

AN ABSTRACT OF THE THESIS OF

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Title: DEATH ANXIETY, SELF-ESTEEM, AND LOCUS OF  
CONTROL IN ALCOHOLICS

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Studies in the field of alcoholism have produced inconsistent and contradictory results regarding the personality and belief dimensions of the alcoholic. To date, no singularly acceptable definition of the "typical" alcoholic exists. The problem of defining and treating alcoholics remains a significant issue for treatment professionals.

In the present study, fifty-one male and female inpatient alcoholics were used to examine the relationships of death anxiety, self-esteem, and locus of control to alcoholics' perceptions of various treatment preferences, e.g., Alcoholics Anonymous, the alcohol-aversive drug, disulfiram, no preference, and preference for both Alcoholics Anonymous (AA) and disulfiram. The results indicated that females had significantly higher death anxiety and significantly

lower self-esteem scores than males. Further, male subjects preferring both, or neither, AA and disulfiram treatment had significantly lower death anxiety scores than males preferring either treatment modality alone. Male subjects preferring disulfiram treatment were found to have significantly higher self-esteem scores than male subjects expressing preference for other treatment modalities. Additionally, male subjects were found to be significantly less willing to assign a locus of control to their behavior. It is anticipated that these results will have the beneficial effects of stimulating much needed further research on alcoholism as well as promoting better treatment strategies for alcoholics.

DEATH ANXIETY, SELF-ESTEEM, AND LOCUS  
OF CONTROL IN ALCOHOLICS

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A Thesis  
Presented to  
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by  
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## CHAPTER 1

### INTRODUCTION

The treatment of alcoholism has been plagued by problems of definition, the identification of significant personality factors, and contradictory attitudes toward the appropriate choice of treatment model. No single mode of treatment is consistently utilized, and no consensus is found as to what constitutes the most effective form of treatment. To date, no singularly acceptable definition of the "typical" alcoholic exists, and no known specific predisposing factors are exclusively designated to predict the development of alcoholism (Murphee, 1976). The definition of alcoholism as a unitary entity has been attempted with little success, and its etiology remains unclear and contradictory. For example, Mendelson and Mello (1979) stated that, "no specific personality type, family history, social-economic situation or stressful experience has been found to predict uniquely the development of alcohol problems" (p. 10). In view of the difficulties in describing alcoholism, it is not surprising to find a variety of treatment models reflecting the same confusion.



The most pervasive model of alcoholism currently in use is based on the disease theory proposed by Jellinek (1960). This model proposes that alcoholism is a progressive disease marked by a loss of control over the intake of alcohol, and when loss of control is established, an addiction to alcohol exists. Other major approaches are derived from psychological and sociological theories on the nature of alcoholism (see, First Special Report, 1971). Psychological theories assume that alcoholism is a symptom of an underlying disorder and stress such diverse concepts as oral fixation, latent homosexuality, learned behavior, and personality traits. Sociological theories are derived mainly from the examination of the attitudes and values found in a specific population or culture. The diversity of definitions and theories underlines the widespread disagreement regarding the nature of alcoholism, its etiology, development, and treatment.

Treatment programs for alcoholics also reflect the general lack of unity found elsewhere in the field. The mode of treatment may vary widely among facilities. Two common approaches found in treatment programs, however, are involvement with Alcoholics Anonymous (AA), and the use of the alcohol-aversive drug, disulfiram (trade name, Antabuse).

Alcoholics Anonymous, founded in 1935 by two alcoholics, has had a tremendous impact on professional attitudes and programs. Alcoholics Anonymous requires alcoholics to admit that they are powerless over alcohol, that total abstinence is essential, and that to maintain sobriety, they must commit their lives to helping other alcoholics (Twelve Steps and Twelve Traditions, 1952). Cahn (1970) states that "many state alcoholism programs and a large number of specialized services owe their very origins to the efforts of AA members" (p. 14). He further reports that "even in programs where AA is not directly involved, its philosophy usually has some impact on the treatment orientation" (p. 141). Within AA, the attitude that only an alcoholic can really help another alcoholic, and strong disagreement regarding the role of drugs in treatment have been frequent sources of conflict with the professional community.

Drug therapy, and specifically the use of disulfiram as an alcohol-aversive drug, has been used as an adjunct in the treatment of alcoholism since the late 1940s (Gerrein, Rasenberg & Manohar, 1973). Reporting on the physical effects of disulfiram, Becker (1979) states:

Within a few minutes after ingesting even minute quantities of alcohol in disulfiram-treated patients, a remarkable reaction occurs: The patient first notes a feeling of warmth in the face, the skin especially in the upper chest and face becomes bright red, and a pounding sensation occurs in the head and chest. In addition, respiratory difficulties, nausea, vomiting, sweating, weakness, dizziness, blurred vision, and confusion may also be part of the reaction. It is unclear exactly how long after a single dose of disulfiram a reaction will occur, although 12 to 24 hours is the common estimate. With large doses of alcohol and disulfiram, the reaction can be extremely severe and life threatening (p. 292).

Since disulfiram is slowly excreted from the body, the disulfiram-alcohol reaction can occur up to 2 weeks following the last ingestion of the drug (Gerrein, et al., 1973).

Determination of the actual success rate of either Alcoholics Anonymous or disulfiram in treating the alcoholic is as problematic as finding a uniform definition of, and/or mode of treatment for, alcoholism. Alcoholics Anonymous maintains no membership records and has no recognized formal organization. Tournier (1979) proposed that the widespread domination of AA in the alcoholism treatment field has been instrumental in limiting treatment strategies and that its acceptance as a major factor in treatment is based on tradition rather than any objective evaluation

of its impact. On the other hand, Goodwin (1979) believes that the effect of AA is self-evident and regrets that scientific demonstration of the efficacy of AA is not possible. A variety of methodological problems, mainly due to poorly designed studies (Lundwall & Baekeland, 1971), has made an assessment of success rates with disulfiram very difficult. Currently, then, there is little real knowledge of the actual success of either Alcoholics Anonymous or disulfiram in treatment.

During the past several years, no singularly effective model for the treatment of alcoholism has emerged. Without reservation, a need exists to establish a basis for determining what best constitutes effective treatment for the alcoholic client. Due to the continued use of disulfiram and the widespread involvement of Alcoholics Anonymous in treatment programs, the attitude of alcoholics toward these two common treatment components was considered a significant variable for consideration. More specifically, the present study was undertaken to investigate death anxiety, self-esteem, and locus of control factors in two groups of alcoholics -- those preferring treatment via Alcoholics Anonymous, and those preferring treatment via disulfiram.

The concept of locus of control (LOC), based in social learning theory, was developed by Rotter (1966). In social learning theory, it is believed that reinforcements strengthen the expectancy that a behavior will be similarly reinforced in the future. A generalized expectancy that reinforcements are contingent on one's own behavior is referred to as locus of control. Individuals with internal locus of control believe that environmental events are causally related to their own behavior. Those with external locus of control believe events are based on luck, fate, or control by powerful others. Locus of control in alcoholics has been investigated in numerous studies which have primarily used the Rotter (1966) Internal-External Locus of Control Scale.

Hinrichsen (1976) reports that the interest in locus of control in alcoholics is related to the assumption that alcoholics have experienced impairment in the volitional control of the consumption of alcohol. This notion is a central theme in the disease theory (Jellinek, 1960) which emphasized the alcoholic's loss of ability to control the intake of alcohol. An individual whose alcohol consumption is causing him difficulties in health or functioning must feel

either that he can no longer choose to stop drinking, or, conversely, that he can stop his self-destructive behavior whenever he chooses to do so. If the individual feels he has lost volitional control over his alcohol consumption, an external orientation can be assumed. On the other hand, if the person feels he can choose to stop drinking at any time, it can be assumed that the control orientation is internal.

In an early study of locus of control, Goss and Morosko (1970) hypothesized that alcoholics would be more externally controlled than Rotter's (1966) control group. They were surprised to find that the majority of scores reflected an internal orientation. It was suggested that the alcoholic's feelings of guilt and self-blame might stem from a belief in personal control. Gozali and Sloan (1971) hypothesized that alcoholics would be more internally oriented due to their belief that they can control their drinking. The results of their study, comparing locus of control between alcoholics and nonalcoholics indicated that alcoholics were more internally oriented than nonalcoholics. In regard to treatment programs for alcoholics, Gozali and Sloan recommended that modifying the alcoholic client's control orientation be considered as a treatment objective.

In another study examining the LOC in alcoholics, Costello and Manders (1974) reported that active alcoholics were more internally oriented than recovered alcoholics.

It would appear, then, that investigators have generally found alcoholics to be more internally oriented than norm groups. However, several studies have reported finding a more external LOC in alcoholics (Caster & Parsons, 1977a). Rohsenow and O'Leary (1978) report that research investigating LOC has indicated that subjects having external control are generally found to be more anxious and depressed than those subjects who are internally oriented. These externally oriented subjects were also found to be more aggressive, dogmatic, suspicious, and afraid of failure.

Based on significantly more external scores on an LOC scale, Nowicki and Hopper (1974) suggested that female alcoholics needing inpatient treatment may be a more disturbed group than male inpatients. They also found that external orientation in females was related to greater psychomotor impairment than for males. It was suggested that these results might indicate different approaches by sex and treatment modality are in order.

The conceptual bases of the Rotter Internal-External Locus of Control Scale are a sense of powerlessness and fatalism (Rotter, 1966). A fundamental sense of powerlessness over one's environment has also been related to the concept of death anxiety (Sadowski, Davis, & Loftus-Vergari, 1979). Using the Reid-Ware Three Factor Locus of Control Scale (Reid & Ware, 1974; 1973), Sadowski et al. (1979) re-examined the relationship between death anxiety and locus of control. The Reid-Ware contains the Fatalism and Social System Control subscales found in the Rotter (1966) scale as well as the inclusion of a Self-Control subscale. Templer's (1970) Death Anxiety Scale (DAS) was used to measure death anxiety. The scales were administered to 164 male and 211 female college students. The results indicated that death anxiety was significantly related to the Self-Control dimension of the Reid-Ware scale for both genders. Death anxiety for females was associated with the influence of powerful others (Social System Control factor), while death anxiety for males focused on fate or luck (Fatalism factor).

Another area of interest is the association found between death anxiety and self-esteem. Diggory and Rothman (1961) reported that persons with high self-esteem



had greater death anxiety than those with low self-esteem. This view is at variance with data reported by Davis, Martin, Wilee, and Voorhees (1978). These investigators found a negative relationship between death anxiety and level of self-esteem.

Death anxiety is generally reported to be higher for females than males (Davis et al., 1978; Koob & Davis, 1977; Templer, Lester, & Ruff, 1974). As mentioned above, Nowicki and Hopper (1974) found that alcoholic female inpatients may be a more disturbed group than their male counterparts. This is consistent with the findings that higher death anxiety for females was associated with the influence of powerful others, an external orientation. On the other hand, the positive association between death anxiety and femininity has been reported to be weak (Templer et al., 1974).

Self-esteem is generally reported to be low among alcoholics. For example, Nocks and Bradley (1969) found that as the duration of the drinking problem increased, self-esteem decreased. The highest self-esteem was found among alcoholics who denied any problem. Gross and Alder (1970) reported that alcoholics view themselves as unworthy of respect and as generally inadequate when compared to a standardization group.

Hall (Note 1) in a comparison of active and recovered alcoholics, found that active alcoholics had lower self-esteem. Alcoholics who seek out or accept treatment appear to have lower self-esteem than alcoholics who refuse treatment (Berg, 1971; Charlampous, Ford, & Skinner, 1976; Matefy, Kalish, & Cantor, 1971).

Berg (1971) found that alcoholics have lower self-esteem than nonalcoholics. However, when alcoholics were asked to describe their self-concepts while intoxicated in laboratory conditions, self-concept shifted to a less critical and more favorable position. In accounting for this shift, Berg hypothesized that if intoxication temporarily enhanced the self-image, then drinking behavior and intoxication were reinforced. This would help explain the maintenance of what others perceive as repetitive self-destructive behavior.

In summary, alcoholics have generally, not without exception, been found to be more internal in control orientation than control groups. Death anxiety has been associated with locus of control, and specifically with the Self-Control factor found in the Reid-Ware (1974; 1973) scale. Both the Reid-Ware and Templer's (1970) Death Anxiety Scale appear to reflect a fundamental sense of powerlessness as part of their conceptual

bases. Females apparently tend to be more external in control orientation than males, and have greater death anxiety than males. The alcoholic's self-esteem is more often found to be low for sober alcoholics.

Several studies have attempted to relate personality variables to various treatment types and outcomes (Caster & Parson, 1977b; Hewitt, Note 2; Nowicki & Hopper, 1974; Oziel & Obitz, 1975; Stafford, 1980). Few studies, however, have investigated the alcoholic's perception of treatment techniques in relation to significant personality variables. Obitz (1975), commenting on the large number of alcoholic clients who do not find treatment reinforcing, emphasized the need to examine specific therapeutic techniques in regard to the perceptions of the individual alcoholic. He has investigated the perceptions of alcoholics regarding two types of therapy, directive and non-directive, and found that although alcoholic subjects preferred the directive technique, they indicated that the non-directive technique was more socially desirable. In a later study (Obitz, Wood, & Cantergiani, 1977), the perceptions of alcoholics regarding group therapy and Alcoholics Anonymous were investigated. How alcoholics perceived these two types of techniques was

found to be dependent on who did the asking, either a recovering alcoholic or a nonalcoholic. Alcoholics Anonymous was rated more socially desirable when a recovered alcoholic did the asking. When a nonalcoholic served as experimenter, Alcoholics Anonymous and group therapy were rated about the same.

The present study was conducted in an effort to further determine possible relationships between alcoholics' perceptions of specific treatment techniques and personality variables. The alcoholic client was rated on utilization of AA and willingness to take disulfiram. The preference of either treatment technique was then related to specific belief dimensions; specifically, to locus of control, death anxiety, and self-esteem. Based upon the previous data, it was hypothesized that (a) alcoholics preferring AA would be more internally oriented, (b) alcoholics preferring disulfiram would be more externally oriented, (c) alcoholics exhibiting external control would have greater death anxiety, (d) female alcoholics exhibiting external control would have greater death anxiety, (e) alcoholics rejecting both treatment types would have the highest self-esteem, and (f) alcoholics preferring both treatment types would have the lowest self-esteem.

## CHAPTER 2

### METHOD

#### Subjects

Subjects were inpatients on the Alcohol Rehabilitation Treatment Unit of an urban medical center located in Kansas. The unit offers a 21-day program for alcoholics including both detoxification and inpatient treatment following detoxification. Alcoholics Anonymous is an integral part of the program and patients are expected to attend scheduled AA meetings on the unit. Disulfiram, on the other hand, may be chosen as an adjunct to treatment by any given individual patient and is not a requirement of the unit. All subjects were designated as alcoholic by admission to this unit. A total of 51 subjects (39 males, 12 females) were included in the present study.

#### Instruments

Each subject participating in the study was asked to complete four questionnaires. The questionnaires consisted of three measurement scales and an information questionnaire used to identify each subject's choice of treatment. The three measurement scales and the

information questionnaire are described below.

Death Anxiety Scale. Death anxiety was measured via Templer's (1974) Death Anxiety Scale. This instrument consists of 15 true or false statements regarding fears about death and dying. Scoring is based on the number of responses reflecting anxiety.

Texas Social Behavior Inventory (TSBI). Self-esteem was measured via the Texas Social Behavior Inventory, Form A. This instrument consists of 16 multiple-choice statements regarding self-esteem and social competence. For each item, an individual has five possible responses ranging from "not at all characteristic of me" to "very characteristic of me." Each item is scored from 0 to 4, with 0 indicating lowest self-esteem, and 4 indicating the highest self-esteem. The final scoring is based on the total number of points for all items.

Reid-Ware Three Factor Locus of Control Scale.

The Reid-Ware Three Factor Locus of Control Scale was employed to measure locus of control. This instrument has a forced-choice format and consists of 45 items. Three control dimensions are measured. Fatalism and

Social System Control are each evaluated by 12 items. These items, like those on the Rotter scale (1966), reflect on luck, fate, control by powerful others, and the unpredictability of forces in the environment. The Self-control factor is the third dimension measured and consists of 8 items. These items reflect the degree to which an individual believes he is controlled or influenced by immediate impulses. Persons who perceive events occurring due to fate or the control of powerful others reflect a belief in external control. Internal control is reflected by the belief that events are contingent on the behavior of the individual. Scoring of each dimension is measured in terms of the direction of externality.

Information Questionnaire. An information questionnaire was used to obtain data regarding demographic information and personal beliefs of the individual subject. More specifically, the responses to the questionnaire will be used to identify those alcoholics who attended Alcoholics Anonymous regularly, and those who were willing to take disulfiram. Acceptance of Alcoholics Anonymous as a treatment option was indicated by an affirmative response to the question, "do you regularly attend AA by choice?" Acceptance of disulfiram

as a treatment option was indicated by an affirmative response to the question, "would you be willing to begin taking antabuse?" An answer sheet responding to the DAS Scale (Questionnaire 1), TSBI (Questionnaire 2), and Reid-Ware (Questionnaire 3) was stapled to the Information Questionnaire. Copies of the Information Questionnaire, Answer Sheet, and Questionnaire Booklet containing the DAS, TSBI, and Reid-Ware scales are found in Appendix A.

### Procedure

By arrangement with the Director of the Alcohol Rehabilitation Treatment Unit, and in accordance with the policies of the medical center, the following procedure was implemented: Twice weekly, during the daily scheduled Community Meeting, patients on the unit were asked to voluntarily participate in a research study on alcoholism. They were informed that it would take approximately one hour to complete the project, and that no identifying information would be requested. Following the meeting, volunteers met and were given instructions for completing the questionnaires. The instructions given to each subject are found in Appendix A. A room was set aside for volunteers to complete the questionnaires undisturbed. At the end of each



session, subjects were informed of the nature of the study and thanked for participating in the project. This procedure was repeated over a period of approximately 2 months in an effort to obtain the largest possible sample of subjects.

## CHAPTER 3

### RESULTS

Prior to analysis, the DAS, TSBI, and locus-of-control scores were determined for male and female subjects in each of the following treatment categories: Alcoholics Anonymous (AA), disulfiram (D), neither (N), and both (B). The number of subjects appearing in each treatment category is shown in Table 1. As the number of female subjects included in the present study was limited ( $n = 12$ ), analyses comparing treatment categories within this sample were not performed. The larger number of male subjects included did allow for such comparisons, however. Hence, reported comparisons between males and females represent an averaging across all treatment categories.

#### DAS Analysis

A t-test for independent samples was employed to ascertain whether differences in DAS scores existed between males and females. Females were found to have significantly higher DAS scores than males,  $t(49) = 2.46$ ,  $p < .02$ .

The unweighted means analysis of variance technique

was employed to ascertain differences in DAS scores between treatment categories for the male subjects. This analysis yielded a significant,  $F(3,35) = 3.08$ ,  $p < .05$ , Groups effect. The Newman-Keuls procedure, employed to further probe the significant Groups effect, indicated that males preferring both (B) AA and D treatments had significantly ( $p < .05$ ) higher DAS scores than the three other treatment categories. Mean DAS scores for the male (by treatment category) and female subjects are shown in Table 2.

#### TSBI Analysis

Significantly higher self-esteem scores were found to be associated with the male subjects,  $t(49) = 2.81$ ,  $p < .01$ . Unweighted means analysis of variance of the male TSBI scores by treatment category yielded a significant,  $F(3,35) = 6.46$ ,  $p < .01$ , Groups effect. Using the Newman-Keuls test for specific contrast effects, it was further shown that the subjects preferring the D treatment had significantly ( $p < .01$ ) higher self-esteem scores than the subjects in the other three treatment categories. These three groups, in turn, did not differ significantly from each other. Mean TSBI scores for the male (by treatment category) and female subjects are shown in Table 3.

### Locus-of-Control Scores

To ascertain male-female differences in willingness to assign locus-of-control, a 2 x 3 unweighted means analysis of variance incorporating Sex-of-Subject (male vs. female), and Locus-of-Control (SC, SSC, F) factors was performed. This analysis yielded significance for the Sex-of-Subject factor,  $F(1,45) = 5.32$ ,  $p < .05$ . As the F scale of the Reid-Ware has fewer items than the SC and SSC scales, it was felt that a significant main effect attributable to this factor would not convey relevant information. Hence, this effect was not considered. However, the occurrence of a significant interaction between the Sex-of-Subject and Locus-of-Control factors would indicate that willingness to assign locus of control was dependent upon both sex of subject and the specific Reid-Ware scale being considered. As this interaction was not significant,  $F(2,45) = 1.04$ ,  $p < .25$ , the conclusion that females were significantly more willing to assign a locus of control (regardless of category - SC, SSC, F) to their behavior than males appears warranted. Mean locus-of-control scores for males and females appear in Table 4.

A 3 x 4 unweighted means analysis of variance

incorporating Locus-of-Control (SC, SSC, F) and Treatment Category (AA, D, N, B) factors was also performed on the locus-of-control data of the male subjects. As this analysis failed to yield significant effects, it appears reasonable to conclude that the male subjects in the present study were simply less willing, regardless of treatment preference, to assign locus of control to their behavior than the female subjects.

## CHAPTER 4

### DISCUSSION

The present results, indicating significantly higher DAS scores for females than for males, is consistent with the earlier reports of Davis et al. (1978), Koob and Davis (1977), and Templer et al. (1974). The death anxiety means for both male and female alcoholics are considerably higher than those reported by Templer and Ruff (1971) for more "normal" segments of the population. Briefly summarized, both male and female alcoholics had higher mean scores than Lincoln Memorial University undergraduate blacks, Lincoln Memorial University undergraduate whites, Murray State University undergraduates, male and female Western Kentucky University undergraduates, male and female apartment house residents, adolescent males and females, fathers and mothers of adolescents, male and female psychiatric aides, retired males and females, and Bloomfield College males. The DAS means for male and female alcoholics in the present study are also greater than those reported by Templer and Ruff (1971) for heterogenous psychiatric male and female patients who earned means of 6.50 and 7.15 respectively.

Male alcoholics preferring both (B) AA and D treatments had a significantly higher DAS mean than the other treatment preferences (see Table 2). This finding may reflect some genuine insecurity on the part of these subjects. It is interesting to note that when the means for all treatment preferences are rank ordered, the means for the D and N groups are lower than both the AA and B groups, with N having the lowest mean of all treatment preferences. Even though nonsignificant, this ordering of means suggests that patients preferring AA as a treatment have elevated death anxiety scores relative to D and N. It is when AA and D are preferred in combination that we seem to be dealing with a different type of patient as compared with the patients that preferred only one mode of treatment (or none).

Matefy et al. (1971) found that several studies of alcoholics who had sought treatment reported that these patients have a low level of self-acceptance and indicate awareness of their self-dissatisfaction. They found that alcoholics who accept treatment, or help-acceptors, exhibited a lower degree of self-acceptance than those who rejected help. In a later study, Charlampous et al. (1976) reported that alcoholics have significantly lower self-esteem than nonalcoholics,

and furthermore, that those alcoholics who had sought treatment in the past or were currently seeking help had lower self-esteem than alcoholics who rejected treatment. Hence, the elevated DAS mean for the male subjects in the present study may reflect low self-acceptance and awareness of serious maladjustment by these patients.

In the current study, males had a significantly overall higher self-esteem score than females (see Table 3). Research involving alcoholics has primarily been conducted with male subjects, and studies on self-esteem do not reflect sufficient data on female alcoholics to allow comparisons. The paucity of information regarding female alcoholics may reverse as the number of female alcoholics seeking treatment is currently increasing. Lindbeck (1975) indicates that the female alcoholic suffers a lowered self-image not only from the single stigma of drinking, but because she is considered to be more of a moral transgressor than her male counterpart. Overall, male alcoholics in this study were found to have both higher self-esteem and lower death anxiety than female alcoholics. This lends support to the findings by Davis et al. (1978) of a negative relationship between death anxiety and level of self-esteem.



Males preferring the D treatment had significantly higher self-esteem scores than the other three treatment categories. When looking at specific treatment categories, it becomes apparent that some personality differences may exist among alcoholics choosing different treatment preferences. Disulfiram is often prescribed for outpatient treatment, and may reflect the alcoholic's feeling of independently coping with his problem (even if only temporarily) which may enhance the self-esteem score of this group. When looking at individual treatment categories, conflicting evidence is found which does not support previous research indicating that alcoholics accepting help have lowered self-esteem (Charlampus, et al., 1976; Matefy, et al., 1971).

Females were significantly more willing to attribute a locus of control to their behavior than were males (see Table 4). Although this effect was not related to specific locus-of-control categories, it may lend support to Nowicki and Hopper's (1974) suggestion that different approaches to alcoholics by sex and treatment modality are in order.

Further studies investigating the alcoholic client's perception of treatment techniques in relation to significant personality variables seems warranted.

Currently, much of the treatment for alcoholics is comprised of specific techniques which are often used indiscriminantly on all clients. Although these techniques may vary from facility to facility, depending on available funds, professional orientation, and the status of the alcoholic as a voluntary or committed client, many common factors exist. Many treatment facilities share as a common base the utilization of AA, disulfiram, group therapy, individual therapy, and leisure-time activities. The primary goal or desired treatment outcome is sobriety.

Obitz (1975) has commented on the large number of alcoholics who fail to find treatment reinforcing. Further examination of the perceptions of alcoholic clients regarding treatment may allow treatment professionals to match a given client with the most effective treatment technique. The results of the current study indicate that an interaction exists between specific personality factors, gender, and preference for a specific treatment technique. Upon examination, significant differences between the genders suggests that females may be a significantly more disturbed group than their male counterparts as indicated by the elevated DAS scores and significantly lower

self-esteem scores. This hypothesis supports Nowicki and Hopper's (1974) data which, based upon more extended locus-of-control scores by females, reported that female alcoholics involved in inpatient treatment may be a more disturbed group than male inpatients.

In conclusion, the choice of a particular treatment technique or combination of treatment techniques may be directly related to specific problem areas for the individual client. Thus, alcoholics who choose all possible treatment modalities may differ significantly from those choosing a single technique. Further research examining the perceptions of alcoholics toward various treatment techniques may allow for more efficient and effective treatment for the alcoholic client.

**REFERENCE NOTES**

REFERENCE NOTES

1. Hall, E.A. Self-concept development of active and recovered alcoholics. Unpublished Doctoral Dissertation, University of Arizona, 1974.
2. Hewitt, B. An investigation into the modification of locus of control in outpatient alcoholics and its relationship to preference for alcoholics anonymous. Unpublished Doctoral Dissertation, The College of William and Mary, 1977.

## REFERENCES

## REFERENCES

- Becker, C.E. Pharmacotherapy in the treatment of alcoholism. In J.H. Mendelson & N.K. Mello (Eds.), The Diagnosis & Treatment of Alcoholism. St. Louis; McGraw-Hill, 1979.
- Berg, N.L. Effects of alcohol intoxication on self-concept: Studies of alcoholics and controls in laboratory conditions. Quarterly Journal of Studies on Alcohol, 1971, 32, 442-453.
- Cahn, S. The treatment of alcoholics: An evaluative study. New York: Oxford University Press, 1970.
- Caster, D.U., & Parsons, O.A. Locus of control in alcoholics and treatment outcome. Journal of Studies on Alcohol, 1977, 38(11), 2087-2095.
- Caster, D.U., & Parsons, O.A. Relationship of depression, sociopathy, and locus of control to treatment outcome in alcoholics. Journal of Consulting and Clinical Psychology, 1977, 45, 751-756. (b)
- Charlampous, K.D., Ford, B.K., & Skinner, T.J. Self-esteem in alcoholics and nonalcoholics. Journal of Studies on Alcohol, 1976, 37(7), 990-994.
- Costello, R.M., & Manders, K.R. Locus of control and alcoholism. British Journal of Addiction, 1974, 69, 11-17.

Davis, S.F., Martin, D.A., Wilee, C.T., & Voorhees, J.W.

Relationship of fear of death and level of self-esteem in college students. Psychological Reports, 1978, 42, 419-422.

Diggory, J.C., & Rothman, D.Z. Values destroyed by death. Journal of Abnormal and Social Psychology, 1961, 63, 205-210.

First Special Report to the U.S. Congress on Alcohol & Health from the Secretary of Health, Education, and Welfare, December, 1971. (DHEW Publication No. HSM 73-9031, U.S. Public Health Service). Washington, D.C.: U.S. Government Printing Office, 1971.

Gerrein, J.R., Rosenberg, C.M., & Manohar, V. Disulfiram maintenance in outpatient treatment of alcoholism. Archives of General Psychiatry, 1973, 28(6), 798-802.

Goodwin, D.W. "Alcoholics anonymous as treatment and as ideology"; comments on the article by R.E. Tournier. Journal of Studies on Alcohol, 1979, 40(3), 318-319.

Goss, A., & Morosko, T.E. Relation between a dimension of internal-external control and the MMPI with an alcoholic population. Journal of Consulting and Clinical Psychology, 1970, 34(2), 189-192.



- Gozali, J., & Sloan, J. Control orientation as a personality dimension among alcoholics. Quarterly Journal of Studies on Alcohol, 1971, 32, 159-161.
- Gross, W.F., & Adler, L.O. Aspects of alcoholics' self-concept as measured by the Tennessee Self-Concept Scale. Psychological Reports, 1970, 27, 431-434.
- Hinrichsen, J.J. Locus of control among alcoholics: Some empirical and conceptual issues. Journal of Studies on Alcohol, 1976, 37(7), 908-916.
- Jellinek, E.M. The Disease Concept of Alcoholism. New Haven: Hillhouse Press, 1960.
- Koob, P.B., & Davis, S.F. Fear of death in military officers and their wives. Psychological Reports, 1977, 40, 261-262.
- Lindbeck V. The Woman Alcoholic. Public Affairs Pamphlet No. 529. New York: Public Affairs Committee, Inc., 1975.
- Lundwall, L., & Baekeland, F. Disulfiram treatment of alcoholism. A review. The Journal of Nervous and Mental Disease, 1971, 153(6), 381-394.

- Matefy, R.E., Kalish, R.A., & Cantor, J.M. Self-acceptance in alcoholics who accept and reject help. Quarterly Journal of Studies on Alcohol, 1971, 32, 1088-1091.
- Mendelson, J.H., & Mello, N.K. Diagnostic criteria for alcoholism and alcohol abuse. In J.H. Mendelson & N.K. Mello (Eds.), The Diagnosis & Treatment of Alcoholism. St. Louis: McGraw-Hill, 1979.
- Murphee, H.B. Some possible origins of alcoholism. In W.J. Filstead, J.J. Rossi, & M. Keller (Eds.), Alcohol and Alcohol Problems: New Thinking and New Directions. Cambridge: Ballinger, 1976.
- Nocks, J.J., & Bradley, D.L. Self-esteem in an alcoholic population. Diseases of the Nervous System, 1969, 30, 611-617.
- Nowicki, Jr., S., & Hopper, A.E. Locus of control correlates in an alcoholic population. Journal of Consulting and Clinical Psychology, 1974, 42(5), 735.
- Obitz, F.W. Alcoholics' perceptions of selected counseling techniques. British Journal of Addiction, 1975, 70, 187-191.

- Obitz, F.W., Wood, J.D., & Cantergiani, N. Alcoholics' perceptions of group therapy and alcoholics anonymous. British Journal of Addiction, 1977, 72, 321-324.
- Oziel, L.J., & Obitz, F.W. Control orientation in alcoholics related to extent of treatment. Journal of Studies on Alcohol, 1975, 36(1), 158-151.
- Reid, D.W., & Ware, E.E. Multidimensionality of internal-external control: Implications for past and future research. Canadian Journal of Behavioural Science, 1973, 5, 264-271.
- Reid, D.W., & Ware, E.E. Multidimensionality of internal-external control: Addition of a third dimension and non-distinction of self versus others. Canadian Journal of Behavioural Science, 1976, 6, 131-142.
- Rohsenow, D.J., & O'Leary, M.R. Locus of control research on alcoholic populations: A review. II. Relationships to other measures. The International Journal of Addictions, 1973, 13(2), 213-226.
- Rotter, J.B. Generalized Expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80(1, Whole No. 609).

Sadowski, C.J., Davis, S.F., & Loftus-Vergari, M.C.

Locus of control and death anxiety. Omega,

1979-80, 10(3), 203-210.

Stafford, R.A. Alcoholics' perception of the

internal-external locus of their drinking

problem. Journal of Studies on Alcohol, 1980,

41(3), 300-309.

Templer, D.I. The construction and validation of a

death anxiety scale. Journal of General Psychology,

1970, 82, 165-177.

Templer, D.I., Lester, D., & Ruff, C.F. Fear of death

and femininity. Psychological Reports, 1974,

35, 530.

Templer, D.I., & Ruff, C.F. Death anxiety scale means,

standard deviations, and embedding. Psychological

Reports, 1971, 29, 173-174.

Tournier, R.E. Alcoholics Anonymous as treatment and

as ideology. Journal of Studies on Alcohol,

1979, 40(3), 230-239.

Twelve Steps and Twelve Traditions. New York:

Alcoholics Anonymous World Services, Inc.,

1952.

## APPENDIX A

### Evaluation Instruments

First, please fill out all the questions on the top two pages. These sheets are completely anonymous and you do not need to put your name on any of the sheets.

This booklet has three questionnaires in it. Please answer each of the questions to the best of your ability and mark your answer on the sheet provided. Please do not write on the booklet. This is not timed, and you will probably be able to finish in an hour or less.

If you have any questions, I will be glad to answer them. Please don't share your thoughts or answers with others doing the questionnaire.

I appreciate your participation and want to thank you for agreeing to help in this research.

INSTRUCTIONS GIVEN TO SUBJECTS



10. Is this your first admission into a hospital program for alcoholism?

yes ( ) no ( )

If not, how many times have you been in a hospital program for alcoholism in the last 2 years? \_\_\_\_\_

11. Do you think you are an alcoholic? yes ( ) no ( )

12. Antabuse is a drug sometimes prescribed by a doctor to help alcoholics stop drinking. When taking antabuse, drinking alcoholic beverages makes a person ill.

a. Would you be willing to begin taking antabuse? yes ( ) no ( )

b. Have you ever taken antabuse? yes ( ) no ( )

c. If yes, when did you last use it? \_\_\_\_\_

d. Was it by your choice? yes ( ) no ( )

e. If not your choice, who made the decision for you?  
\_\_\_\_\_

13. Alcoholics Anonymous (A.A.) is a voluntary group of alcoholics working to keep themselves sober and help others keep and stay sober.

a. Have you ever attended an A.A. meeting by your own choice?

yes ( ) no ( )

b. Do you regularly attend A.A. by choice? yes ( ) no ( )

c. If yes, how often a week? \_\_\_\_\_

14. Do you feel A.A. is a good support system for you?

yes ( ) no ( ) never attended ( )



Questionnaire # 1

- 1. True False
- 2. True False
- 3. True False
- 4. True False
- 5. True False
- 6. True False
- 7. True False
- 8. True False
- 9. True False
- 10. True False
- 11. True False
- 12. True False
- 13. True False
- 14. True False
- 15. True False

Questionnaire # 2

- 1. a b c d e
- 2. a b c d e
- 3. a b c d e
- 4. a b c d e
- 5. a b c d e
- 6. a b c d e
- 7. a b c d e
- 8. a b c d e
- 9. a b c d e
- 10. a b c d e
- 11. a b c d e
- 12. a b c d e
- 13. a b c d e
- 14. a b c d e
- 15. a b c d e
- 16. a b c d e

Questionnaire # 3

- |         |         |         |
|---------|---------|---------|
| 1. A B  | 16. A B | 31. A B |
| 2. A B  | 17. A B | 32. A B |
| 3. A B  | 18. A B | 33. A B |
| 4. A B  | 19. A B | 34. A B |
| 5. A B  | 20. A B | 35. A B |
| 6. A B  | 21. A B | 36. A B |
| 7. A B  | 22. A B | 37. A B |
| 8. A B  | 23. A B | 38. A B |
| 9. A B  | 24. A B | 39. A B |
| 10. A B | 25. A B | 40. A B |
| 11. A B | 26. A B | 41. A B |
| 12. A B | 27. A B | 42. A B |
| 13. A B | 28. A B | 43. A B |
| 14. A B | 29. A B | 44. A B |
| 15. A B | 30. A B | 45. A B |

Q U E S T I O N N A I R E B O O K L E T

3

This project is strictly voluntary. The summation of information will be compiled and utilized for research. There is absolutely no personal identifying information on these forms.

Questionnaire # 1

DEATH ANXIETY SCALE

Please circle the following statements True or False as they apply to you:

- |     |  |      |       |
|-----|--|------|-------|
| 1.  | I am very much afraid to die.                                | True | False |
| 2.  | The thought of death seldom enters my mind.                  | True | False |
| 3.  | It doesn't make me nervous when people talk about death.     | True | False |
| 4.  | I dread to think about having to have an operation.          | True | False |
| 5.  | I am not at all afraid to die.                               | True | False |
| 6.  | I am not particularly afraid of getting cancer.              | True | False |
| 7.  | The thought of death never bothers me.                       | True | False |
| 8.  | I am often distressed by the way time flies so very rapidly. | True | False |
| 9.  | I fear dying a painful death.                                | True | False |
| 10. | The subject of life after death troubles me greatly.         | True | False |
| 11. | I am really scared of having a heart attack.                 | True | False |
| 12. | I often think about how short life really is.                | True | False |
| 13. | I shudder when I hear people talking about a World War III.  | True | False |
| 14. | The sight of a dead body is horrifying to me.                | True | False |
| 15. | I feel that the future holds nothing for me to fear.         | True | False |

Questionnaire # 2

TEXAS SOCIAL BEHAVIOR INVENTORY

1. I am not likely to speak to people until they speak to me.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

2. I would describe myself as self-confident.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

3. I feel confident of my appearance.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

4. I am a good mixer.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

5. When in a group of people, I have trouble thinking of the right things to say.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

6. When in a group of people, I usually do what the others want rather than make suggestions.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

7. When I am in disagreement with other people, my opinion usually prevails.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

8. I would describe myself as one who attempts to master situations.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

9. Other people look up to me.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

10. I enjoy social gatherings just to be with people.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

11. I make a point of looking other people in the eye.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

12. I cannot seem to get others to notice me.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

13. I would rather not have very much responsibility for other people.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

14. I feel comfortable being approached by someone in a position of authority.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

15. I would describe myself as indecisive.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

16. I have no doubts about my social competence.

a	b	c	d	e
Not at all character- istic of me	Not very	Slightly	Fairly	Very much character- istic of me

REID-WARE THREE FACTOR LOCUS OF CONTROL SCALE

This questionnaire is a measure of personal belief: obviously there are no right or wrong answers. Each item consists of a pair of alternatives lettered (A) and (B). Please select the one statement from each pair (and only one) which you more strongly believe to be more true rather than the one you think you should choose or the one you might like to be true.

Please answer these items carefully, but do not spend too much time on any one item. Be sure to choose one of the options for every item. Mark the letter of the statement (A or B) on the answer sheet.

In some cases you may discover that you believe both statements or neither one. In such cases be sure to select the one you more strongly believe to be the case as far as you are concerned. Also try to respond to each item independently when making your choice: do not be influenced by your previous choices.

1. (A) Various sports activities in the community help increase solidarity amongst people in the community.  
(B) Various sports activities in the community can lead to rivalry detrimental to solidarity in the community.
2. (A) War brings out the worst aspects of men.  
(B) Although war is terrible, it can have some value.
3. (A) There will always be wars no matter how hard people try to prevent them.  
(B) One of the major reasons we have wars is because people do not take enough interest in politics.
4. (A) Even when there is nothing forcing me, I have found that I will sometimes do things I really did not want to do.  
(B) I always feel in control of what I am doing.
5. (A) There are institutions in our society that have considerable control over me.  
(B) Little in this world controls me, I usually can do what I decide to do.
6. (A) I would like to live in a small town or rural environment.  
(B) I would like to live in a large city.
7. (A) For the average citizen becoming a success is a matter of hard work, luck has little or nothing to do with it.  
(B) For the average guy getting a good job depends on being in the right place at the right time.

8. (A) Patriotism demands that the citizens of a nation participate in any war.
- (B) To be a patriot for one's country does not necessarily mean he must go to war for his country.
9. (A) In my case getting what I want has little or nothing to do with luck.
- (B) It is not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
10. (A) Sometimes I impulsively do things which at other times I definitely would not let myself do.
- (B) I find I can keep my impulses in control.
11. (A) In many situations what happens to people seems to be determined by fate.
- (B) People do not realize how much they personally determine their own outcomes.
12. (A) College students should be trained in times of peace to assume military duties.
- (B) The ills of war are greater than any possible benefits.
13. (A) Most people do not realize the extent to which their lives are controlled by accidental happenings.
- (B) For any guy, there is no such thing as luck.
14. (A) If I put my mind to it I could have an important influence on what a politician does in office.
- (B) When I look at it carefully I realize it is impossible for me to have any really important influence over what politicians do.
15. (A) With fate the way it is, many times I feel that I have little influence over the things that happen to me.
- (B) It is impossible for me to believe that chance or luck plays an important role in my life.
16. (A) When I put my mind to it I can constrain my emotions.
- (B) There are moments when I cannot subdue my emotions and keep them in check.
17. (A) Every person should give some of his time for the good of his town or country.
- (B) People would be a lot better off if they could live far away from other people and never have to do anything for them.

18. (A) As far as the affairs of our country are concerned, most people are the victim of forces they do not control and frequently do not even understand.
- (B) By taking part in political and social events the people can directly control much of the country's affairs.
19. (A) People cannot always hold back their personal desires; they will behave out of impulse.
- (B) If they want to, people can always control their immediate wishes and not let these motives determine their total behavior.
20. (A) Many times I feel I might just as well decide what to do by flipping a coin.
- (B) In most cases I do not depend on luck when I decide to do something.
21. (A) Our federal government should promote the mass production of low rental apartment buildings to reduce the housing shortage.
- (B) The best way for our government to reduce the housing shortage is to make low interest mortgages available and stimulate the building of low cost houses.
22. (A) I do not know why politicians make the decisions they do.
- (B) It is easy for me to understand why politicians do the things they do.
23. (A) Although sometimes it is difficult, I can always willfully restrain my immediate behavior.
- (B) Something I cannot do is have complete mastery over all my behavioral tendencies.
24. (A) In the long run people receive the respect and good outcomes they worked for.
- (B) Unfortunately, because of misfortune or bad luck, the average guy's worth often passes unrecognized no matter how hard he tries.
25. (A) With enough effort people can wipe out political corruption.
- (B) It is difficult for people to have much control over the things politicians do in office.
26. (A) Letting your friends down is not so bad because you cannot do good all the time for everybody.
- (B) I feel very bad when I have failed to finish a job I promised I would do.



27. (A) By active participation in the appropriate political organizations people can do a lot to keep the cost of living from going higher.
- (B) There is very little people can do to keep the cost of living from going higher.
28. (A) It is possible for me to behave in a manner very different from the way I would want to behave.
- (B) It would be very difficult for me to not have mastery over the way I behave.
29. (A) In this world I am affected by social forces which I neither control nor understand.
- (B) It is easy for me to avoid and function independently of any social forces that may attempt to have control over me.
30. (A) It hurts more to lose money than to lose a friend.
- (B) The people are the most important thing in this world of ours.
31. (A) What people get out of life is always a function of how much effort they put into it.
- (B) Quite often one finds that what happens to people has no relation to what they do, what happens just happens.
32. (A) Generally speaking, my behavior is not governed by others.
- (B) My behavior is frequently determined by other influential people.
33. (A) People can and should do what they want to do both now and in the future.
- (B) There is no point in people planning their lives too far in advance because other groups of people in our society will inevitably upset their plans.
34. (A) Happiness is having your own house and car.
- (B) Happiness to most people is having their own close friends.
35. (A) There is no such thing as luck, what happens to me is a result of my own behavior.
- (B) Sometimes I do not understand how I can have such poor luck.
36. (A) More emphasis should be placed on teaching the principles of Christianity in the public schools.
- (B) Christianity should not be included in a school curriculum; it can be taught in church.

37. (A) Many of the unhappy things in people's lives are at least partly due to bad luck.
- (B) People's misfortunes result from the mistakes they make.
38. (A) Self-regulation of one's behavior is always possible.
- (B) I frequently find that when certain things happen to me I cannot restrain my reactions.
39. (A) The average man can have an influence in government decisions.
- (B) This world is run by a few people in power and there is not much the little guy can do about it.
40. (A) When I make up my mind, I can always resist temptation and keep control of my behavior.
- (B) Even if I try not to submit, I often find I cannot control myself from some of the enticements in life such as overeating or drinking.
41. (A) My getting a good job or promotion in the future will depend a lot on my getting the right turn of fate.
- (B) When I get a good job, it is always a direct result of my own ability and/or motivation.
42. (A) Successful people are mostly honest and good.
- (B) One should not always associate achievement with integrity and honor.
43. (A) Most people do not understand why politicians behave in the way they do.
- (B) In the long run people are responsible for bad government on a national as well as on a local level.
44. (A) I often realize that despite my best efforts some outcomes seem to happen as if fate planned it that way.
- (B) The misfortunes and successes I have had were the direct result of my own behavior.
45. (A) Most people are kind and good.
- (B) People will not help others unless circumstances force them to.

**APPENDIX B**

**Tables**

Table 1

Number of Subjects by Sex and Treatment Preference

	Alcoholics Anonymous (AA)	Disulfiram (D)	Neither (n)	Both (E)
Male	7	13	9	10
Female	2	4	5	1

Table 2

Mean Male-Female DAS Scores by Treatment Category

---

	AA	D	N	B	Average over All Categories
Male	8.00	7.76	7.22	9.00	7.99
Female	-	-	-	-	9.09

---

Table 3

Mean Male-Female TSBI Scores by Treatment Category

---

	AA	D	N	E	Average over All Categories
Male	36.71	40.76	35.83	36.40	37.80
Female	-	-	-	-	34.53

---