

5-22-1975

Marital Status as a Discriminator and Treatment Variable among Female Alcoholics

James C. Knapp
Portland State University

Follow this and additional works at: https://pdxscholar.library.pdx.edu/open_access_etds



Part of the [Substance Abuse and Addiction Commons](#), and the [Women's Health Commons](#)

Let us know how access to this document benefits you.

Recommended Citation


Knapp, James C., "Marital Status as a Discriminator and Treatment Variable among Female Alcoholics" (1975). *Dissertations and Theses*. Paper 2444.
<https://doi.org/10.15760/etd.2444>

This Thesis is brought to you for free and open access. It has been accepted for inclusion in Dissertations and Theses by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.

AN ABSTRACT OF THE THESIS OF James C. Knapp for the Master of Social Work presented May 22, 1975.

Title: Marital Status as a Discriminator and Treatment Variable Among Female Alcoholics.

APPROVED BY MEMBERS OF THE THESIS COMMITTEE:


James L. Breedlove, Chairman


Quentin D. Clarkson


Edward M. Scott

In this study marital status and the alcoholism or non-alcoholism of the spouse are hypothesized to be important factors affecting the female alcoholic's personality and treatability. Using as a sample a group of women seen at a public treatment center for alcoholism, personality measurement variables were obtained from the Minnesota Multiphasic Personality Inventory and the Edwards Personal Preference Schedule. On the basis of these variables and of the additional variable of age, discrimination among this group of women was attempted using a stepwise discriminant analysis.

Classification of this group of women by marital status into four groups (1. alcoholic women with alcoholic spouses; 2. alcoholic women with non-alcoholic spouses; 3. single alcoholic women; and 4. non-alcoholic women married to alcoholics) was achieved on a much better than by chance basis. The greatest amount of discrimination comes from the MMPI scores and from age.

Three alcoholic subgroups classified with non-alcoholic women in a stepwise discriminant function were explored further to determine the basis of this classification. Of these three subgroups of alcoholic women, the alcoholic women with alcoholic spouses were found to be most like the non-alcoholic women, suggesting the possibility of greater treatability for this particular group.

The results of this study indicate that the factor of marital status and the alcoholism or non-alcoholism of husbands is an important etiological and treatment variable to explore in further research.

MARITAL STATUS AS A DISCRIMINATOR AND
TREATMENT VARIABLE AMONG FEMALE ALCOHOLICS

by

JAMES C. KNAPP

A thesis submitted in partial fulfillment of the
requirements for the degree of

MASTER
of
SOCIAL WORK

Portland State University
1975

TO THE OFFICE OF GRADUATE STUDIES AND RESEARCH:

The members of the Committee approve the thesis of
James C. Knapp presented May 21, 1975.



James L. Breedlove, Chairman



Quentin D. Clarkson



Edward M. Scott

APPROVED:



Gordon Hearn, Dean, School of Social Work



David T. Clark, Dean of Graduate Studies and Research

TABLE OF CONTENTS

	PAGE
LIST OF TABLES	iv
CHAPTER	
I INTRODUCTION	1
II REVIEW OF THE LITERATURE	3
III DESCRIPTION OF THE PROBLEM	6
IV METHOD	9
V THE RESULTS	12
VI CONCLUSIONS AND RECOMMENDATIONS	40
REFERENCES	43
APPENDIX	45

LIST OF TABLES

TABLE	PAGE
I Age Distribution of Total Sample	12
II Levels of Education Attained in Total Sample	13
III Family Income Range in Total Sample.	13
IV Marital Status in Total Sample	14
V Marital Status/Spouse in Total Sample.	15
VI Means of the 28 Variables.	16
VII Summary Table.	18
VIII Number of Cases Classified into Groups	20
IX Comparison of Original Means to Subgroup Means	34
X Comparison of Subgroup Means to Means of Original Alcoholic and Non-alcoholic Groups.	35
XI Percentages on Variable Direction.	38
XII Revised Percentages on Variable Direction.	39

CHAPTER I

INTRODUCTION

Of the helping professions, social work has historically been the most interested and closely involved in the family unit. As this interest relates to alcoholism, Bailey (1, p.84) states that

on the basis of their professional practice, caseworkers early stressed the need to treat the "alcoholic marriage" rather than merely the alcoholic individual. Within the past decade a few psychiatrists, and more recently psychologists and sociologists, have begun to be similarly concerned. The literature reveals a progression from initial consideration of the wife chiefly as a part of the alcoholic patient's environment, to a concern about her as a person in her own right, and finally to a current focus on the interaction between marital partners. (p. 84)

Thus, during the past twenty years or so, marriage has received increasingly more attention as a highly significant factor in the understanding of causation and treatment of alcoholism. (2)

As systems theory has developed during approximately the same time span, the function of alcoholism within a marital system has come to be viewed not as an isolated phenomenon but an integral part of that system. Drinking is thus viewed by some as having adaptive and maintenance aspects between marital partners. (3,4)

Yet with the development of a more system-oriented view of marriage and of the role alcoholism plays in the marital system, it has been only during the past several years that treatment approaches have been developing to reflect the dynamics of a marital system in alcoholism. Finlay (5) recently commented:

Despite the voluminous literature in the field of alcoholism about marital and family dynamics, relatively few studies have been reported about treatment approaches that specifically address marital and family interaction as the unit of treatment. The predominant theoretical model, as has been the case in the fields of counseling and psychotherapy in general, is a medical one. Within such a concept one family member is labeled sick and becomes the identified patient.(p. 402)

Social systems, especially marriage, then, must be considered in research on alcoholism. The following study is an attempt to look at marital status and marriage partner as an etiological and treatment factor in female alcoholism.

CHAPTER II

REVIEW OF THE LITERATURE

There is little information in the literature regarding marital status and the alcoholism of the spouse for female alcoholics. What research is reported on the subject of marital status and alcoholism pertains primarily to men rather than to women.

The limited research and discussion in the literature suggests that marital status is an important factor in the development of alcoholism among women. (6, 7, 8) In 1961 Bailey (1) reviewed the research and professional literature on alcoholism and marriage. She stated that "there appears to be no research on the husbands of alcoholic women . . . and no studies of couples where both partners are alcoholics . . ." (p. 88)

Wood and Duffy (7) state that "most investigators consider unsatisfactory marriages to be the main precipitant of female alcoholism." (p. 343) Furthermore, their research indicates the alcoholism of the spouse or encouragement to drink by the spouse is a singularly important influence in the development of alcoholism by the female. Wandberg and Horn concur, reporting that "the problem drinking partner in the marriage has attempted to get the other partner to join the drinking." (9, p. 53)

It is interesting to note the paucity of information available in reference to the spouse of the female alcoholic. In Lisansky's (10)

study, among the married female alcoholics, 35% had spouses with drinking problems as compared to a 9% figure for male alcoholics. In a study of alcoholics from the lower classes, Sclare (11) reported that a sixth of his subjects had alcoholic husbands.

Rosenblatt and others (12, 13) in two different studies found marital status related to multiple psychiatric admission for alcoholism among a male population. In those studies separated, divorced or widowed men had more multiple than single admissions.

Rosenbaum (14) discusses the factor of many alcoholic women being married to alcoholics, reporting that in most of these cases "the husband's own drinking as well as his nonconstructive attitude toward the wife's drinking were cited as major areas of conflict in the marital relationship." (p. 87) She points out the need to include these husbands in treatment both for identifying their own problems and for supporting treatment for the alcoholic wife. Furthermore, she cites the need for information concerning comparisons between single and married female alcoholics and the implication the marital status holds for treatment planning.

Evenson et al (15) in their study using a large sample of 1,023 alcoholics, 13.79% of whom were women, looked at psychological and social dimensions of alcoholism. From this examination they found three subtypes of alcoholism; two of these appeared to be related primarily to severity and the third to marital variables and sex. The subtype grouping suggests important implications for treatment. For example, members of one subtype "tend to blame their spouse for their drinking and to be positively motivated for clinic treatment, but negatively

motivated toward Alcoholics Anonymous." (p. 52) Comparison of the Evenson findings with other studies (16, 17, 18) using similar populations consistently shows marital status as an important factor in alcoholism.

CHAPTER III

DESCRIPTION OF THE PROBLEM

A review of the literature on alcoholic women (19, 20, 21) indicates that there are some important differences between male and female alcoholics. Marital stress has been cited as an important factor in the development of alcoholism in women and it may account for some of those differences.

In this investigator's review of the literature, there was indication but little discussion actually found which related marital status to important factors in the treatment of female alcoholics. Marital status and the alcoholism or non-alcoholism of the spouse are speculated to be significant variables relating to the personality of alcoholic women. If women are sufficiently different in certain characteristics so as to be discriminated among and classified by marital status, treatment implications arise based on that difference.

In an antecedent study (19), Knapp divided a sample population of women treated at the Portland Alcoholism Treatment and Training Center into four groups for the purpose of comparing marital status and personality disorganization. By way of review, Knapp in her study compared marital status and personality disorganization across four groups: 1) the alcoholic wives of alcoholic men; 2) the alcoholic wives of non-alcoholic husbands; 3) single alcoholic women; and 4) the non-alcoholic wives of alcoholic men. She then hypothesized that

the alcoholic wives of alcoholics would demonstrate the most dysfunction, due to the unstabilizing effects of the alcoholic husband and the stress of marital interaction between two disorganized personalities. In contrast, the alcoholic woman married to the non-alcoholic husband would experience less stress and consequently less personality dysfunction without the problems created by the alcoholic husband. The dysfunction of the single alcoholic women was hypothesized to fall between the two marital categories; and the dysfunction of the non-alcoholic wives of alcoholic males was hypothesized to be the least among the four categories, since these wives have been shown to have essentially normal personalities which become disorganized by their husbands' alcoholic episodes.
(p. 30)

She found that the non-alcoholic wives showed the least amount of personality disorganization and the alcoholic women with non-alcoholic spouses showed the most, followed by the single alcoholic women. The alcoholic women married to alcoholic men showed the least amount of personality dysfunction among the alcoholic groups, based on the number of abnormal scores on the clinical profiles of the Minnesota Multiphasic Personality Inventory.

If marital status and the alcoholism of a woman's spouse are important factors affecting the female alcoholic's personality and treatability, differences should emerge to characterize these women in such a way as to categorize them into subgroups according to marital status. In other words, if there are personality characteristics unique to the women of each marital category, personality measurements could discriminate among alcoholic women. If in fact these differences could be extrapolated, treatment geared to correspond to the uniqueness of each group would be suggested as more effective than an undifferentiated treatment approach which would fail to consider marital status and the alcoholism of the spouse.

Therefore, this investigator hypothesized that these women are

sufficiently different in personality to be discriminated among, using the four marital status categories set by Knapp.

CHAPTER IV

METHOD

For the analysis of marital status in relationship to personality in alcoholic women, this investigator chose to use the same sample of women used by Knapp (19) in her study. The sample came from a group of women treated at the Alcohol Treatment and Training Center, an out-patient clinic operated in Portland, Oregon, by the State Division of Mental Health. The clinic serves alcoholics and their families in the greater metropolitan Portland area and its rural surroundings, with most clients coming from low and middle income families. Education and group therapy are the main treatment modalities. Part of the intake procedure is the routine administration of the Minnesota Multiphasic Personality Inventory (MMPI) and the Edwards Personal Preference Schedule (EPPS), and any applicant who has completed the intake and orientation process after the year 1968 usually has the results of these tests available in his or her record. The subjects for this study are 242 women who completed this intake procedure between 1968 and 1973 and who were no longer being seen at the clinic, i.e. they were tested at the beginning of treatment and their cases had been closed as of June, 1973. This number does not include the children of the clients and the non-Caucasian women treated during this time span.

In an attempt to describe and interpret characteristics and differences among the four groups of women set up by Knapp, the investigator analyzed the variables of age, of MMPI scores, and of EPPS

scores in a stepwise discriminant analysis. The data from the files of the women were punched onto general purpose IBM key punch cards. Due to computer programming limitations, only 28 variables could be used. This eliminated pertinent demographic data from the analysis. Then a computer program using the stepwise discriminant analysis was utilized as a way of measuring level of discrimination and as a way to maximize accuracy in classifying the women into groups while at the same time listing variables in order of their discriminatory level of accuracy as sets of predictors in the classification process.

The MMPI is a widely used and well known instrument in the study of alcoholism. It is a self-administering questionnaire which yields a profile with four validity scales and ten clinical scales on a graph of T scores. The profile distinctly marks scores above 70 and below 30; these scores are two or more standard deviations from the mean and are generally considered to be abnormal. The higher the score, the greater the similarity to the various clinical groups used in constructing the scales. Only two of the validity scales were included in the current analysis, as these were the only scales on which information was consistently included in the case records.

In the interpretation of MMPI scales one should be trained in the uses and limitations of the MMPI. Ordinarily, interpretations are made on the basis of contextual information, i.e. age, education, patient status. Also one must look at the profile patterns, scale elevation, and scatter. However, for research purposes and for profiles having only one significantly deviating scale, a single scale interpretation has merit.

In this study, the means of all the women's scores on each MMPI scale form a single profile for each of the four groups. In this way a composite profile and interpretation can be made to give a flavor for the nature of each of the status/spouse groups. Nevertheless, the primary purpose for using these variables is to see if discrimination among these women in the sample can be made to a significant extent. Those four groups, once again, are 1) alcoholic women married to alcoholics; 2) alcoholic women married to non-alcoholics; 3) single alcoholic women; and 4) non-alcoholic women with alcoholic husbands.

The Edwards Personal Preference Schedule is a self administered and forced choice inventory used as a personality measurement. Unlike the MMPI, the EPPS is not widely used in psychiatric settings. It was designed primarily as a counseling tool with normal persons and is used in research relating to personality.

The EPPS measures 15 personality traits or needs on a percentile scale, the mean equalling 50. The inventory contains 210 different pairs of statements from which the individual chooses that statement which is most descriptive of himself. In the literature this investigator found only limited use of the EPPS in research on alcoholism in females. (22,23,24)

CHAPTER V

THE RESULTS

Some of the demographic parameters of the sample population are considered on the first five frequency tabulated tables in this chapter. TABLE I shows that most of the women were under fifty years of age when they entered the clinic, with almost half of them between the ages of 36 and 50.

TABLE I
AGE DISTRIBUTION OF TOTAL SAMPLE

Age-yrs.	Frequency	% of Total
18-35	85	35%
36-50	110	46%
51 up	47	19%
Total	242	100%

Table II indicates that the women generally have high school educations and that about one in three have some type of advanced training. The category "beyond" may include technical training beyond high school level or any amount of college work. Only 36 of those 78 were considered to be professionally trained, e.g. teacher, registered nurse.

Most of the women in this sample seem to fall into lower-middle class socio-economic status or below. The very nature of the clinic, a public agency, tends to eliminate those persons who are able to pay

for private psychiatric services. Also, many of the clients at the Alcohol Treatment and Training Center are referred by other public agencies such as the public welfare department. The low family incomes may also be due to employment problems experienced as a result of alcoholism.

TABLE II
LEVELS OF EDUCATION ATTAINED
IN TOTAL SAMPLE

Level	Frequency	% of Total
Grammar sch.	24	10%
High Sch.	136	56%
Beyond	78	32%
Unknown	4	2%
Total	242	100%

TABLE III
FAMILY INCOME RANGE IN TOTAL SAMPLE

Income	Frequency	% of Total
Below \$6,000	107	44%
\$6000-12,000	101	42%
Above \$12,000	34	14%
Total	242	100%

Only 19% of the total sample of women were married. This category includes those who have never been married, those who are divorced

and those who are widowed. This study looked only at the effects of the marital status during the time women entered treatment, and therefore, these women were grouped together, since no marital relationship was being experienced at that time. Because so many of the women in the sample were women coming to the clinic as part of the treatment for their alcoholic husbands, the sample is biased in the direction of the married. TABLE IV shows the frequencies of marriage in the total sample. For the sake of categorization, a handful of women separated from their husbands at the time of intake were considered to be married.

TABLE IV
MARITAL STATUS IN TOTAL SAMPLE

Status	Frequency	% of Total
Married	197	81%
Unmarried	45	19%
Total	242	100%

When these women are divided according to marital status and alcoholism of spouse, the frequencies for each of the four categories are shown on TABLE V. The figures there indicate that over half of the total sample were non-alcoholic women.

TABLE V
MARITAL STATUS/SPOUSE IN TOTAL SAMPLE

Category	Number	% of Total
NA (Non-alcoholic wife of alcoholic)	130	54%
AN (Alcoholic wife of non-alcoholic)	39	16%
AO (Unmarried alcoholic woman)	45	19%
AA (Alcoholic wife of alcoholic)	28	11%
Total	242	100%

The next table, TABLE VI, which was tabulated as part of the computer analysis of the data, gives the mean scores on all 28 variables for each of the four groups of women. The scores are compiled in the same order as they were programed for computer analysis. The first four score columns are for each of the groups and the fifth contains the grand means over the four groups.

TABLE VII shows in summary form the results of a stepwise discriminant analysis of all 28 variables. The step number column indicates the ranking of variables in order from highest to lowest in accuracy as predictors in the classification of these women according to marital status grouping. The variables in a stepwise analysis function only in combination as a set of discriminating variables, i.e. step 1 is the single best discriminator among the four groups of women, but each following variable operates dependently on each preceding and subsequent variable in that particular sequential order. Therefore, step 2 is not the second best discriminator, independent of step 1, but falls

TABLE VI
MEANS OF THE 28 VARIABLES

Variable	AA	AN	AO	NA	Grand Means
1 Age	2.03571	2.02564	1.91111	1.72308	1.84297
2 Pd	70.60713	71.94872	69.00000	63.45384	66.68161
3 Sc	62.85713	64.20512	63.71111	59.16922	61.25206
4 D	68.35713	66.00000	66.82222	61.44615	63.97932
5 Hy	63.67856	61.79486	61.77777	61.62306	61.91734
6 Hs	59.11285	55.28204	57.15555	56.88461	56.93800
7 Pt	63.03571	61.30768	63.20000	59.33076	60.79752
8 Mf	43.50000	43.10255	46.33333	47.26154	45.98346
9 Pa	65.28571	60.82051	61.22221	58.77692	60.31404
10 Ma	58.07143	59.43588	55.08888	53.73076	55.40495
11 S1	62.32143	53.43588	59.13333	57.48460	57.69833
12 F	60.61285	64.15384	63.64444	54.32307	58.37189
13 Ach	60.00000	54.00000	54.51111	51.58461	53.49173
14 Def	46.71428	39.23076	41.13333	39.29999	40.48759
15 Ord	44.42856	31.56410	33.84444	34.75385	35.19008
16 Exh	50.46428	56.48717	60.71111	54.26923	55.38429
17 Aut	57.78571	55.64102	51.35555	38.73845	46.01239
18 Aff	33.53571	34.30768	30.95555	36.36922	34.70247
19 Int	63.17856	60.28204	56.97777	55.11537	57.22726
20 Suc	52.67856	44.51282	52.13333	46.25385	47.80991
21 Dom	47.75000	56.84615	43.28888	42.48460	43.94627
22 Aba	61.53571	48.79486	50.24443	47.15384	49.65701
23 Nur	44.89285	36.48717	46.13333	42.75385	42.61983
24 Chg	44.67856	52.12820	45.59999	52.56923	50.28925
25 End	42.50000	30.76923	36.15555	41.89230	39.10330
26 Het	74.10713	69.35896	68.11110	66.32307	68.04544
27 Agg	53.35713	60.87178	52.62221	46.82307	50.92148
28 K	47.89285	45.87178	46.26666	52.31538	49.64049

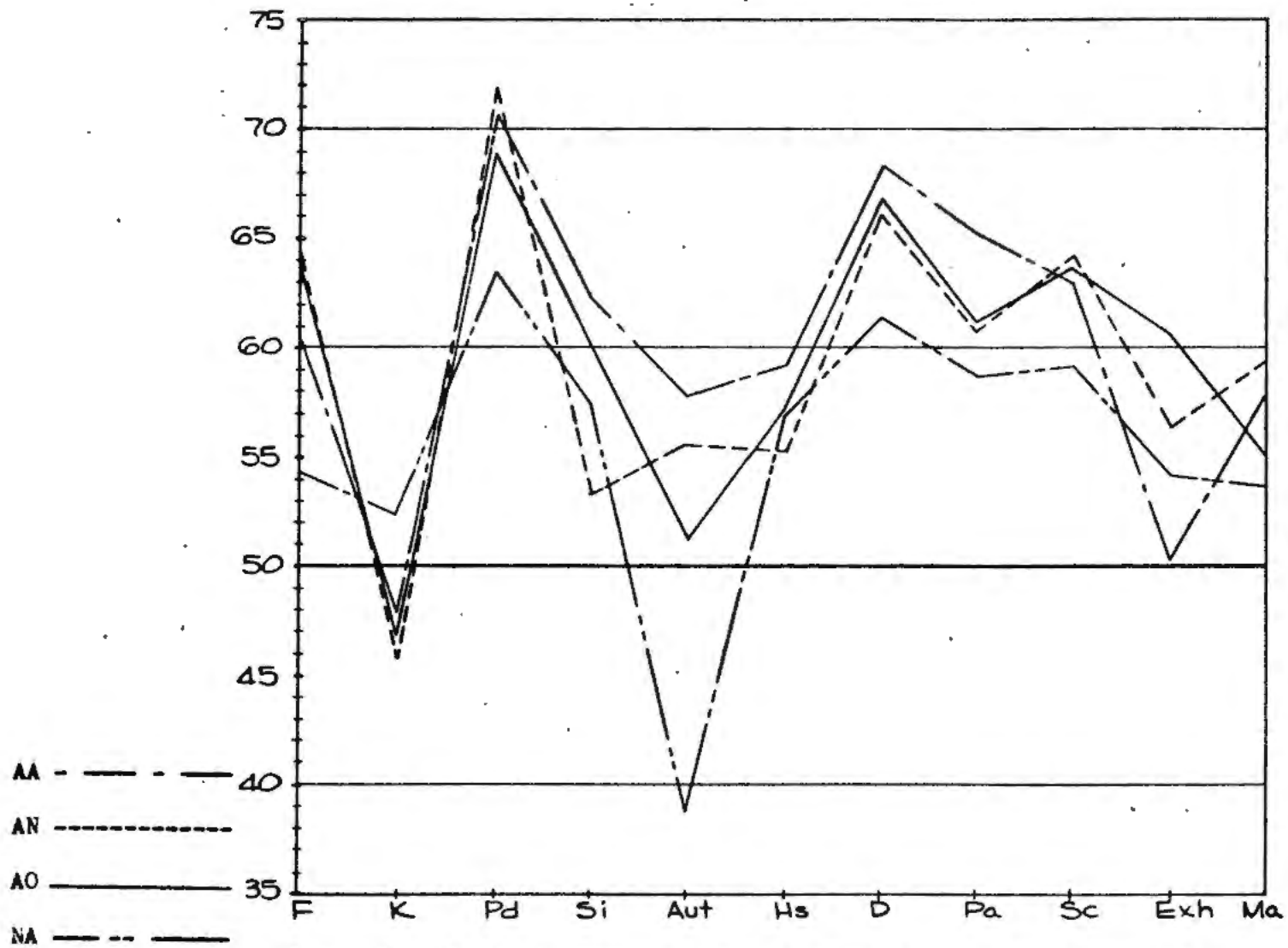


Figure 1. Graph of means of first 11 stepwise personality variables.

TABLE VII
SUMMARY TABLE

Step Number	Variable Entered	F Value To Enter	No. Of Variables Included	J-Statistic	i-U
1	12 F	8.4058	1	0.9042	.0958
2	28 K	5.1666	2	0.8487	.1513
3	1 Age	6.0398	3	0.7882	.2118
4	2 Pd	3.5399	4	0.7541	.2459
5	11 S1	5.4238	5	0.7051	.2949
6	17 Aut	3.5400	6	0.6743	.3257
7	6 Hs	2.2120	7	0.6556	.3444
8	4 D	2.7109	8	0.6333	.3667
9	9 Pa	1.4425	9	0.6216	.3784
10	3 Sc	1.0704	10	0.6130	.3870
11	16 Bch	0.9539	11	0.6054	.3946
12	10 Ma	1.0651	12	0.5970	.4030
13	14 Def	1.1336	13	0.5881	.4119
14	24 Chg	1.0113	14	0.5803	.4197
15	25 End	0.9456	15	0.5731	.4269
16	13 Ach	1.0908	16	0.5648	.4352
17	22 Aba	1.0610	17	0.5568	.4432
18	20 Suc	1.1847	18	0.5480	.4520
19	8 Mf	0.8370	19	0.5418	.4582
20	7 Pt	0.8274	20	0.5357	.4643
21	27 Agg	0.8434	21	0.5296	.4704
22	26 Het	0.7596	22	0.5241	.4759
23	23 Nur	0.5977	23	0.5198	.4802
24	18 Aff	0.5686	24	0.5157	.4843
25	21 Dom	0.5110	25	0.5120	.4880
26	15 Ord	0.2863	26	0.5099	.4901
27	19 Int	0.0506	27	0.5096	.4904
28	5 Hy	0.0180	28	0.5094	.4906

second in combination, as part of a set of variables with step 1.

The summary table also provides the U-statistic value of sets of variables as predictors in the order of lowest to highest predictor value, i.e. 0 equals a perfect predictor. With the use of the 1-U column, the table can be read from top to bottom. For example, step 1 accounts for $9\frac{1}{2}\%$ of the variability; by the third step $21\frac{1}{2}\%$ of the variability is accounted for, and so forth.

As this summary table indicates, the first 12 steps account for 40% of the variability. It is at this level of accuracy that the sets of variables predict into which of the four groups women in this population should be placed. The last 16 variables add little predictive significance - only 9% - to the first 12 steps.

The stepwise discriminant analysis determines the level of accuracy at which the 28 variables used in this study can discriminate among the sample so as to correctly classify these women by marital status. As there are four groups, probability at the outset is that 25% of these women would by chance alone be correctly classified into the correct marital status category. TABLE VIII indicates into which groups these women were classified based on a stepwise discriminant analysis of the variables.

By reading horizontally across the table, it can be seen that 13 of the 28 (46.4%) AA women were correctly classified into the AA category, which 15 cases were incorrectly classified into the other three groups, i.e. four into AN, six into AO and five into NA.

Thus, by looking at TABLE VIII we can see that the AO group is the least well defined of the four groups. As mentioned above, 25% of

the women would be classified into this group by chance. In the analysis 40%, 18 out of 45 cases, were correctly classified into the AO group.

TABLE VIII
NUMBER OF CASES CLASSIFIED INTO GROUPS

GROUP	AA	AN	AO	NA	TOTAL	%
AA	13	4	6	5	= 28	46.42% (13/28)
AN	6	20	7	6	= 39	51.28% (20/39)
AO	8	9	18	10	= 45	40.00% (18/45)
NA	15	8	20	87	= 130	66.92% (87/130)

As the AO group is not really well defined, although better than by chance alone, it would appear that the fact that the AO group is of single marital status is not as important a factor as their being alcoholic, i.e. they are single for reasons other than being alcoholic.

The AA group is more clearly distinguishable than the AO group on the basis of this data. However, the most clearly discriminated group among the alcoholic women are those of the AN category. These data placed them at a level of 51.28%. At a significantly higher level and clearly distinguishable is the NA group, classified correctly at 66.92%.

In looking at this table, then, we can see that the data do discriminate reasonably well among the four groups, especially well with the NA from among the alcoholic groups.

Of the 12 MMPI scales the investigator used in this analysis, two

are validity scales, the remaining ten being clinical scales. The three MMPI scales falling low in the stepwise ranking are the clinical scales of Mf (Masculine-Feminine Scale) and Pt (Psychosthenia) at the nineteenth and twentieth steps respectively, and the Hy (Hysteria) at the last step in the analysis as the twenty-eighth stepwise variable.

The Edwards Personality Preference scores comprise 13 of the last 16 stepwise discriminating variables and are therefore of less value for the purpose of providing variability discrimination among the women of this research population. The two Edwards scores among the first 12 steps are Autonomy, at the sixth step, and Exhibition, barely among the first 12 variables as the eleventh in order.

The following is a description of each of these 12 most discriminating variables with interpretation of their meaning and statistical measurements. The four mean scores on each variable, as shown in TABLE VI, are included with each discussion.

I. F SCALE

Scores: AA/60.84 AN/64.15 AO/63.64 NA/54.32

This scale is the first variable among the 28 in the stepwise discriminant analysis. Its purpose is that of a validity scale indicator designed to measure inattention to the test, to detect confused thinking, or to measure failure to understand test questions. It detects unusual or atypical responses to test items. Other possible F scale indications include such things as a wish to put one's self in a bad light or a very compulsive person who, in trying to be honest, becomes overly self-critical (25)

An F scale above 70 might be an indication of possible psychosis,

especially in the presence of the "psychotic triad," i.e. high Pa, Pt and Sc.* It might also suggest eccentricity with the implication of a rugged early life or non-conformity.

The score for NA or 54.32 is quite close to the norm of 50. For each of the groups of alcoholic women, the F score is in excess of one standard deviation. Although there is clear differentiation between the alcoholic and non-alcoholic women on this scale, the mean scores for AO and AN fall within $\frac{1}{2}$ point, indicating little distinction between these two groups on this variable. However, the three point spread between the AO and AA groups does indicate some discrimination on this scale for these two groups.

The most economical interpretation of the alcoholics relatively high scores is that they are more likely to admit unconventional things about themselves and to report symptoms, perhaps in a desire to obtain help (26)

II. K SCALE

Scores: AA/47.89 AN/45.87 AO/46.26 NA/52.31

Like the F scale, the K score is a validity indicator, the purpose of which is a measurement of suppression. A high K score may be an attempt to put ones self in a favorable light, wanting to make a favorable impression, while a low K may indicate an exaggeration of faults. Persons with a low K tend to be more difficult to help in therapy, although extreme K scores in either direction indicate poor treatment prognosis.

*The alcoholic groups' scores are elevated between 1 and $1\frac{1}{2}$ standard deviations on these four scales, while NA scores are within one standard deviation.

According to Van De Riet and Wolking (25), people scoring from about 55 to 58 have a favorable prognosis, as this reflects "some prudence, ego strength, circumspectness, and capability of handling one's own problems." People scoring low tend to be self critical and critical of others as well, and they have difficulty in interpersonal relations, including suspiciousness of others' motives and being caustic in their manner.

As with the F scale, there is a clustering effect with the alcoholic women, whose scores are within approximately a two-point range of each other, an even narrower range than the $3\frac{1}{2}$ point spread on the F score.

All the alcoholic groups have T scores below 50 (the mean) from approximately two to a little over four points, with a distance of 4.42 points from the NA. The NA fall above the norm by 2.31 points. All scores are well within one standard deviation and fall relatively close to the norm.

The somewhat depressed T scores of the alcoholic women suggest a lowered self confidence and ego strength with a greater difficulty in extended treatment, even though they may be relatively open in describing their problems (26)

III. AGE

Scores: AA/2.03 AN/2.02 AO/1.91 NA/1.72

For computerization age is divided into three groups, 1, 2, and 3. Group 1 is the age group 18 to 35 years; 2 is 35 to 50 years; and 3 is 51 years and over. The AA and AN groups are within .01 of each other, nearly centered midway in the 35 to 50 year range. The mean score for

NA is distinctly in the direction of younger women. AO falls between the younger NA women and the older AA and AN women.

As a factor relating to alcoholism, marital status, and general personality, age is an important variable to consider. For example, Fort and Porterfield (27) indicate that women having notable personality difficulties prior to the onset of heavy drinking have a lower age of onset. Age is a factor relating to marital status as well, since younger women are less likely to be married than older women simply because of their age.

IV. Pd SCALE

Scores: AA/70.60 AN/71.94 AO/69.00 NA/63.45

Generally, the high Pd score characterizes persons lacking deep emotional response with rapid mood swings which in turn prevent them from learning from past experiences. They frequently find themselves resentful of family members or of other persons with whom they have been closely associated. Antisocial behavior commonly occurs among these groups and rebellion against social customs is frequent. Other typical characteristics include an inability to plan ahead, a reckless disregard for the consequences of their behavior, shallow social relationships and a lack of strong loyalties. According to Van De Riet and Wolking (25), "the most frequent digressions from social mores of high Pd scorers are lying, stealing, alcohol or drug addiction, and sexual immorality."

The key to these trouble-making personalities on the MMPI is that the Pd is the peak of the profile, which is the case in the Means score profile for the alcoholic women in this study.

In looking at the means, this is the only scale on which a score of over two standard deviations occurs. Two of the alcoholic groups, AN and AA, are at a level of at least two standard deviations above the norm, and the third group, AO falls within one point of that level. This is the only scale, except for D, on which the NA group is more than one standard deviation above the norm of the nine MMPI scales on this graph. As Hurst (28) point out, Pd of 70 to 74 is fairly minor, and, therefore, a higher score on this scale may not be as significant as a high score on one of the other scales. However, the elevation on this scale would be consistent with the alcohol and drug addiction tendencies characterizing these women.

V. S1 SCALE

Scores: AA/66.32 AN/53.43 AO/59.13 NA/57.48

The social introversion scale is a measure of social introversion - extroversion. The higher the score, the more introversion socially, and the lower the score, the more extroversion. The high score indicates withdrawn and aloof behavior and anxiety associated with contact with people. As the S1 goes down, the indication is that of a person who is socially outgoing and able to make a good impression in groups. Conversely, a high S1 indicates a person who does little socializing and is uncomfortable in groups.

This variable is fifth in the step sequence of the 28 variables. It is the first variable thus far described in which the NA score falls among rather than apart from the alcoholic groups. The alcoholic groups are without the clustering seen on the preceding three variables. Only the AA group is in excess of one standard deviation from the norm.

The trend of all the scores is in the direction of social introversion, with the AN group mean score approximately 3.5 points above the mean, the AO group at nearly one standard deviation above the norm with a score of 59.13, while the NA falls in between AN and AO at approximately 7.5 points above the norm. However, the relationship of these group scores are difficult to interpret. It may be that this is a chance finding (26).

VI. AUT SCALE

Scores: AA/57.78 AN/55.64 AO/51.35 NA/38.73

The autonomy scale indicates ability to do as one chooses in the expression of action, thought, feelings and decision making. It is designed to be an indicator of the extent to which one is free to do unconventional things, to avoid situations where conforming is expected, and to do things one chooses with concern of what others may think; it indicates ability to criticize those in authority.

It is interesting to note the wide range of these scores and the spread among them. This is the only variable among the 11 graphed on which the NA group, out of the four groups on this particular scale, which is in excess of one standard deviation from the norm. The Aut variable is of course only one of two Edward's scores among the significant first 12 discriminating variables, and it is relatively high in order at step 6.

The NA group is quite distinctly differentiated from the alcoholic groups on this variable, in excess of one standard deviation below the norm at 38.73. The alcoholic groups all are within one standard deviation and above the norm with a spread of nearly 13 points between the

NA and closest alcoholic group, AO. This is the greatest spread between the NA and alcoholic groups of any 11 variables graphed.

This score would indicate that the NA group is significantly less concerned with doing as they please than the alcoholic women.

VII. Hs SCALE

Scores: AA/59.14 AN/55.28 AO/57.15 NA/56.88

Persons scoring high on this scale are described as having undue concern about their bodily functions and health. "Hs scores over 65 indicate a psychological component even in patients who are physically very ill. Moderate elevations indicate people who are unambitious, dull, stubborn, and narcissistically egocentric." (25)

On this scale the score for the AO (the least clearly defined alcoholic group) and NA are very close, only .27 apart. The range for the groups overall is relatively narrow, with a spread of only 3.86 points from the lowest to the highest. The AA score is within less than a point of one standard deviation above the norm. The lowest scoring group, AN, is approximately one half of one standard deviation above the norm. Of the four groups, AA has the only score which is remarkable in any sense, as it is nearly within the moderately elevated (60 to 65 point range) range.

VIII. D SCALE

Scores: AA/68.35 AN/66.00 AO/66.82 NA/61.44

The depression scale is highly sensitive to mood changes and is the best single index of immediate satisfaction and comfort in living, according to Van De Riet and Wolking (25). In addition, a high D score indicates a lack of self confidence, poor morale, dejection, hopelessness-

ness about the future, feelings of uselessness, low frustration tolerance, and a narrowing of interest.

The NA group scored markedly lower on the depression scale than the alcoholic groups, yet all scores were above one standard deviation from the norm, with all alcoholic groups in excess of 1.5 standard deviations from the norm.

These scores would seem to indicate that the NA group is significantly less depressed, as reflected by their score, than any of the alcoholic groups. Although the alcoholic scores are quite high - AA is within 1.67 points of two standard deviations from the norm - there seems to be no clearly significant distinctions among the alcoholic groups themselves. The range and spread of scores is similar to the Pd profile, although among the alcoholic groups AN appears as the least elevated rather than most elevated score of the three. This scale overall is second highest in elevation to the Pd scale for all four groups.

It would appear that depression is a significant problem for all four groups of women, but particularly for the alcoholic groups. One might speculate that typical motivations behind depression may especially for these women include too much conflict, frustration of wishes, no gratifying outlets, normal mounting of aggression turned onto self; the ultimate goal is self punishment or self destruction.

IX. Pa SCALE

Scores: AA/65.28 AN/60.82 AO/61.22 NA/58.77

The paranoia scale is a measurement of resistance and suspiciousness. The higher the scale, the greater the probability of delusional

behavior. "Scores between 65 and 75 frequently occur in people who have undue interpersonal sensitivity." (25) These people feel pressed by their social obligations and take too seriously the criticisms of others.

The alcoholic groups scored in excess of one standard deviation above the mean on the Pa scale. The AN and AO scores, within .4 points indicate little differentiation between these two groups, while the third alcoholic group, AA, is clearly separated from the other three by 4.06 points from the next highest group, AO. The NA group, although falling below the other groups, is relatively high, i.e. within 1.33 points of one standard deviation above the norm.

Rigidity, stubbornness, jumping to conclusions and then justifying the conclusions are characteristic traits of high Pa scorers. There is a strong tendency to project faults and little balance exists between the extremes of domination and submission. Sexual conflicts may stem from attitudes surrounding domination and submission. These traits, then, seem to characterize the sample of alcoholic women.

X. Sc SCALE

Scores: AA/62.85 AN/64.20 AO/63.71 NA/59.16

The schizophrenia scale is a measure of fantasy, implying wishful thinking as an escape from reality. Thinking associated with Sc is an expression of immaturity and implies inner preoccupation, turning away from the world of reality to one's own little compartment where he can find peace of mind.

The NA group score is less than one point below one standard deviation above the norm, while the alcoholic groups tend to cluster,

within 1.35 points of each other, well in excess of one standard deviation above the norm.

The alcoholic groups score relatively high on this scale. High Sc can indicate feelings of being unrelated to people, not being liked by people, not being close to people or feeling rejected and unable to relate warmly and establish close relationships.

The alcoholic groups could be seen as escaping to alcohol as a turning away from real contact with people. The alcoholic woman with a non-alcoholic husband has the highest score among the alcoholic groups, followed closely by the AO and AA groups, within a spread of 1.35 points. There appears to be a marked difference on this scale between the alcoholic and non-alcoholic women, indicating a greater tendency among the former to turn away from people toward self isolation.

XI. EXH SCALE

Scores: AA/50.46 AN/56.48 AO/60.71 NA/54.26

The exhibition scale is an indicator of one's tendency to say witty and clever things, to tell amusing jokes and stories, to talk about personal adventures and experiences, to have others value and comment upon one's appearance, to say things just to see what effect it will have on others, to talk about personal achievements, to be the center of attention, to use words that others do not know the meaning of, to ask questions others cannot answer (29, p. 11).

Exhibition is the second Edwards test score among the first 12 variables and is similar to the Edward's Aut, as there is no clustering effect among any of the groups on this variable. Each score is clearly separated from each of the other scores. The only group in excess of one standard deviation from the norm is the AO group at 60.71.

The AA group is practically on the norm at 50.46, with NA appro-

ximately four points above that. On this variable then, there appears to be differences among the groups, with one group, AO, more extreme from the norm and 4.23 points above the next closest group, AN, at 56.48.

Like the differences on the Si scale, the differences on Exh are difficult to interpret. It is significant, however, that the AA group is at the retiring end (more introverted and less exhibitionistic) for both variables, while the AN group stands more to the outgoing side. Perhaps non-alcoholic husband helps bring an alcoholic woman out while an alcoholic husband cuts her off from social interaction.

XII. Ma SCALE

Scores: AA/58.07 AN/59.43 AO/55.08 NA/53.73

The hypomania scale is a measure of over-activity with the higher the scale, the more active the person. It is an indication of psychic energy and tension. "T scores from 60 to 70 generally indicate a pleasant outgoing person. A T score above 70 indicates the hyperactivity is interfering in some way with the person's functioning." (25) So up to a point this is a good characteristic, but when there are no restraints, a person moves into reactions of hypomania and then mania, with concomitant loss of judgement.

On this scale all scores fall within one standard deviation of the norm and are fairly equally distanced from each other. NA once again has the lowest score, which has been the case on seven of the eleven variables discussed. The AN group score is nearly at one standard deviations, 59.43, followed within less than 1.5 points by the AA group. The greatest spread at extremes of highest to lowest scores is between AN and NA with a 5.7 point difference, a little over .5 standard deviation.

The slight elevation of the alcoholic groups above the non-alcoholic group suggests a somewhat greater tension among the alcoholics.

The discussion of the Ma scale, the twelfth step variable in the stepwise discriminant analysis, thus concludes the description and interpretation of the variables in this section. We can now turn our attention once again to the information contained in TABLE VIII, NUMBER OF CASES CLASSIFIED INTO GROUPS. This table indicates that the NA group is relatively well distinguished from the alcoholic groups and is a fairly uniform group of women. The alcoholic women, on the other hand, are not so clearly distinguishable, according to marital status, but classification into the three groups, AA, AN and AO, is possible on a much better than chance basis. For those cases of alcoholic women not correctly classified they are nearly evenly distributed into each of the other three categories and, therefore, are a less uniform, more heterogeneous group.

In assessing treatment implications, the 21 alcoholic women classified under the NA group on TABLE VIII seem to hold the most promise for further examination.* One must ask the question, if these women are classified as non-alcoholic, what characteristics make them more like the non-alcoholic women with whom they are placed rather than the alco-

*The 43 women of the NA group classified on TABLE VIII under alcoholic groups (AA/15, NA/8 and AO/20) are of interest as well but have less relevance for treatment implications in this study, as these are non-alcoholic women who would not be seeking treatment for themselves. Therefore, the investigator chose to pursue further examination of the above mentioned 21 alcoholic women, who were, indeed, seeking treatment as alcoholics.

holic women of which they are a part? Furthermore, it would seem likely that these 21 women would be more treatable, having characteristics common with non-alcoholic women. It seems potentially productive to examine more closely the variables affecting placement of these alcoholic women in the non-alcoholic groups.

Referring to the alcoholic groups classified in TABLE VIII under the NA group* (AA¹/5 AN¹/6 AO¹/10), it is the investigator's intention at this point to compare these A¹ women with both the NA and with the alcoholic groups in an attempt to determine what characteristics make the A¹ groups more like the NA women than the other alcoholic women.

This comparison will be limited to the first 12 stepwise variables only. This limitation stems from the fact that it is this first set of 12 stepwise variables which account for 40% of the variability for all the women comprising the four groups, while the remaining set of 16 variables account for only an additional 9% of variability, thus lending little possibility of fruitful examination of the latter. Further analysis of all 28 variables would need to be much more refined to detect any other basis of discrimination which may be in effect among these groups, and this is beyond the scope of this study.

TABLE IX shows the mean scores for each of the A¹ groups in comparison to the NA and A (alcoholic groups) on the first 12 stepwise variables. Following the table will be a comparison and interpretation for the mean scores shown on that table. As previously mentioned, the pur-

*The hyphen mark (1) will be used to designate the alcoholic subgroups classified under NA on TABLEVIII.

pose of this comparison is to determine what characteristics make the A' groups more like the NA women than other alcoholic women.

TABLE IX
COMPARISON OF ORIGINAL MEANS TO SUBGROUP MEANS

Variable	AA	AN	AO	NA	AA'	AN'	AO'
F	60.64	64.15	63.64	54.32	53.00	55.80	55.77
K	47.89	45.87	46.26	52.31	56.20	60.40	51.77
Age	2.03	2.02	1.91	1.72	1.80	1.66	1.90
Pd	70.60	71.94	69.00	63.45	64.40	76.20	68.25
Si	62.32	53.43	59.13	57.48	53.80	52.60	58.71
Aut	57.78	55.64	51.35	38.73	45.60	20.40	48.44
Hs	59.14	55.28	57.15	56.88	53.60	65.40	55.88
D	68.35	56.00	66.82	61.44	55.40	70.00	62.77
Pa	65.28	50.82	61.22	58.77	60.00	62.00	58.88
Sc	62.85	64.20	63.71	59.16	51.80	64.20	55.11
Exh	50.46	56.48	60.71	54.26	51.50	57.20	61.88
Ma	58.07	59.43	55.08	53.73	46.60	59.20	52.55

The significance of these data from TABLE IX can be more clearly seen when the differences in the means are computed. These differences are shown in TABLE X; this table also gives the direction of the differences. The minus (-) sign indicates that the subgroup's mean score is higher than the mean score of the original group of women.

TABLE X

COMPARISON OF SUBGROUP MEANS TO MEANS OF ORIGINAL
ALCOHOLIC AND NON-ALCOHOLIC GROUPS

Variable	Differences of Means					
	NA-AA'	AA-AA'	NA-AN'	AN-AN'	NA-AO'	AO-AO'
F	1.32	7.64	-1.48	8.35	-1.38	7.87
K	-3.89	-8.31	-8.09	-14.35	.54	-5.51
Age	-.08	.23	.06	.36	-.18	.01
Pd	-.95	6.20	-12.75	-4.30	-4.80	.75
S1	3.68	8.50	4.88	.80	-1.23	.42
Aut	-6.87	12.18	18.33	35.24	-9.71	2.91
He	3.28	5.54	-8.52	-10.12	1.00	1.27
D	6.04	12.95	-8.56	-4.00	-1.33	5.15
Pa	1.23	5.28	-3.23	-1.18	-.11	2.34
Sc	7.36	11.00	-5.04	.00	4.05	8.60
Exh	2.76	-1.10	-2.94	-.80	-7.62	-1.17
Ma	7.13	11.47	-5.47	.23	1.18	2.43

Step 1, Variable 12: F - All three A' groups are very close on this variable to the NA group with sizeable differences existing between A and alcoholic groups.

Step 2, Variable 28: K - Again there is a clear difference between the mean scores of alcoholic groups and the alcoholic subgroups. The difference between the AN' and AN is a large one, while the others are still show sizeable but not such great differences. The three scores tend in the direction of the NA group, i.e. higher scores sug-

gest greater treatability. Scores falling into the range of 55 to 58 on the K scale, in particular, represent quite favorable prognoses for treatment.

Step 3, Variable 1: Age - AA' and AN' are younger women, very close to NA and clearly younger than the mean age for AA and AN. AO' is virtually identical to the AO group.

Step 4, Variable 2: Pd - Once again in the AO groups there is less distinction between AO and AO' than between the other alcoholic groups and subgroups. On this variable the AN' is more unlike the NA group than closer to it, as AN' is over 4 points in excess of the AN score, thus exhibiting an inverse trend. AA' is within one point of NA on this scale, which is the peak of the MMPI profile.

Step 5, Variable 11: S1 - On the S1 variable AA' is much closer to NA than to AA, whereas both AN' and AO' are closer to their original groups than to the non-alcoholic women. AN' is nearly identical to AN and AO' is within a half point of AO. The difference of 3.68 between AA' and NA is in the direction of the norm, as is the case of AN'.

Step 6, Variable 17: Aut - As is the case for the original four groups, the variance of scores on this variable is extreme. Again AA' is closer to NA than the other two groups. AN' is least like NA and AO.

Step 7, Variable 6: Hs - All three A' groups are closer to NA than they are to the original alcoholic groups on this variable. While AO' is the closest to NA, it is also closest of the three alcoholic subgroups to its own original group. AA' falls approximately 5.5 points toward the norm, away from the AA score.

Step 8, Variable 4: D - AN' shows an inverse trend on this scale, farther away from NA and closer to its original group, AN. AN' is two standard deviations above the norm, while AA' is about a half of a standard deviation from the norm. AA' is almost 13 points below AA would appear significantly less depressed than AA and less than NA, as well. Once again, while AO' is closer to NA than AA' is, the difference for AA' is in the direction of the norm.

Step 9, Variable 9: Pa - AN exhibits an inverse trend again away from NA. Both AA' and AO' are very close to NA on this variable. All scores - NA, A' and A - with the one exception of AA are at approximately one standard deviation above the norm and exhibit little variance on this variable.

Step 10, Variable 3: Sc - AA' is over one standard deviation below AA, very close to the norm. AN' is identical to AN on this variable and, while AO' is closest of the alcoholic subgroups to NA, there remains a four point distance between AO' and NA.

Step 11, Variable 16: Exh - In an inverse trend, AN' and AO' move away from NA and at the same time remain very close to their original group scores. Unlike the other Edwards variable (Aut) for the subgroups, there is limited variance on these scores; all scores are within approximately one standard deviation of the norm and the greatest difference between a subgroup and the original alcoholic group is 1.17 on AO and AO'

Step 12, Variable 10: Ma - On this and the three preceding variables AN' is within approximately one point of AN. This is the fourth variable on which the AA' group has been one standard deviation or more

below AA (also on Aut, D, and Sc). AN' was one standard deviation or more below once (on Aut) and above its original group twice (k, Hs). AO' was never one or more standard deviations above or below AO, its original group.

By way of summary on the preceding discussion of the alcoholic subgroups, TABLE XI shows that on 11 out of 12 variables, (92%) AA' is closer to NA than to AA. Conversely, on only one out of 12 variables (8%) is AA' closer to AA than it is to NA. On 7 out of 12 variables (58%) AO is closer to NA than to AO. Conversely, on 5 variables out of 12 (42%) AO' is closer to AO than to NA. On 5 out of 12 variables (42%) AN' is closer to NA than to AN, but on 7 out of 12 variables (58%) AN' is closer to AN than it is to NA.

TABLE XI
PERCENTAGES ON VARIABLE DIRECTION

	AA'	AN'	AO'
Closer to NA	11 = 92%	5 = 42%	7 = 58%
Closer to A	1 = 8%	7 = 58%	5 = 42%
Total	100%	100%	100%

By eliminating the first three steps, variables F, K, and Age, on which all three alcoholic subgroups are closer to NA than to their original groups (with the exception of AO' being closer to AO on age), we can see more clearly the distinction between AN' and NA. AN' is more like AN than NA. AO' becomes more nearly an evenly mixed group, and AA' remains closely identified with NA. See TABLE XII.

TABLE XII
 REVISED PERCENTAGES ON
 VARIABLE DIRECTION

	AA'	AN'	AO'
Closer to NA	8 = 89%	2 = 22%	5 = 56%
Closer to A	1 = 11%	7 = 78%	4 = 44%
Total	100%	100%	100%

The first three variables discussed in the preceding pages - F, K, and age - give the clearest and most consistent distinction among these groups. With the one exception of the subgroup of single alcoholic women on the age variable, the F, K and Age scores show the most consistent overall discrimination for all three alcoholic subgroups.

In general, throughout the comparison, the subgroup of alcoholic women married to alcoholics is most like the non-alcoholic women. Except on the first three step variables, the alcoholic women married to non-alcoholics subgroup appears more like the original AN group than like the non-alcoholic women, especially when the F, K and Age variables are eliminated. The subgroup of single women seems to be a heterogeneous group throughout the analysis.*

*It is interesting to note that of the A' groups, only AO' has a score closer to an A group than to NA on one of the three most consistent discriminators; this seems to reflect the mixed nature of this group.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

The alcoholism literature indicates that no specific "alcoholic personality" has been found, and this study concurs. However, the severity of alcoholism, the personality, and the degrees of "pathology" will directly influence treatment. In addition, marital status and the alcoholism or non-alcoholism of the spouse are factors having significant implications for treatment as suggested by the findings in this investigation.

According to the findings, the AA' group (those alcoholic women with alcoholic husbands who are most like the non-alcoholic wives of alcoholics in this study) is most like those women in the NA (non-alcoholic wives of alcoholics) group. This may indicate a more treatable group than the other alcoholic women. The AN' group (those alcoholic women married to non-alcoholic men who are most like the NA group) appears to be less like the NA group, and, therefore, it would follow, less amenable to treatment. The AO' group (those single alcoholic women most like the NA group) is as much like the AO (the original group of single alcoholic women) group from which it is derived as it is like the NA group. Because the AO' group is a more heterogeneous group of women than the other alcoholic groups, the inferences for treatment of these women are not as clearly indicated.

What characteristics are commonly shared by those alcoholic women who are more like non-alcoholic women in this study than they are like

the other alcoholic women, especially those women in the AA' group, who were shown to be the most like the non-alcoholic women? What do they have in common with NA? The most significant discriminating characteristics acting on the original marital status groups were the variables of age, the MMPI F score and the MMPI K score. Thus, these three variables in combination seem to be the most important factors tying the women in the alcoholic subgroups to the non-alcoholic women. In essence, this indicates that these alcoholic women are younger in age and have less confused thinking and more ego strength than other alcoholic women, i.e. they have a more favorable treatment prognosis. A closer examination, which is beyond the scope of this study, of these women who are in the alcoholic subgroups could possibly point to some etiological factors in alcoholism.

Therefore, viewing marital status as a factor affecting treatment of female alcoholics, a hypothesis for further study is that younger alcoholic women with a low F score and a K score within one standard deviation above the norm are more treatable as a group than alcoholic women not having these characteristics, and that, somehow, marriage to an alcoholic husband renders one more treatable than marriage to a non-alcoholic spouse or no marriage at all. This current study suggests that some alcoholic women married to alcoholic men, i.e. the women in the AA' group, may have been essentially normal non-alcoholic females who may have become alcoholic adaptively in a relationship with an alcoholic spouse.

By way of summary, this exploratory study has indicated that differences do exist among the female alcoholics of this population, based

on marital status. Also, the Minnesota Multiphasic Personality Inventory is able to make some discrimination among the four marital status groups. Further research is needed to more specifically identify and determine the causes and nature of these differences.

REFERENCES

1. Bailey, M. B. "Alcoholism and Marriage: A Review of Research and Professional Literature," Quart. J. Stud. Alc., 22: 81-97, 1961.
2. Steinglass, P. et al. "A Systems Approach to Alcoholism," Arch. Gen. Psychiat., 24: 401-409, 1971.
3. Davis, D. I. et al. "The Adaptive Consequences of Drinking," Psychiatry, 37: 209-215, 1974.
4. Steinglass, P. et al. "A Systems Approach to Alcoholism," Arch. Gen. Psychiat., 24: 401-409, 1971.
5. Finlay, D. G. "Alcoholism: Illness or Problem in Interaction?" Social Work, 19: 398-405, 1974.
6. Jacob, A. G. and Lavoie, C. "A Study of Some Characteristics of a Group of Alcoholic Women," Toxicomanies, 4: 165-191, 1971.
7. Wood, H. P. and Duffy, E. L. "Psychological Factors in Alcoholic Women," American J. Psychiat., 123: 341-345, 1966.
8. Busch, H., Kormendy, W., and Feuerlein, W. "Partners of Female Alcoholics," Br. J. Addict., 68:179-184, 1973.
9. Wanberg, K. W., and Horn, J. L. "Alcoholism Symptom Patterns of Men and Women," Quart. J. Stud. Alc., 31: 40-61, 1970.
10. Lisansky, E. "Alcoholism in Women: Social and Psychiatric Concomitants," Quart. J. Stud. Alc., 18: 588-623, 1957.
11. Sclare, A. B. "The Female Alcoholic," Brit. J. Addict., 65: 99-107, 1970.
12. Rosenblatt, S. M. et al. "Marital Status and Multiple Psychiatric Admissions for Alcoholism: A Cross Validation," Quart. J. Stud. Alc., 32: 1092-1096, 1971.
13. Rosenblatt, S. M. et al. "Marital Status and Multiple Psychiatric Admissions for Alcoholism," Quart. J. Stud. Alc., 30: 445-447, 1969.
14. Rosenbaum, B. "Married Women Alcoholics at the Washingtonian Hospital," Quart. J. Stud. Alc., 19: 79-89, 1958.
15. Evenson, R. C. et al. "Factors in the Description and Grouping of Alcoholics," Am. J. Psychiatry, 130: 49-53, 1973.
16. Horn, J. L. and Wanberg, K. W. "Symptom Patterns Related to Excessive Use of Alcohol," Quart. J. Stud. Alc., 30: 35-58, 1969.
17. Kinsey, B. A. "Psychological Factors in Alcoholic Women from a State Hospital Sample," Am. J. Psychiat., 124: 1463-1455, 1968.

18. Hoffmann, H. et al. "Analysis of Drinking Attitudes and Drinking Behavior in Hospitalized Alcoholics," Psychol. Rep., 28: 83-88, 1971.
19. Knapp, J. B. Female Alcoholism: The Relationship of Marital Status to Personality Disorganization, Portland State University, 1974.
20. Lindbeck, V. L. "A Review of the Literature: The Woman Alcoholic," Inter. J. Addict., Vol. 7, 1971.
21. Schuckit, M. "The Alcoholic Woman: A Literature Review," Psychiat. in Med., 3: 37-43, 1972.
22. Reiter, H. H. "Note on Some Personality Differences between Heavy and Light Drinkers," Perceptual and Motor Skills, 30:762, 1970.
23. Fitzgerald, B. J. et al. "Use of the Edwards Personal Preference Schedule with Hospitalized Alcoholics," J. Clin. Psych., 23: 194, 1967.
24. Rae, J. B. and Drewery, J. "Interpersonal Patterns in Alcoholic Marriages," Brit. J. Psychiat., 120: 615-621, 1972.
25. Van De Riet, V. and Wolking, W. D. "Interpretive Hypotheses for the MMPI," University of Florida Medical Center.
26. Marks, J. Unpublished comments on the MMPI, University of Oregon Medical School, 1975.
27. Fort, T. and Porterfield, A. L. "Some Backgrounds and Types of Alcoholism Among Women," J. Health Hum. Behav., 2: 283-292, 1961.
28. Hurst, J. F. "Clinical Impressions of the Minnesota Multiphasic Personality Inventory," Unpublished.
29. Edwards, A. Manual for the Edwards Personal Preference Schedule. New York: Psychological Corporation, 1959.

APPENDIX A
STANDARD DEVIATIONS

Variable	AA	AI	AO	JA
1 Age	0.74447	0.77755	0.70137	0.69344
2 Pd	12.02571	24.98201	24.44843	15.02195
3 Sc	13.65096	24.68875	23.65239	15.90964
4 D	11.33729	21.95567	23.07030	15.71103
5 Hy	10.26339	20.43880	20.58778	15.05501
6 Hs	11.81873	21.01118	20.94029	14.53705
7 Pt	10.28656	22.38788	21.59920	15.28351
8 Mf	9.86763	17.01512	16.94640	11.68345
9 Pa	10.11363	20.38943	20.57452	12.38413
10 Ma	11.90682	22.91031	19.25285	13.93599
11 Si	11.10239	21.38220	18.75629	13.71194
12 F	8.12045	16.72772	18.49461	11.85319
13 Ach	27.74617	32.83768	29.91394	29.62347
14 Def	30.11314	32.96204	31.63251	30.69323
15 Ord	30.51701	29.91896	28.59744	28.88042
16 Exh	27.71744	31.29556	30.49260	33.02089
17 Aut	27.39738	35.26326	28.31326	28.08287
18 Aff	28.93730	30.97206	30.01961	29.44899
19 Int	25.98579	33.04694	32.88509	31.94365
20 Suc	25.16173	35.21275	34.94902	30.79546
21 Dom	24.72156	29.96971	30.90865	31.01241
22 Aba	31.15012	30.70757	33.45424	33.62909
23 Nur	23.80370	31.00835	27.96797	28.99883
24 Chg	27.83687	29.42799	33.57715	34.09555
25 End	32.77246	26.68176	32.32921	32.03003
26 Het	21.56181	26.09541	26.59390	30.23117
27 Agg	27.84904	31.38147	32.12209	30.30605
28 K	8.52594	15.09123	14.24520	10.97490