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ABSTRACT

This paper describes an attempt to ascertain differences between an alcoholic and a non-alcoholic group of males. The author feels that as long as the characteristics and needs of alcoholics are not understood treatment programs will continue simplistic ineffective and even harmful. The study compares the profiles of alcoholics and non-alcoholics on a specifically developed questionnaire which yielded information on demographic data, defensiveness, motivations for smoking, coping styles, effects of drinking, self esteem, depression, aggression, death wishes, and paranoid thinking. The study indicates that drinking for alcoholics is both comforting and troublesome; that alcoholism is linked with depression in one-third of the sample; and that low self esteem characteristics the alcoholic group. The author also finds variation within the alcoholic population, and stresses the need for treatment programs to be planned responsively to meet the various needs of alcoholics. (NB)

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## Treatment Related Factors in Alcoholic Populations

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There persists in some quarters a lingering belief that alcoholism is merely an unfortunate habit albeit one not easily banished. The logical corollary to this notion is that little training is necessary for those who treat alcoholism. This "bad habit" concept continues to breed simplistic treatment programs ranging from those in which participants need only sit through several lectures about alcoholism to "aversion" methods where the patient's respiratory capability is briefly suspended after he has imbibed an alcoholic beverage.

A simplistic approach to alcoholism also obscures the fact that alcoholism is not a unitary disorder but an end point for a number of syndromes. Only through closer scrutiny of alcoholic and non-alcoholic populations and further delineation of their characteristics will the various "alcoholisms" be better understood. Even where characteristics and syndromes found in alcoholics may not be etiologically significant, and at present we cannot always know which are cause or consequence of alcoholism, greater awareness of them will nevertheless contribute to a more rational approach to alcoholism treatment. The failure rate seen in many alcoholism programs may be the outcome of treating all alcoholics alike or assigning them to different treatment programs in a random manner. For example, the alcoholism literature frequently refers to depression in alcoholic populations. Nevertheless, most alcoholism treatment programs make little systematic effort to determine the presence or severity of clinical depression in their patient groups, a fact that could significantly alter treatment outcome.

The need to develop criteria for measuring alcoholism population characteristics which influence treatment outcome has been recognized.<sup>1,2</sup> Just as the

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likelihood of a successful outcome is increased when subjects are treated in programs congruent with their needs, programs that fail to recognize these needs have a negative effect beyond high failure rates. The frustration and confusion engendered by inappropriate programs, no matter how well intentioned, can lead to unsuccessfully treated individuals subsequently shunning all treatment programs.

This paper will demonstrate some of the significant personality and behavioral differences between alcoholic and non-alcoholic populations. More importantly, it is hoped it will break ground for the development of practical self-administered questionnaires which will be of value in classifying alcoholics in terms of characteristics which are potentially treatment-related. Given the understaffing in alcoholism programs generally, the value of an instrument for rapid assessment of the treatment needs of subjects entering alcoholism programs is obvious. The search for significant differences within alcoholic populations in this paper is confined to parameters which have either proven or potential treatment relevance, factors whose presence may have therapeutic implications.

#### METHOD

A self-administered questionnaire was developed to search for characteristics selected for their potential in contributing to more responsive alcoholism treatment programs. Adequate reliability was first established wherever a modified shorter scale was substituted for an original scale ( $\alpha < 0.59$ ). Respondents completed the self-administered questionnaire in the presence of an interviewer who provided clarification when needed.

The study group was 289 alcoholic men undergoing treatment in inpatient (163 subjects) and outpatient (126 subjects) programs in several southeastern Michigan cities. All were required to fill out the questionnaire. The controls were 302 men who voluntarily completed the questionnaire after renewing their driver licenses. The latter group received \$3.00 each to complete the hour-long questionnaire. Some 60% of potential controls refused the questionnaire.

usually pleading lack of time. Thirty-three control questionnaires were later eliminated because of responses indicating a drinking problem, leaving 269.

## RESULTS

### Demographic Data

A summary of the demographic data appears in Table 1. The control group was younger, more educated, and less often divorced. Many controls were college students, hence the lower income despite more education.

### Defensiveness

Any questionnaire approach to personal data must assess respondent candor. This was done by using two sub-components of the Crowne-Marlowe Social Desirability Scale<sup>3</sup> to assess defensiveness and deception in responses. One seven item scale measured the tendency to assert good things about oneself ("I have never deliberately said something that hurt someone's feelings"), while another seven item scale measured the tendency to deny bad ("I sometimes feel resentful when I don't get my way").

The Assert Good subscale revealed no significant difference between the alcoholic group (mean = 8.46, SD = 3.28) and the control group (mean = 7.94, SD = 3.49). However, the alcoholics' mean score for the Deny Bad subscale was strikingly lower, indicating less denial for the alcoholics (mean = 4.75, SD = 3.70) than the controls (mean = 6.69, SD = 4.00), ( $t = 5.75, p < .0001$ ). Thus the alcoholics appeared more likely to acknowledge unfavorable facts about themselves than did the control group.

The reduced defensiveness ("Deny Bad") of the alcoholic group would have us anticipate less covering up of unfavorable data resulting in higher scores for them on certain measures. The alcoholics might then appear more handicapped than they really were when compared with the control group. The results of the comparisons between the alcoholic and control group would then have to be interpreted in the light of the difference in Deny Bad indices. One corrective

approach is to control for the differential effects of the Deny Bad tendency through analysis of covariance. In this type of analysis a between-group comparison is made on a particular variable which had been adjusted for its association with a covariate measure, in this case the Deny Bad tendency. The corrected difference between the groups is then tested for significance with the F-test as if each person had the same Deny Bad status. This was done and the results of the covariance analyses on the various measures, with Deny Bad as covariate, indicated that many means for the alcoholics needed minor downward adjustments whereas the means for the control group were adjusted a little upward. The corrected intergroup differences became slightly less pronounced; the corrected data are used in this paper. Hence, the contrasts between alcoholics and non-alcoholics in this study are not an artifact created by defensive differences.

#### Reasons for Drinking

Do alcoholics drink for different reasons than a non-alcoholic population? Subjects checked whether they agreed or disagreed with a series of statements setting forth the reasons they drink. The alcoholic group expressed significantly higher agreement than the controls with statements indicating that they drank when worried, depressed, or tense ("Tension Relief", Table 2). The alcoholics also expressed significantly higher agreement with statements indicating they drank to attain relaxation. ("Drinking helps me overcome being shy", . . . helps me relax", etc.). The mean agreements as expressed by composite scores of the groupings of questions are shown in Table 2. In effect, the alcoholics drank mostly for tension relief, while the controls drank largely for relaxation with relatively few using it for relief of tension. It may prove valuable to determine whether an individual alcoholic drinks relatively more for tension relief or for relaxation, since this difference may have a direct bearing on treatment approach and outcome.

## Effects of Drinking

What does alcohol do for alcoholics as contrasted to others who drink? Subjects were asked "When you drink, what does alcohol do for you?", followed by statements about the effects of their drinking. The listed effects can be broadly divided into those which were troublesome ("makes me depressed", ". . .lose control", ". . .get in trouble with others") versus comforting effects (" . . .more relaxed", ". . .happy", ". . .less concerned about problems", etc.). As shown in Table 2, the alcoholic group reported significantly more troublesome effects than the controls, but, paradoxically, significantly more comfortable effects as well, although the latter were not as significantly greater.

## Leisure Activities

Subjects were presented with the list of leisure activities shown in Table 3 and a five-point frequency scale ranging from "never" to "very often". Table 3 reveals that the alcoholics were less involved in all activities except for "drinking with friends". The most pronounced difference between the two groups were non-drinking activities with friends and reading.

Both groups showed similar patterns of leisure time preferences, with the alcoholics spending much less time in all activities except for "drinking with friends".

## Coping with Tension or Depression

To determine how alcoholics and controls attempt to cope with anxiety and depression, subjects were asked, "How often do you do each of the following when you are depressed or nervous or tense?" The five-point response scale ranged from "never" to "very often" followed by a list of possibilities which included tranquilizers, other medications, smoking a great deal, having a drink, physical activity, going to a movie, thinking it over, talking the problem over with someone, and talking to others but not about the problem. Two clusters emerged from a hierarchical cluster analysis of these coping behaviors (Table 4).



One cluster labelled "coping-oral substance use" consisted of taking a tranquilizer, taking other medications, smoking, or having a drink.

The second cluster, coping without substance use, consisted of physical activity, going to see a movie, thinking it over, talking the problem over with someone, or talking to other people but not about the problem.

A score for each of the two clusters was calculated for each respondent by summing the associated item responses. The means of the two cluster scores appear in Table 4 revealing that the alcoholics resorted significantly more frequently than the controls to oral substances to relieve emotional discomfort, whereas the control group used significantly more diverse non-substance means of coping with depression and tension.

An additional analysis of oral substance use was done eliminating the "having a drink" item to see if alcoholics used other oral substances significantly more than the controls. As seen in Table 4, this turned out to be the case.

#### Self-Esteem

Seven statements from a profile developed by Rosenberg<sup>4</sup> were used to assess self-esteem. The profile probed respondents' level of agreement with statements reflecting self-worth, self-satisfaction and feelings of being successful, ("On the whole, I am satisfied with myself", etc.). As seen in Table 5, the alcoholic group demonstrated significantly less self-esteem.

#### Depression

Two profiles were used to evaluate depression: a twelve question version of the Zung Self-Rating Depression Scale (SDS)<sup>5</sup> and form G of Lubin's Depression Adjective Check List (DACL)<sup>6</sup>. The Zung questions are either directly mood-related ("blue", "crying") or establish the frequency of symptoms associated with depression ("tire for no reason", "poor appetite", "trouble sleeping", etc.).

The Depression Adjective Check List consists of thirty-four words generally related to depressed states ("sad", "failure", "sunk") or feelings of well being ("merry", "eager", "whole"). Subjects were asked to check all those words which

describe "How you feel--in general".

Table 5 shows the sharply higher depression scores for the alcoholic group on both depression scales. Clearly, alcoholics are far more depressed than the general population. However, clinicians would naturally wish to know how many of these subjects have depressions of clinical magnitude. This information can be gleaned from extrapolating prior work with the DACL to our current study groups. Lubin<sup>7</sup> reported a median DACL score of 15 with a standard deviation of 6 for psychiatric patients being treated for depression. If we take 15 and above as a conservative threshold for moderately severe to severe depression, 33% of our alcoholic group as compared to only 6% of the control group had depressions of clinical severity.

#### Death Wishes

In seeking further information about the presence of depression and despair, a series of questions about suicide was used. Three questions were related to thoughts of suicide while two questions determined whether suicide had been attempted in the prior year or during the respondent's lifetime. In the first question, subjects were asked whether they had ever felt like taking their lives. 43% of the alcoholics responded affirmatively, as did 22% of the controls. The same question was then repeated, but restricted to the prior twelve months, with responses of 30% and 14%, respectively. Those who had thought of committing suicide during the prior year were then asked how seriously they had considered it. 21% of the alcoholic group and 6% of the control group who had thought of suicide during the previous year indicated they had considered it very seriously.

5% of the alcoholic group and 1% of the controls had actually attempted suicide one or more times during the previous year, with 14% and 4%, respectively, indicating at least one suicide attempt during their lifetimes.

#### Aggression

An eleven item scale from the Buss-Durkee Inventory<sup>8</sup> was used to assess subjects' degree of agreement with statements reflecting aggressive and irritable



feelings ("It makes my blood boil to have somebody make fun of me", "I often feel like a powder keg ready to explode", etc.). Inasmuch as feelings may not correspond to aggressive acts, two additional questions were: "How often during the past year have you been involved in a fist fight?" and "How often during the past year did you become so angry that you threw or broke things?"

The Buss-Durkee aggression profile in Table 5 showed the alcoholics having a significantly more aggressive stance. As for the incidence of fist fights and throwing or breaking things during the preceding year, the alcoholics were also more prone to suit action to their feelings, reporting significantly more of both episodes. The alcoholics averaged 0.46 fights during the year and 0.98 episodes of throwing and breaking objects, versus 0.14 and 0.57 for the control group.

#### Paranoid Thinking

Paranoid indices for each group were constructed using eight items from the Buss-Durkee Inventory<sup>8</sup> which reflected subjects' agreement with items expressing suspicion ("I commonly wonder what hidden reason another person may have for doing something nice for me") and resentment ("I feel I get a raw deal out of life") plus four additional questions scattered in the questionnaire: "How often do you feel (1) that someone is trying to spoil things for you?; (2) that someone holds a grudge against you?; (3) that things are rigged against you?; (4) envious of other people? The mean paranoid indices derived from all 12 questions appear in Table 5 with the alcoholics displaying a significantly higher paranoid index.

#### DISCUSSION

Why do the alcoholics appear more honest with lower scores on the Deny Bad scale? Are they more realistic about themselves? A critical difference between the alcoholic and control groups in this study was that the former were in an alcoholism treatment setting when filling out the questionnaire, a context that might tend to reduce their defensiveness. In one sense, the defensiveness data is at variance with the traditional "denial" seen in alcoholic

patients,<sup>9</sup> although that denial usually refers to denial of a drinking problem as such. Conversely, work with the Michigan Alcoholism Screening Test (MAST) reveals surprisingly candid responses from most alcoholics answering questions about specific problems related to drinking.<sup>10,11</sup>

Drinking for the alcoholic group appears more purposeful, more "goal" oriented. Their reasons for drinking are in stark contrast to the control group, providing further evidence that drinking for the alcoholic is not only quantitatively different, but different in terms of motivation and urgency.

That the alcoholics reported they drank more to relieve feelings of stress or in an effort to attain social ease is hardly surprising. Nor is the fact that their drinking leads to troublesome effects, since the latter define the condition of alcoholism. What is somewhat paradoxical at first glance is that many alcoholics reported not only troublesome effects but were also quite emphatic about the comforting effects of their drinking. Nevertheless, the troublesome effects appear to outweigh the comforting effects for the alcoholics if one compares their relative differences from the values for the control group. The controls, on the other hand, rarely drank explicitly for tension relief, but did so for relaxation.

The data for the alcoholic group's leisure time activities and coping efforts are consistent with our clinical knowledge of alcoholism. The former data suggest that most alcoholics do not find gratification in the leisure pursuits which others find fulfilling. Drinking with others is often the only gratifying leisure activity. The coping data also point to heavier reliance on drugs and alcohol at the expense of more cerebral, physical, or interpersonal leisure activity.

Knowledge of reasons for and effects of drinking as it applies to individual alcoholic patients as well as precise information regarding available coping mechanisms and effective leisure patterns have obvious relevance to therapeutic strategies. Since alcoholics show wide variation in these parameters, accurate knowledge regarding their presence is important. This becomes more so as therapies

emphasizing social processes become available and are blended with those which stress the resolution of intrapsychic conflict.

The lack of self-esteem of many alcoholics confronts us with the problem of attempting to assess the etiologic role of lack of self-esteem (and all deviations from normal reported here) in alcoholism. What our research does not tell us is whether lower scores for self-esteem are a cause or a result of the patient's alcoholism. To be an alcoholic must surely be detrimental to self-esteem. Although the general assumption is that the alcoholic's personality differences are present prior to the onset of their alcoholism, one cannot help but ponder to what degree alcoholism itself contributes to some of these findings.

Alcoholism has been linked with depression in genetic studies.<sup>12</sup> In this view some forms of alcoholism may be genetically derived depressive equivalents. Our finding that full one third of the patients in the alcoholic group suffer from serious depression may in effect be revealing a deficiency in current alcoholism treatment programs. Assuming all alcoholic populations have substantial numbers of seriously depressed patients, can the depressed segment be successfully helped without treating their depression?

The data on aggressive feelings, aggressive acts, and paranoid thinking further emphasize that many alcoholics are quite different from non-alcoholics and from each other, and that these differences should not be overlooked in treatment programs since they may contribute to the onset and perpetuation of the patient's alcoholism.

The approach described in this paper offers the possibility of determining each alcoholic's degree of reliance on drinking and drug taking activity for gratification and/or allaying unpleasant affect or anxiety. In addition, it indicates which alcoholics are and are not needful of treatment programs designed to alter counterproductive leisure and coping patterns.

Hopefully, the data in this paper will stimulate further efforts to develop an easily administered method for systematically examining the psychological and social characteristics of alcoholic populations in general, as well as the characteristics of alcoholic individuals. This general approach offers an opportunity to make alcoholism treatment more responsive to patient needs.

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Table 1. -- Demographic Data for Alcoholics and Controls

Variable	Alcoholic N = 289	Control N = 269
Mean Age	43	35
Mean Education (years)	11.7	14.3
Mean Income	\$12,500	\$11,200
Marital Status		
Married	65%	63%
Divorced-Separated	25%	5%
Single	8%	31%
Widowed	2%	1%
Race		
White	82%	91%
Black	14%	5%
Other	4%	4%



Table 2.--Reasons for Drinking and Effects of Drinking for Alcoholics and Controls

	Alcoholics (N=289) Mean	Controls (N=269) Mean	t-test	significance
<b>Reasons for Drinking</b>				
Tension Relief	6.20	1.85	24.04	<.0001
Items = 3				
Range = 0-9				
Social Relaxation	5.65	3.67	11.58	<.0001
Items = 3				
Range = 0-9				
<b>Effects of Drinking</b>				
Troublesome Consequences	5.40	1.56	21.72	<.0001
Items = 3				
Range = 0-12				
Comfortable Consequences	11.68	7.80	14.41	<.0001
Items = 5				
Range = 0-12				

Table 3.--Comparison of Leisure Time Activities for Alcoholics and Controls

Activity	Alcoholics (N=289) Mean	Controls (N=269) Mean	t-test	significance
Watching TV	3.28	3.28	0.03	ns
Reading	3.56	3.99	4.88	<.001
Church or club activities	2.16	2.42	2.46	<.05
Working around the house	3.31	3.49	2.01	<.05
Working on the car	2.55	2.68	1.24	ns
Family activities	3.30	3.97	6.56	<.0001
Getting together with relatives	2.54	2.77	2.63	<.01
Getting together with friends	3.06	3.48	4.86	<.001
Going out drinking with friends	2.57	2.08	4.56	<.001

Table 4.--Methods of Coping with Tension or Depression

Method of Coping	Alcoholics (N=289) Mean	Controls (N=269) Mean	t-test	significance
Oral Substances Items = 4 Range = 0-16	6.44	2.59	19.26	<.0001
Non-Substance Items = 5 Range = 0-20	10.24	11.47	4.56	<.0001
Oral Substances Minus "Having a Drink" Items = 3 Range = 0-12	4.11	1.64	14.33	<.0001

Table 5.--Personality Variables of Alcoholics and Controls

Variables	Alcoholics (N=289) Mean	Controls (N=269) Mean	t-test	significance
Self-Esteem Items = 7 Range = 0-21	14.56	17.45	9.48	< .0001
Depression (SDS) Items = 12 Range = 0-30	18.64	10.95	13.58	< .0001
Depression (DACL) Items = 34 Range = 0-34	12.25	6.13	11.89	< .0001
Aggression Items = 11 Range = 0-33	17.45	13.33	7.88	< .0001
Paranoid Thinking Items = 12 Range = 0-36	17.89	12.05	10.85	< .0001