- Dorland's Illustrated Medical Dictionary, 25th Edition, p. 53. Philadelphia: W.B. Saunders Co., 1974.
- * Dorsch, G., R. Talley, and H. Bynder. "Response to Alcoholics by the Helping Professions and Community Agencies in Denver." Quarterly Journal of Studies on Alcohol 30:905-919, 1969.
- Downes, S.C. "Attitudes Toward the Physically Disabled as Indicated in Rehabilitation and Non-Rehabilitation Groups." Unpublished doctoral dissertation. Pennsylvania State University, 1967.
- Dunn, O.J. Basic Statistics. New York: John Wiley & Sons, 1977.
- Einstein, S. and E. Wolfson. "Alcoholism Curricula: How Professionals are Trained." International Journal of the Addictions 5:295-312, 1970.
- Ferneau, E.W. "What Student Nurses Think About Alcoholic Patients and Alcoholism." Nursing Outlook 15:40-41, 1967.
- Fisher, J.V., J.C. Fisher, and R.L. Mason. "Physicians and Alcoholics: Modifying Behavior and Attitudes of Family Practice Residents." Journal of Studies on Alcohol 37:1686-1693, 1976.
- Fisher, J.C., R.L. Mason, K.A. Keeley, and J.V. Fisher. "Physicians and Alcoholics: The Effect of Medical Training on Attitudes Toward Alcoholics." Journal of Studies on Alcohol 36:949-955, 1975.

× Gardner, Y. "The Pastor's Use of Community Resources in Helping the Family of an Alcoholic." Pastoral Psychology 13:39-44, 1962.

Goldenberg, M., F. Korn, C. Sluzki, and A. Tarnopolsky. "Attitudes Toward Alcohol, Alcoholism, and the Alcoholic--An Exploratory Study." Social Science Medicine 2:29-39, 1968.

Golder, G. "Nurse and the Alcoholic Patient." American Journal of Nursing 56:436-438, 1956.

Hanna, E. "Attitudes Toward Problem Drinkers: A Critical Factor in Treatment Recommendations." Journal of Studies on Alcohol 39:98-109, 1978.

Harlow, P.E. and M.J. Goby. "Changing Nursing Students' Attitudes Toward Alcoholic Patients: Examining Effects of a Clinical Practicum." Nursing Research 29(1):59-60, 1980.

Hart, L. "Attitudes Regarding Alcoholism Among a Group of Drinking Drivers." The International Journal of the Addictions 12:411-415, 1977.

Hart, L. "Attitudes Toward Alcoholism Among a Group of Rehabilitation Counselors: An Exploratory Study." Drug Forum 5(2):411-415, 1977.

Hayes, W.I. and R. Gazaway. Human Relations in Nursing, 3rd Edition. Philadelphia: W.B. Saunders Co., 1964.

Heinemann, M.E. "Caring for Patients with Alcohol Problems." Journal of Psychiatric Nursing 12:34-38, 1974.

Heise, D.R. "The Semantic Differential and Attitude Research." In Attitude Measurement, pp. 235-253. Edited by G.F. Summers. Chicago: Rand McNally & Co., 1970.

Heise, D.R. "Methodology of the Semantic Differential." Psychological Bulletin 72:406-422, 1969.

Huffman, W.J. "Analysis of Accidents Facts." The University of Tennessee Safety Center, The University of Tennessee, Knoxville, 1981.

Huffman, W.J. "A Case for Higher Level Statistical Treatment of Survey Research Data." A paper prepared for use by students and faculty in the Department of Health and Safety Education, University of Illinois, Urbana-Champaign, 1972.

- Hughes, E.C. et al. Twenty Thousand Nurses Tell Their Story. Philadelphia: J.B. Lippincott Co., 1958.
- Janicki, M.P. "Attitudes of Health Professionals Toward Twelve Disabilities." Perceptual and Motor Skills 30:77-78, 1970.
- Jones, R.L. "The Hierarchical Structure of Attitudes Toward the Exceptional." Exceptional Children 40:430, 1974.
- Kaplan, K.J. "On the Ambivalence--Indifference Problem in Attitude Theory and Measurement: A Suggested Modification of the Semantic Differential Technique." Psychological Bulletin 77:361-372, 1972.
- Kilty, K.M. "Attitudes Toward Alcohol and Alcoholism Among Professionals and Non-Professionals." Journal of Studies on Alcohol 36:327-345, 1975.
- Kilty, K.M. and A. Feld. "Professional Education in Understanding and Treating Alcoholism: A Demonstration Project." Journal of Studies on Alcohol 40:929-942, 1979.
- Kinder, B.N. "Attitudes Toward Alcohol and Drug Abuse. II. Experimental Data, Mass Media Research, and Methodological Considerations." The International Journal of the Addictions 10(6):1035-1054, 1975.
- Knox, W.J. "Attitudes of Social Workers and Other Professional Groups Toward Alcoholism." Quarterly Journal of Studies on Alcohol 34:1270-1278, 1973.
- Knox, W.J. "Attitudes of Psychologists Toward Alcoholism." Journal of Clinical Psychology 25:446-450, 1969.
- Kruskal, W.J. "A Nonparametric Test for the Several Sample Problem." American Mathematical Statistics 23:525-540, 1952.
- Lasater, A.H. Personal Interview, October 7, 1981.
- Leake, G.J. and A.S. King. "Effect of Counselor Expectations on Alcoholic Recovery." Alcohol Health and Research World 1:16-22, 1977.
- Lemon, N. Attitudes and Their Measurement. New York: John Wiley & Sons, 1973.
- Lieff, J., J. Avorn, H. Caddell, H. Anderson, P. Gorlin, S. Kennedy, J. Goodwin, J. Goodwin, and L. Verlenden. "Attitudes of the Medical Profession Toward Drug Abuse." American Journal of Public Health 63:1029-1035, 1973.

- Linsky, A.S., M.E. Heinemann, and K.M. Sorensen. "Problems of the Alcoholic-Tuberculous Patient: A Study of Attitudes of the Hospitalized Alcoholic-Tuberculous, the Non-Alcoholic Tuberculous, and the Nurse." Nursing Research 14:33-36, 1965.
- Marks, I.M. "Patterns of Meaning in Psychiatric Patients." Mandsley Monograph No. 13. Oxford University Press, 1965.
- Marks, I.M. "Semantic Differential Uses in Psychiatric Patients." British Journal of Psychiatry 112:945-951, 1960.
- Mendelson, J. "Medical Treatment of the Alcoholic Patient in a General Hospital." In The Role of the Nurse in the Case of the Alcoholic Patient in a General Hospital. Proceedings of a conference in Chatham, Massachusetts, September 19-20, 1960. Alcoholism Division, Massachusetts Public Health Department, Boston, Massachusetts, 1960.
- Mogar, R.E., S.T. Helm, M.R. Snedeker, M.H. Snedeker, and M.W. Wilson. "Staff Attitudes Toward the Alcoholic Patient." Archives of General Psychiatry 21:449-454, 1969.
- Moody, P.M. "Attitudes of Nurses and Nursing Students Toward Alcoholics." Quarterly Journal of Studies on Alcohol 32:172, 1971.
- Moss, D.M. "Parochial Ministry, the Episcopal Church, and Alcoholism." Journal of Religion and Health 14:192-197, 1975.
- Nickels, S.A. and M.E. Shaw. "Saliency and Two Measures of Attitude." Psychological Reports 14:273-274, 1964.
- Observer and N.A. Maxwell. "A Study of Absenteeism, Accidents and Sickness Payments in Problem Drinkers in One Industry." Quarterly Journal of Studies on Alcohol 20:302-312, 1959.
- Osgood, C.E. J.J. Suci, and P.H. Tannenbaum. The Measurement of Meaning. Urbana: University of Illinois Press, 1957.
- Peyton, S.P., J. Chaddick, and R. Gorsuch. "Willingness to Treat Alcoholics; A Study of Graduate Social Work Students." Journal of Studies on Alcohol 41:935-939, 1980.

- Pederson, L.L. and P.M. Carlson. "Rehabilitation Service Providers: Their Attitudes Towards People with Physical Disabilities, and Their Attitudes Toward Each Other." Rehabilitation Counseling Bulletin 24:275-282, 1981.
- Reidenbach, D. "The Pastor and the Alcoholic." Pastoral Psychology 9:9-12, 1958.
- Rule, B.G. and D. Phillips. "Responsibility Versus Illness Models of Alcoholism." Quarterly Journal of Studies on Alcohol 34:489-495, 1973.
- Sapir, J.V. "Social Work and Alcoholism." Annals of the American Academy of Political and Social Science 315:125-132, 1958.
- Schmid, N.J. and D.T. Schmid. "Nursing Students' Attitudes Toward Alcoholics." Nursing Research 22:246-258, 1973.
- Schneider, C.R. and W. Anderson. "Attitudes Toward the Stigmatized: Some Insights from Recent Research." Rehabilitation Counseling Bulletin 23:299-313, 1980.
- Schofield, L.F. and J.T. Kunce. "Client Disability and Counselor Behavior." Rehabilitation Counseling Bulletin 14:158-165, 1971.
- Sowa, P.A. and H.S. Cutler. "Attitudes of Hospital Staff Toward Alcoholics and Drug Addicts." Quarterly Journal of Studies on Alcohol 35:210-214, 1974.
- Stafford, R.A. and J.M. Petway. "Stigmatization of Man and Woman Problem Drinkers and Their Spouses." Journal of Studies on Alcohol 38:2109-2121, 1977.
- Staub, G. and L. Kent. The Para-Professional in the Treatment of Alcoholism. Springfield, Illinois: Bannerstone House, 1973.
- Stephan, P.G. "Clergymen as Counselors." Dissertation Abstracts 31:1197B, 1971.
- Sterne, M.W. and D.J. Pittman. "The Concept of Motivation; A Source of Institutional and Professional Blockage in the Treatment of Alcoholism." Quarterly Journal of Studies on Alcohol 26:41-57, 1965.
- Straus, R. "Problem Drinking and Community Responsibility." Pastoral Psychology 9:13-20, 1958.

- Tittle, C.R. and R.J. Hill. "Attitude Measurement and Prediction of Behavior: An Evaluation of Conditions and Measurement Techniques." Sociometry 30:199-213, 1967.
- Tolor, A. and J.S. Tamerin. "How Generalized are the Public Perceptions of a Prominent Political Figure Who is an Acknowledged Alcoholic?" Perceptual and Motor Skills 41:957-967, 1975.
- Tringo, J.I. "The Hierarchy of Preference Toward Disability Groups." Journal of Special Education 4:295-306, 1970.
- Van, B. and J.W. Gabrynowicz. "Doctors' and Nurses' Views on Alcohol Dependency." The Australian Nurses' Journal 7(4):42-44, October 1977.
- Veevers, J.E. "Drinking Attitudes and Drinking Behavior: An Exploratory Study." Journal of Social Psychology 85:103-109, 1971.
- x Verdery, E.A. "Pastoral Care of the Alcoholic's Family After Sobriety." Pastoral Psychology 13:30-38, 1962.
- Wallston, K.A., B.S. Wallston, and B.M. Devellis. "Effect of a Negative Stereotype of Nurses' Attitudes Toward an Alcoholic Patient." Journal of Studies on Alcohol 37(5):651-665, 1976.
- Welsh, R.L. "Attitudes and Behaviors of Rehabilitation Counseling Students and Graduates Toward Stigmatized Persons." Dissertation Abstracts 35:202, 1974.
- Wiltenburg, W.J. "The Bible and the Attitudes of Ministers on Drinking." Pastoral Psychology 9:36-41, 1958.
- Wolch, C. "How Ontario Clergy Look at Alcoholism; Denominational and Individual Differences Revealed by Study of Experience and Views." Alcoholism Research 4:1-7, 1957.
- Yuker, H.E., J.R. Block, and J.H. Youngg. The Measurement of Attitudes Toward Disabled Persons. Albertson, New York: Human Resources Center, 1976.

APPENDICES

APPENDIX A

FORMS MAILED TO PROFESSIONAL POPULATIONS

The University of Tennessee
Knoxville
School of Health, Physical Education and Recreation

(615) 974-5041

Division of Health and Safety
1914 Andy Holt Avenue
Knoxville, Tennessee 37916

Dear Sir/Madam:

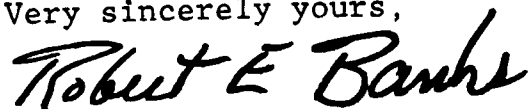
The use of alcohol has been a part of our society. People are seen drinking in many different social situations, from weddings to concerts. Many schools have an interest in the area of alcohol education. In order to plan an educational program it is important to understand the views of individuals such as yourself.

This study is designed to measure the attitudes of select professional groups and drinking populations. We will be asking you to complete the modified Semantic Differential Scale which will help in assessing these attitudes.

I would be very grateful if you would participate in this study. I would like to emphasize that you are under no obligation to join the study. You also have the right to withdraw from the study at any time.

Thank you for your time and consideration.

Very sincerely yours,



Robert E. Banks
Project Director

CONSENT FORM

I, _____,
(name of participant)

agree to participate in the study conducted by Robert E. Banks, a doctoral student at The University of Tennessee, Knoxville. The study is being conducted for the purpose of assessing attitudes of various professional and drinking populations toward non-drinkers and drinkers. I understand that information will be obtained by my completing a pencil and paper questionnaire.

I understand the purpose of the study and have been given the opportunity to have my questions answered. I understand that while results of this study will be published, my responses will be confidential as no names, code numbers, or other identifying information will be used. This consent form (with my name on it) will be kept separate from the survey.

I have been informed of my rights to refuse to participate in the study and to refuse to answer any or all questions. I understand that I may withdraw from further participation in this study at any time.

Signature _____ Date _____

Robert E. Banks
Division of Health and Safety
The University of Tennessee, Knoxville
974-5041

CONCEPT 3: INDIVIDUAL GUILTY OF DRIVING WHILE INTOXICATED

CONCEPT 3: INDIVIDUAL QUALITY OF DRIVERS WHILE ENGAGED

foolish _____ : _____ : _____ : _____ : _____ : _____ :	wise
strong _____ : _____ : _____ : _____ : _____ : _____ :	weak
active _____ : _____ : _____ : _____ : _____ : _____ :	passive
sick _____ : _____ : _____ : _____ : _____ : _____ :	healthy
excitable _____ : _____ : _____ : _____ : _____ : _____ :	calm
safe _____ : _____ : _____ : _____ : _____ : _____ :	dangerous
hopeless _____ : _____ : _____ : _____ : _____ : _____ :	hopeful
aimless _____ : _____ : _____ : _____ : _____ : _____ :	motivated
predictable _____ : _____ : _____ : _____ : _____ : _____ :	unpredictable
complicated _____ : _____ : _____ : _____ : _____ : _____ :	simple

CONCEPT 4: PROBLEM DRINKER

CONCEPT 4: PROBLEM DRINKER

foolish _____	: _____	: _____	: _____	: _____	: _____	: wise
strong _____	: _____	: _____	: _____	: _____	: _____	: weak
active _____	: _____	: _____	: _____	: _____	: _____	: passive
sick _____	: _____	: _____	: _____	: _____	: _____	: healthy
excitable _____	: _____	: _____	: _____	: _____	: _____	: calm
safe _____	: _____	: _____	: _____	: _____	: _____	: dangerous
hopeless _____	: _____	: _____	: _____	: _____	: _____	: hopeful
aimless _____	: _____	: _____	: _____	: _____	: _____	: motivated
predictable _____	: _____	: _____	: _____	: _____	: _____	: unpredictable
complicated _____	: _____	: _____	: _____	: _____	: _____	: simple

CONCEPT 5: ALCOHOLIC

CONCEPT 3: ALCOHOLIC

foolish _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	wise
strong _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	weak
active _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	passive
sick _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	healthy
excitable _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	calm
safe _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	dangerous
hopeless _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	hopeful
aimless _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	motivated
predictable _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	unpredictable
complicated _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	simple

CONCEPT 6: SKID ROW DRUNK

CONCEPT 6: SKID ROW DRIVEN

foolish	_____	: _____	: _____	: _____	: _____	: _____	wise
strong	_____	: _____	: _____	: _____	: _____	: _____	weak
active	_____	: _____	: _____	: _____	: _____	: _____	passive
sick	_____	: _____	: _____	: _____	: _____	: _____	healthy
excitable	_____	: _____	: _____	: _____	: _____	: _____	calm
safe	_____	: _____	: _____	: _____	: _____	: _____	dangerous
hopeless	_____	: _____	: _____	: _____	: _____	: _____	hopeful
aimless	_____	: _____	: _____	: _____	: _____	: _____	motivated
predictable	_____	: _____	: _____	: _____	: _____	: _____	unpredictable
complicated	_____	: _____	: _____	: _____	: _____	: _____	simple

CONCEPT 7: RECOVERING ALCOHOLIC

CONCEPT 7: RECOVERING ALCOHOLIC

foolish _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	wise
strong _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	weak
active _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	passive
sick _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	healthy
excitable _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	calm
safe _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	dangerous
hopeless _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	hopeful
aimless _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	motivated
predictable _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	unpredictable
complicated _____ :	_____ :	_____ :	_____ :	_____ :	_____ :	simple

GENERAL INFORMATION

1. ☐ Male ☐ Female
2. Age: ☐ 20-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ >61
3. Profession: ☐ Nurse ☐ V.R. Counselor
☐ Minister ☐ Psychologist
☐ Social Worker
4. Do you ever consume beverage alcohol? ☐ Yes ☐ No
5. Does your work involve individuals who have alcohol problems? ☐ Yes ☐ No
Percentage involvement: ☐ <5% ☐ 41-70%
☐ 6-15% ☐ >71%
☐ 16-40% ☐ 100%
Estimated number per year _____
6. Does your work involve the families of individuals who have alcohol problems? ☐ Yes ☐ No
Percentage involvement: ☐ <5% ☐ 41-70%
☐ 6-15% ☐ >71%
☐ 16-40% ☐ 100%
Estimated number per year _____
7. Do you counsel alcoholics? ☐ Yes ☐ No
8. Do you refer alcoholics to other agencies? ☐ Yes ☐ No
9. Do you feel that treatment of alcoholism is one of your competencies? ☐ Yes ☐ No
10. What training in the area of alcohol and alcoholism have you had? (Check as many as pertain to you)
☐ Attendance at Schools of Alcohol Studies
☐ Readings
☐ Workshop, Seminar, or Symposia
☐ Undergraduate or graduate university classes
☐ Inservice training
☐ On-the-job training/volunteer. Years _____
11. How many years have you been working with alcoholics?
Years _____
12. Religious preference _____

THANK YOU FOR YOUR COOPERATION.

APPENDIX B

APPLICATION AND APPROVAL OF HUMAN
SUBJECTS COMMITTEE

THE UNIVERSITY OF TENNESSEE, KNOXVILLE
APPLICATION FOR REVIEW OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identification of Project Date: June 1, 1981

Project Director: Robert E. Banks

Title of Project: Attitudes and Alcohol--The Use of
the Semantic Differential with
Different Professional Treatment
and Drinking Populations in East
Tennessee

Department: Division of Health and Safety

Estimated Starting Date: June 1981

Estimated Completion Date: September 1981

II. Objective of Project

The objective of this study is to measure the attitudes of various professional and drinking populations toward drinking and non-drinking populations.

III. Description of Subjects

The study subjects will be in two (2) classes of five (5) groups each. The first class will consist of social workers, vocational rehabilitation counselors, ministers, psychologists, and nurses. These will be professionals who are currently working in their profession. The second class of subjects will consist of individuals who are patients in a medical detoxification center, patients in a non-medical detoxification center, members of an Alcoholics Anonymous group, residents at halfway houses in Knoxville, and students in D.W.I. (Driving While Intoxicated) school in East Tennessee. There will be a minimum of twenty-five (25) and a maximum of thirty-five (35) in each group for a total of three hundred fifty (300 ± 50) subjects.

IV. Methods of Procedure

This study will use a single evaluation instrument to determine attitudes. This instrument is a modified Semantic Differential Scale. This scale consists of

seven (7) concepts with ten (10) bipolar adjectives for each concept. Each individual's attitude will be measured by his/her response toward a concept on the sheets provided (see attached example). An instrument will be mailed to each individual in the professional population. A cover letter explaining the purpose of the study, a release form, and an addressed, stamped envelope for use in returning the instrument will be included. A follow-up letter requesting that the instrument be completed and returned will be sent to those who have not returned the instrument after a two week interval of time. The instrument will be administered to the drinking populations.

V. Protection Measures

Subjects will not put their names on any questionnaire forms. No names or other identifying information will be used in the dissertation. Only the author will see individual questionnaires, after completion.

VI. Method of Obtaining "Informed Consent" from Subjects

The researcher will meet with each drinking population and explain the purpose of the study as well as the rights of the subjects. Any questions will be answered. In the cases of the mailing, a letter stating the purpose of the study as well as the rights of the individual will be included. Each individual will be asked to sign a consent form prior to filling out the questionnaire.

VIII. Responsibility of Project Director

By compliance with the policies established by the University Committee on Research Participation, the Project Director subscribes to the broad principles stated in "The Declaration of Helsinki" and standards of professional ethics in all research, development and related activities involving human subjects under the auspices of The University of Tennessee, Knoxville.

- a. When appropriate, Form DHEW 596 will be completed and returned to the Office of the Vice Chancellor for Graduate Studies and Research, 404 Andy Holt Tower.
- b. Approval will be obtained from the University Committee prior to instituting any change in project protocol.

- c. Development of any unexpected risks will be reported to the University Committee.
- d. Signed consent statements will be kept for the duration of the project and for at least three years thereafter.
- e. A status report (Form D) will be submitted at 12 month intervals, or as requested, attesting to the current status of the project.

Project Director

Signature _____

Date _____

THE UNIVERSITY OF TENNESSEE, KNOXVILLE
KNOXVILLE 37916

OFFICE OF THE VICE CHANCELLOR FOR
GRADUATE STUDIES AND RESEARCH

404 ANDY HOLT TOWER

July 7, 1981

AREA 615
TELEPHONE 974-3466

Dr. L. Evans Roth
Vice Chancellor for Graduate
Studies and Research
404 Andy Holt Tower
CAMPUS

Dear Dr. Roth:

Robert E. Banks, Department of Health and Safety submitted a project entitled "Attitudes and Alcohol - The Use of the Semantic Differential with Different Professional Treatment and Drinking Populations in East Tennessee," CRP #1240. The departmental human subjects committee has reviewed and approved this project. In their judgment, this project comes within that section of their approved guidelines which permits the Chairperson of the Committee on Research Participation to give approval to the project on behalf of the Committee.

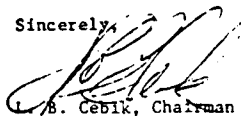
After reviewing this project, I certify that it does conform to Committee and Departmental guidelines. Therefore, acting on behalf of the Committee, I have approved this project.

The responsibility of the project director includes the following:

1. Prior approval from the Committee must be obtained before any changes in protocol are instituted.
2. Signed consent statements from each experimental subject must be kept for the duration of the project and for at least three years thereafter.
3. The Committee must be informed of any physical or psychological effects on subjects for re-evaluation of the protocol approval.
4. A statement must be submitted (Form D) at 12-month intervals attesting to the current status of the project (protocol is still in effect, project is terminated, etc.)

The Committee wishes the project director success in his research endeavors.

Sincerely,



L. B. Cebik, Chairman
Committee on Research Participation

js
cc: Robert E. Banks -
Robert Kirk

APPENDIX C

CORRESPONDENCE

EAST
TENNESSEE
SUBSTANCE
ABUSE
CONTROL
BUREAU

July 6, 1981

Robert E. Banks, Project Director
University of Tennessee
School of Health, Physical Education
and Recreation
Knoxville, Tennessee 37916

Dear Mr. Banks:

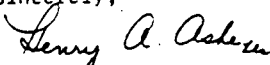
This letter is in support of your study on Assessing attitudes of various professional and drinking populations toward drinkers and non-drinkers in areas of Region II in Tennessee.

My years of experience in working with alcoholism in this Region finds this project will be very beneficial in getting data of this kind.

Do not think a study of this kind has ever been done in this Region and the results will give us much needed information in assessing needs and providing planning strategies for our Training, Prevention and other programs.

If there is anyway, we may assist in this project please feel free to call on us.

Sincerely,


Henry A. Ashe
Executive Director

APPENDIX D

MEANS FOR DUNCAN'S MULTIPLE RANGE ANALYSIS OF VARIANCE

Means for Duncan's Multiple Range Test for Analysis of
Variance Scores Within Each Population:

	<u>Concept</u>	<u>Mean</u>
Population 1--Nurses	1	46.28
	7	42.81
	2	39.10
	4	23.48
	3	23.10
	5	22.57
	6	21.43
Population 2--Ministers	1	44.80
	7	42.55
	2	34.65
	4	24.95
	3	23.95
	5	23.85
	6	23.55
Population 3--Social Workers	7	42.48
	1	38.70
	2	38.43
	4	26.56
	3	25.65
	5	24.13
	6	24.00
Population 4--V.R. Counselors	7	44.10
	1	44.00
	2	40.30
	4	24.50
	5	24.50
	3	23.60
	6	22.80
Population 5--Psychologists	7	42.59
	1	41.74
	2	38.70
	4	25.30
	3	24.44
	5	23.74
	6	22.48

	<u>Concept</u>	<u>Mean</u>
Population 6--A.A. Members	7	50.04
	1	44.77
	2	37.77
	5	27.82
	3	26.41
	4	26.18
	6	24.50
Population 7--Medical Detox.	1	48.09
	7	46.68
	2	35.73
	4	25.14
	3	22.00
	5	21.54
	6	20.59
Population 8--Nonmedical Detox.	7	48.76
	1	48.24
	2	35.79
	5	25.15
	4	25.06
	3	23.70
	6	21.06
Population 9--Half-Way House	7	46.84
	1	46.32
	2	36.37
	4	24.63
	5	24.21
	3	24.16
	6	22.42
Population 10--D.W.I. Students	1	41.17
	7	38.96
	2	35.75
	3	29.42
	4	23.75
	5	21.88
	6	21.54

Means for Duncan's Multiple Range Test for Analysis of
Variance Scores Between Professional Groups:

	<u>Group</u>	<u>Mean</u>
Concept--Abstainer	1	46.28
	2	44.80
	4	44.00
	5	41.74
	3	38.70
Concept--Social Drinker	4	40.30
	1	39.10
	5	38.70
	3	38.43
	2	34.65

Means for Duncan's Multiple Range Test for Analysis of
Variance Scores Between Drinking Groups:

	<u>Group</u>	<u>Mean</u>
Concept--Abstainer	8	48.24
	7	48.10
	9	46.32
	6	44.77
	10	41.17
Concept--Individual Guilty D.W.I.	10	29.42
	6	26.41
	9	24.16
	8	23.70
	7	22.00
Concept--Alcoholic	6	27.82
	8	25.15
	9	24.21
	10	21.88
	7	22.54
Concept--Recovering Alcoholic	6	50.04
	8	48.76
	9	46.84
	7	46.68
	10	38.96

Means for Duncan's Multiple Range Test for Analysis of
Variance Scores Between the Professional and Drinking
Populations:

	<u>Mean</u>
Drinking Population	32.08
Professional Population	31.36

APPENDIX E

POPULATION MEAN SCORES

POPULATION MEAN SCORES FOR TABLE 4-24:

Concept--Abstainer

<u>Population</u>	<u>Mean</u>
Nurses	46.29
Ministers	44.80
Social Workers	38.69
V.R. Counselors	44.00
Psychologists	41.74

Concept--Social Drinker

<u>Population</u>	<u>Mean</u>
Nurses	39.09
Ministers	34.65
Social Workers	38.43
V.R. Counselors	40.30
Psychologists	38.70

POPULATION MEAN SCORES FOR TABLE 4-33:

Concept--Abstainer

<u>Population</u>	<u>Mean</u>
Alcoholics Anonymous	44.77
Medical Detoxification Patients	48.09
Nonmedical Detoxification Patients	48.24
Half-Way House Residents	46.31
D.W.I. Students	41.17

Concept--Individual Guilty D.W.I.

<u>Population</u>	<u>Mean</u>
Alcoholics Anonymous	26.41
Medical Detoxification Patients	22.00
Nonmedical Detoxification Patients	23.70
Half-Way House Residents	24.16
D.W.I. Students	29.42

Concept--Alcoholic

<u>Population</u>	<u>Mean</u>
Alcoholics Anonymous	27.82
Medical Detoxification Patients	21.55
Nonmedical Detoxification Patients	25.15
Half-Way House Residents	24.21
D.W.I. Students	21.87

Concept--Recovering Alcoholic

<u>Population</u>	<u>Mean</u>
Alcoholics Anonymous	50.05
Medical Detoxification Patients	46.68
Nonmedical Detoxification Patients	48.76
Half-Way House Residents	46.84
D.W.I. Students	38.96

POPULATION MEAN SCORES FOR TABLE 4-36:

<u>Concept</u>	<u>Mean</u>
Abstainer	44.47
Social Drinker	37.07
Individual Guilty D.W.I.	24.71
Problem Drinker	25.00
Alcoholic	23.95
Skid Row Drunk	22.34
Recovering Alcoholic	44.71

APPENDIX F

GENERAL INFORMATION ON PROFESSIONAL POPULATIONS

(Percentage of Yes Answers)

DO YOU EVER CONSUME BEER/ALE?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
76%	45%	96%	90%	100%

DOES YOUR WORK INVOLVE INDIVIDUALS WHO HAVE ALCOHOL PROBLEMS?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
100%	100%	91%	100%	89%

DOES YOUR WORK INVOLVE THE FAMILIES OF INDIVIDUALS WHO HAVE ALCOHOL PROBLEMS?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
90%	90%	83%	70%	85%

DO YOU COUNSEL ALCOHOLICS?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
33%	85%	48%	100%	67%

DO YOU REFER ALCOHOLICS TO OTHER AGENCIES?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
95%	100%	91%	100%	81%

DO YOU FEEL THAT TREATMENT OF ALCOHOLISM IS ONE OF YOUR COMPETENCIES?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
33%	35%	9%	20%	41%

HAVE YOU ATTENDED A SCHOOL OF ALCOHOL STUDIES? (YES)

Nurses	Ministers	S.W.	V.R.C.	Psychologists
14%	20%	0%	20%	18.5%

DO YOU READ REGULARLY ABOUT THE FIELD OF ALCOHOL(ISM)?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
80%	95%	56%	60%	81%

HAVE YOU ATTENDED A WORKSHOP, SEMINAR, OR SYMPOSIA? (YES)

Nurses	Ministers	S.W.	V.R.C.	Psychologists
38%	85%	39%	50%	51%

HAVE YOU ATTENDED UNDERGRADUATE OR GRADUATE UNIVERSITY CLASSES ON ALCOHOL(ISM)?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
38%	35%	17%	50%	44%

HAVE YOU HAD INSERVICE TRAINING IN THE AREA OF ALCOHOL(ISM)?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
19%	35%	26%	20%	52%

HAVE YOU HAD ON-THE-JOB TRAINING/VOLUNTEER EXPERIENCE?

Nurses	Ministers	S.W.	V.R.C.	Psychologists
57%	65%	61%	20%	81.5%

VITA

Robert Edward Banks was born in Savannah, Georgia, on December 1, 1944. He was graduated from Christchurch School, Christchurch, Virginia, in 1964. He served 2 years active duty in the United States Navy during the Vietnam War. He received his Bachelor of Arts degree in French and Psychology from Georgia State University in August 1971. He received a scholarship from the University System of Georgia to attend the University of Dijon, Dijon, France, in 1970. He received the First Degree for Foreigners certificate. In the fall of 1972 he began study toward a Master of Education degree in Vocational Rehabilitation Counseling at the University of Georgia, Athens. The degree was awarded in December 1973.

From 1973 to 1978 he was employed by the South Carolina Department of Mental Health as an Addictions Specialist. He worked at the mental health centers in Anderson and Charleston.

In 1978 he went to The University of Tennessee, Knoxville, to begin work on the Doctor of Philosophy degree. He was employed as a graduate teaching assistant in the Division of Health and Safety. He received the Doctor of Philosophy degree with a major in Public Health Education in August 1982.

- He is married to the former Peggy Tollison of Greeneville, South Carolina. They have two children, Ben and Matt.