AN ABSTRACT OF THE THESIS OF

Susan J. Boeshart for the <u>Master of Science</u> in <u>Psychology</u> presented on <u>May 1988</u> Title: <u>Personality Correlates of Individuals by</u> Alcoholic Beverage Preference

Abstract approved:

This paper reports on exploratory research using personality measurements to determine differences in normal adults by alcoholic drink preference. Thirty volunteers were solicited from graduate psychology students. All subjects completed a standard psychological test (the California Psychological Inventory). The test scores were evaluated to determine significant differences between three drink choice groups: distilled spirits, wine, and beer. Results of a one-way analysis of variance (ANOVA) of all 18 subscales of the CPI were inconclusive. Suggestive findings are reported.

PERSONALITY CORRELATES OF INDIVIDUALS BY ALCOHOLIC BEVERAGE PREFERENCE

A Thesis Presented to

the Divison of Psychology and Special Education EMPORIA STATE UNIVERSITY

> In Partial Fulfillment of the Requirements for the Degree Master of Science

> > by Susan J. Boeshart May, 1988

aus 1Cz Approved for the Major Department

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ACKNOWLEDGEMENTS

Grateful appreciation to:

Stephen Davis, Ph.D., whose wisdom, sensitivity, and flexibility as an advisor was invaluable; Cooper Holmes, Ph.D., and Scott Waters, Ph.D., for participating as members of my Thesis Committee; Larry Woodburn, Ph.D., who provided ideas and encouragement throughout the entire project; student volunteers from the Professional School of Psychological Studies, San Diego, and Turning Point, Vista, who enthusiastically donated their time; Darcy and Cyn who contributed their expertise and knowledge of public drinking behaviors in San Diego; and Kay Stovall, Terry Crawford, my family, and other friends who provided generous emotional support.

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CHAPTER 1

INTRODUCTION

Consumer behavior has been the subject of study for marketing and advertising researchers since the 1940s. Demographic, socioeconomic, and personality data have been analyzed in order to characterize target audiences for products in the marketplace. The results have given clues toward more creative strategies to solve increasingly competitive marketing problems and to influence product use.

Psychological and personality elements have been found to have a dynamic effect on product choice and use (Koponen, 1960; Kassarjian, 1971; Wells, 1972). It is the Marketers have sought to discover what kind of individual the consumer of a product is in order to better strategize effective marketing approaches. Advertisers, too, have conceptualized user personality types for certain brands of products in the development of print and television promotions.

The use of more controversial products, such as alcohol and tobacco, has also been a focus of research, but from quite a different perspective. Although beer, wine, and distilled spirits are household products sold in the general marketplace, they carry a stigma of

potential problem use. This stigma is reflected in the special controls of taxation and in limited availability in this country. This stigma has influenced the perspective of social researchers who have studied the relationship of personality to the use of alcoholic beverages in order to identify the problem drinker.

It is obvious to the viewer of commercials and print advertising produced by alcohol manufacturers that certain types of alcoholic beverages are targeted at specific markets. The usual beer commercial portrays an image of tough masculinity in fun, one-of-the-boys type of setting. This is dramatically different from the sophisticated feminine wine drinker in a romantic setting or the jeweled, seductive female competing at the billiards table, glass of scotch in hand. It appears from these direct advertising appeals that certain consumer groups have been targeted.

Observations made by bartenders in public drinking places indicate a relationship between type of drink and type of drinker. Two bartenders interviewed for this study believe they can correctly anticipate the drink order of most bar patrons, simply based on nonverbal cues.

This study examines the relationship of personality variables to alcoholic beverage preference in order to assist in clarifying the dynamics of alcohol use in normal adults. Insights into the effect of personality upon an individual's preferred alcoholic beverage are sought.

A review of the literature reveals no studies published which correlate personality traits with alcoholic drink preference (drink of choice). Although it seems reasonable to assume that the marketing departments of alcohol manufacturers have compiled such information, these data have not been made available for this study. Therefore, it has been helpful to draw from the body of work in two areas - marketing and consumer research and personality/drug of choice studies.

This chapter provides background information about consumer research and includes a literature review of both product choice studies and pertinent drug of choice research. Concepts of consumer preference are presented to establish a conceptual framework for exploring the dynamic effect of personality elements upon product choice.

Marketing/Consumer Research

After World War II the motivation researchers dominated the field of consumer theories. Studies were devoted to supporting the theory that an individual is motivated to purchase products based on perceived need rather than on the actual utility of the product. Brand preferences were assumed to be a function of product identification and therefore related to the consumer's personality traits. Much of the research was geared toward incorporating what was known about personality measures with what was the origins of true marketing research. Kassarjian (1971) wrote: "The way the ego guides id and superego . . . accounts for the purchase of a four-door sedan rather than a racy sports car" (p. 410). Although there is no doubt that there is a clear link, the early research which related personality characteristics to product choice has been largely inconclusive. According to Kassarjian, this is due to a rather poor understanding of what personality tests measure and the variable and subjective definitions of "personality." Nevertheless, some interesting studies resulted from this line of reasoning. For example, Vitz and Johnston (1965) isolated a single personality trait in male and female smokers using the MMPI and the CPI. These researchers used the Masculinity Scales of the two profiles to test their hypothesis that the more masculine the smoker's personality, the more masculine the image of their regular brand of cigarette would be.

The resulting correlations were low but statistically significant. Their findings gave moderate support for the idea that brand preference of the same product is a result of the relationship between the product's

(4

image and the consumer's personality, rather than any real difference in product.

About this time several researchers began to look at the relationship of self-concept to consumer behavior. Rather than focusing on a single personality trait of the individual, these studies began to explore the influence of consumer self-perception on product choice.

One such study by Grubb and Grathwohl (1967) compared self-concept and beer brand profiles. Their findings, however, were inconclusive, as the beer drinkers saw themselves as more confident and socially extroverted than the non-beer drinkers, but both groups had a similar perception of brands.

More recent self-concept studies give support for a theory of interaction of self-image and product image. Ross (1971) surveyed 247 female students for self-concept and projected attributes of cars and magazines. His findings gave supportive evidence for his theory that people prefer brands which appear to be used by others like themselves.

Sirgy (1980) concluded that product choice is the result of a congruency of self-concept and product image. He theorized that consumers see themselves in particular ways (self-concept), and certain product brands will be preferred if they enhance or reflect the consumers' most valued attributes. Empirical evidence for a relationship of selfconcept to product preference, while promising, has some inherent difficulties. The terms "self-image" and "self-concept" are used interchangeably without a clear distinction and definition. It is also unclear if self-image measures reflect the <u>real</u> or the ideal self.

Other contemporary researchers in this area have identified the product choice as expressing the consumer's psychological need. Sparks and Tucker (1971) correlated personality traits with the use of typical products in a student population. One category of these products was alcoholic beverages. The results of a canonical analysis gave evidence of a relationship in the use of alcoholic beverages to sociability, ascendancy, lack of responsibility, emotional stability, and impulsive traits.

Especially important in this study was a design of synthesizing a "molar personality" from derived personality characteristics. This allowed Sparks and Tucker to clear up some of the difficulties of a trait by trait analysis (Vitz & Johnston, 1965), and to highlight trait interactions and relationships.

A similar approach was used by Schaninger, Lessig, and Panton (1980) to further investigate the relationship between personality and the use of alcohol and illegal drugs. Although the study focused on the amounts of

alcohol and drug consumption, rather than choice or preference variables, the findings were similar to Sparks and Tucker's. The heavy use of alcoholic beverages in a normal population was positively related to sociability, ascendancy, and aggressiveness, and negatively related to responsibility and caution.

A theory of the expressive quality of a product was presented in a paper by Alpert (1972). His theory suggests that a product is viewed as a set of attributes which will be seen differently according to the personality of the consumer. In Alpert's study, the relationship of personality profiles of a normal population to the profiles of a certain product's attributes was examined.

The results offer support for the idea that product choice is linked to personality and psychological needs, as some strong relationships were found. Unfortunately, the sample is relatively small (n = 88), making broad generalizations tentative, and none of the products used were alcoholic beverages.

The theory of hedonic consumption was presented by Hirschman and Holbrook (1982). According to these writers, the "multisensory, fantasy and emotive" (p. 92) aspects of the consumer's experience with a certain product, such as perfume, play an important role in product choice. The product is seen as a symbol rather than a utility item. Certainly alcoholic beverages with evocative advertising and packaging can be seen from this perspective. Alcohol ads commonly allude to its ability to ease stress, provide romantic ambiance, and enhance mood.

Behavioral/Social Research

In the area of alcoholic beverages and personality, social researchers have focused on consumption studies and the identification of the alcoholic personality. The primary aim has been to improve prevention and intervention strategies. Few studies were found which investigated or considered inter-beverage differences.

The majority of investigators in the area of personality and drug of choice relationships have utilized incarcerated or hospitalized samples for study. Few researchers have studied this relationship with normal subjects. Consequently, the generalizations from findings and applications for the present study are necessarily limited.

In 1972, Henriques et al. tested the hypothesis that personality characteristics measured by the MMPI would differ with drug of choice for subjects. They sampled an inpatient population separated by drug of choice groups (heroin, barbiturate, and amphetamine). Their findings did not clearly support their hypothesis, and it was suggested by the authors that the subjects' understanding of MMPI questions could have influenced the resulting profiles (i.e., current attitudes or attitudes under the drug's influence).

Khavari et al. (1978) studied the personality correlates of hallucinogen use in a normal adult sample. Drug of choice (marijuana, LSD, hashish, and others) was the dependent variable, while personality characteristics, as reflected in four independent tests, were the independent variable. Their findings showed that the use of hallucinogenic drugs is strongly associated with a person's need to seek out new, varied, and often unconventional experiences. This varied to a greater or lesser extent on the drug of choice. Also suggested by the results was inter-drug differences.

Later, Mabry and Khavari (1985, 1986) began studying attitude and personality correlates of drug of choice. Again, normal, nonhospitalized subjects were chosen, and again, the dependent variable was type of drug used (marijuana, hashish, LSD, and other psychedelics).

Another drug of choice study was conducted by Trevithick and Hosch (1978). Sixty-five addicts served as subjects for a study of the MMPI correlates of addiction by drug of choice. A multivariate analysis of combinations of scales detected differences between groups (amphetamine, barbiturate, or heroin). Their

findings also revealed composite profiles which distinguished addicts from nonaddicts.

Spotts and Shontz (1983) also used the MMPI, with three other tests, to compare personality profiles with chronic drug users, categorized by drug of choice, to matched nonusers. Their findings showed that there are differences in personality between user groups of opiates, cocaine, amphetamine, and also between user groups and nonusers. An important feature of this study was the use of a nonincarcerated, nonhospitalized population studied over a period of time.

Another group of researchers has studied personality and drug preferences (Shoham et al., 1984). This group theorized that use and choice of drugs is one of the ways by which an individual attempts to cope with "psychic imbalance." The findings do show some support for this theory, but the sample is small (25) and again uses inpatients from a drug rehabilitation center.

Spotts and Shontz (1985) later appear in the literature comparing groups of adults who practice heavy, chronic use of drugs. Their findings revealed significant differences between users of cocaine, amphetamines, opiate and barbiturate/sedative hypnotics. They theorized that these individuals used the drug of choice to cope with varying problems in the individuation process. The method of study combined a battery of

assessment measures and multiple in-depth interviewing sessions on 45 carefully selected subjects.

In the area of alcoholic beverage types--drink of choice--there are some interesting and incidentally related studies. Rickman and Warren (1985) used survey data from a Canada Health Survey to examine the relationship between alcohol consumption and health status reports. When inter-beverage differences were considered, beer drinkers had lower incidents of health problems than wine drinkers or drinkers of distilled spirits.

The researchers also commented on alcoholic beverage advertising, which appears to promote specific beverages to well-defined audiences. In their view, perhaps the the beer drinkers have been so exposed to ads featuring beer drinkers in outdoor-healthy pursuits, that selfperceptions have been duly influenced. Herein lies the problem with most studies using self-report measures-the data may well be distorted to create a desired impression.

Kilty (1983) identified types of drinkers and drinking styles. He avoided the problem drinking type of approach and surveyed a normal adult population of drinkers. His findings showed that drinking styles varied with type of drink, and that age was an important factor. The beer drinkers tended to be younger than other groups of drinkers.

This review of related studies would not be complete without the inclusion of an in vivo study of alcohol drinking. Kessler and Gomberg (1974) observed 27 subjects in public drinking places. Among other data, they noted types of drinks ordered. They found the subjects' overwhelming choice of drink to be beer, followed by "highballs" and cocktails. Subjects were consistent in their choice of drinks, though the study did not elaborate on these particular aspects of data collected.

Inasmuch as media advertising and the packaging of different types of alcohol reflect appeals to specific consumer groups, this study makes the assumption that individuals prefer one alcoholic beverage over another based on expectations, experience, and personality elements. Both product choice and drug and alcohol studies support this assumption.

The literature review highlights the lack of information about normal adult drinkers of alcohol. This study seeks to address this gap in the literature. A normal adult population is utilized. Individuals with a history significant for alcoholism and those who are abstinent were selected out.

All subjects completed a standard psychological test (the California Psychological Inventory) and indicated their preferred alcoholic beverage from six drink

categories. The subjects were grouped by beverage preference and their personality measurements were compared.

Following the assumption that personality elements have a dynamic effect on product choice, insights into the personality variables which differ by beverage choice are sought. These insights provide preliminary information toward the development of a more precise research problem.

CHAPTER 2

METHOD

Sampling

Thirty adult volunteers (15 female, 15 male) were utilized for this exploratory study. Ages ranged from 24 to 55, mean age was 38.3. These subjects were solicited from a graduate school MA/Ph.D. program, chosen for availability. It was reasoned that this population would be motivated and compliant with the test procedure.

The researcher visited classrooms requesting volunteers for a study about alcoholic drink preference and personality. The classes were told that participation would require about one hour to complete a selfadministered psychological test. The students were also instructed not to volunteer if they were abstinent at this time.

Volunteers were accepted until a sample of 10 in each of three drink categories was reached (beer, wine, or distilled spirits). Individuals who indicated a personal history of alcoholism on a short questionnaire form were omitted in order to approximate a normal adult sampling. Each volunteer was assigned a number for reference and confidentiality of identity.

A total of 38 test packets were distributed. Thirty-two were returned completed. Of these completed tests, two were omitted from this study due to a history of alcoholism (as indicated on the short questionnaire form). One volunteer was not able to complete the test due to time constraints and he returned the materials.

Instruments

The California Psychological Inventory (CPI) was chosen to measure personality elements of the 30 volunteers. The use of the CPI was based on several considerations: (1) it is easily self-administered, with clear directions printed on the booklet front, (2) it is a standardized instrument designed for primary use in a normal population, (3) this test addresses personality characteristics rather than pathology, and (4) the CPI subscales are similar to the traits studied in the Sparks and Tucker (1971) and the Schaninger, Lessig, and Panton (1980) studies.

Volunteers were evaluated by their scores on each of the following personality test subscales: dominance, capacity for status, sociability, social presence, selfacceptance, well-being, responsibility, socialization, self-control, tolerance, good impression, communality, achievement via conformity, achievement via independence, intellectual efficiency, psychological mindedness, flexibility and femininity.

A short questionnaire was devised to determine alcoholic beverage choice, and also to select out those volunteers with a personal history significant for alcoholism (see Appendix). A packet containing the CPI test booklet and answer sheet and the questionnaire form was prepared for each volunteer.

Procedure

Volunteers for this study were given a packet which contained one California Psychological Inventory (CPI) test booklet and a single answer blank. Also included was a short questionnaire form. Both of these instruments are described in the preceding section.

Oral instructions were given by the researcher to read and follow directions printed on the CPI booklet for self-administration. Volunteers were also instructed to complete the questionnaire, indicating only one preferred alcoholic beverage. When asked for clarification, the researcher directed volunteers to mark the category which represents that individual's customary beverage choice.

Tests were individually self-administered. Each volunteer took the test with him or her. Instructions were given to return the completed packet in two weeks to a designated location. To add incentive and increase test compliance, the subjects were offered an opportunity to view their test results.

Each volunteer was assigned a number for reference and confidentiality of identity. The completed packets were grouped by beverage preference into one of three drink categories: (1) distilled spirits; (2) wine; and (3) beer. Individuals were identified only by volunteer number, gender, and age. Test results were then compared for significant differences between groups.

Analysis of Data

The completed tests were hand scored according to standard procedures, resulting in a raw score for each of the 18 CPI subscales. Raw scores were converted to standard scores for comparison.

The subscale scores were categorized by one of three drink choice determinations: Group 1 (distilled spirits); Group 2 (wine); and Group 3 (beer). There were a total of 10 subjects in each of three cells and 18 subscale scores per subject.

A one-way analysis of variance (ANOVA) was selected for data analysis. This selection was based upon the ANOVA's ability to evaluate multiple variables efficiently. This tool compared the variability among means of drink preference groups with the average variability found within the groups. A computer program was utilized for the statistical analysis process.

Drink choice was the dependent variable; personality measurements were the independent variable. The one-way ANOVA compared between group variance and within group variance in the three drink preference categories. Each of the 18 CPI subscale measurements were submitted to this test (the F test).

The mean squares (\underline{MS}) for each subscale were calculated for both between and within groups. The <u>F</u> ratio compared the MS between groups to the <u>MS</u> within groups.

The results of the <u>F</u> ratio for each subscale in each group were compared to the critical value for <u>F</u> to determine significance. For this study, the critical value for <u>F</u> is 3.35 (using <u>p</u><.05). This was determined by the <u>df</u> values (2, 27) for three groups and a total of 30 subjects.

Significant differences of groups by age was also examined. This was tested by a one-way ANOVA, as well.

As there were equal numbers of male and female volunteers, the groups were also compared for significant gender proportions. A Chi-square test was applied to this data. A report of these results appears in the following section.

CHAPTER 3

RESULTS

As previously stated, this study is both limited and exploratory. The following section reports the study results, highlighting the findings and acknowledging its limitations.

The data generated by this study were examined to determine significant differences between beer, wine, and distilled spirits drinkers. Personality, age, and gender were considered. Each consideration is reported separately.

Personality Elements

A one-way ANOVA was utilized to discover significant differences between and within groups by personality trait. This test revealed no significant mean differences between any two groups (using $\underline{p}<.05$). The results of the \underline{F} test for each of the CPI subscales did not surpass the critical value for \underline{F} (see Table 1). Since none of these results were larger than the critical value, the null hypothesis cannot be rejected. However, given the rigorous style of the ANOVA test and the exploratory nature of this study, it is reasonable to highlight suggestive findings.

As previously stated, at the .05 level of significance for df (2, 27), the critical value for <u>F</u> is 3.35.

Table l

Analysis of Variance of Subscale Scores Between and Within Groups

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	Significance
Dominance					
Between groups Within groups Total	68.60 <u>3219.40</u> 3288.00	2 27 29	34.30 119.24	0.29	0.75
Capacity for Status					
Between groups Within groups Total	$ \begin{array}{r} 41.60 \\ \underline{2262.40} \\ \underline{2304.00} \end{array} $	2 27 29	20.80 83.79	0.25	0.78
Sociability					
Between groups Within groups Total	16.07 <u>2135.80</u> 2151.87	2 27 29	8.03 79.10	0.10	0.90
Self-Acceptance					
Between groups Within groups Total	$ \begin{array}{r} 163.80 \\ \underline{2159.00} \\ \overline{2322.00} \end{array} $	2 27 29	81.90 79.96	1.02	0.37
Social Presence					
Between groups Within groups Total	161.67 <u>1783.30</u> 1944.97	2 27 29	80.83 66.05	1.22	0.31

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	Significance
Well-Being					
Between groups Within groups Total	13.87 <u>1276.80</u> 1290.67	2 27 29	6.93 47.29	0.15	0.86
Responsibility					
Between groups Within groups Total	$\begin{array}{r} 4.20 \\ \underline{1342.10} \\ 1346.30 \end{array}$	2 27 29	2.10 49.71	0.04	0.96
Socialization					
Between groups Within groups Total	33.87 <u>1491.60</u> 1525.47	2 27 29	16.93 55.24	0.31	0.73
Self-Control					
Between groups Within groups Total	80.27 <u>1727.60</u> 1807.87	2 <u>27</u> 29	40.13 63.99	0.63	0.54
Tolerance					
Between groups Within groups Total	61.27 <u>2376.20</u> 2437.47	2 27 29	30.63 88.01	0.35	0.71
Good Impression					
Between groups Within groups	24.27 <u>1587.20</u> <u>1611.47</u>	2 <u>27</u> 29	12.13 58.79	0.21	0.81

Table 1 (Continued)

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	Significance
Communality					
Between groups Within groups Total	40.07 <u>1115.30</u> <u>1155.37</u>	2 27 29	20.03 41.31	0.49	0.62
<u>Achievement via</u> Conformity					
Between groups Within groups Total	81.87 <u>1410.00</u> 1491.87	2 27 29	40.93 52.22	0.78	0.47
<u>Achievement via</u> Independence					
Between groups Within groups Total	52.27 <u>1395.60</u> 1447.87	2 <u>27</u> 29	26.13 51.69	0.51	0.61
<u>Intellectual</u> Efficiency					
Between groups Within groups Total	201.67 <u>1097.80</u> 1299.47	2 27 29	100.83 40.66	2.48	0.10
<u>Psychological</u> <u>Mindedness</u>					
Between groups Within groups Total	24.87 <u>1718.50</u> 1743.37	2 27 29	12.43 63.65	0.20	0.82

Table 1 (Continued)

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	Significance
<u>Flexibility</u>					
Between groups	402.07	2	201.03	2.14	0.14
Within groups	2533.40	$\frac{27}{29}$	93.83		
Total	2935.47	29			
Femininity					
Between groups	52.87	2	26.43	0.36	0.70
Within groups	1961.00	27	72.63		
Total	2013.87	$\frac{27}{29}$			

Table 1 (Continued)

Note: Critical Value for \underline{F} . $\underline{p} < .05$, $\underline{F} = 3.35$ $\underline{p} < .01$, $\underline{F} = 5.49$ Referring again to Table 1, the CPI subscale which measures Intellectual Efficiency reached the .10 level of significance ($\underline{F} = 2.48$). Similarly, the Flexibility scale \underline{F} ratio achieved the .14 level of significance ($\underline{F} = 2.14$). Both of these values approach the critical value for \underline{F} in this test.

Test Measurements

The CPI measures independent personality traits. These traits also have some interactive values with other traits. For the purpose of this study, however, the most useful interpretation of scores is by independent traitby-trait analysis. Using a mean score of 50, one standard deviation ($\underline{SD} = 10$) above or below the mean approximates a high or low CPI score. Table 2 contains the mean scores (\underline{MS}) and standard deviations (\underline{SD}) for the three drink groups by personality trait. A comparison of scores show Group 3 (beer drinkers) highest in Self-Acceptance by 0.5 <u>SD</u>. Group 1 (distilled spirits drinkers) achieved the lowest scores (by 0.5 <u>SD</u>) in the Intellectual Efficiency and Flexibility scales.

Figure 1 depicts the mean scores for each group by subscale. The similarity between group profiles is dramatized by this configuration. Variations in the "peaks and valleys" for the three groups is minimal. As mentioned previously, of interest is Group 1's lower score on the Intellectual Efficiency scale and Group 3's high

Table 2

Mean	Score	s	and	Star	ıdaı	:d	Deviation
	for	Su	bsca	ales	by	Gı	roup

	Gro	oup l	Gro	up 2	Grou	ι ρ 3
Subscales	MS	SD	MS	SD	MS	SD
Dominance (DO)	59.1	14.40	57.1	8.33	60.8	8.99
Capacity for Status (CS)	61.2	9.16	58.4	9.74	60.4	8.51
Sociability (SY)	54.9	10.99	56.4	6.48	56.5	8.63
Social Presence (SP)	59.3	7.60	60.8	6.16	64.8	10.12
Self-Acceptance (SA)	61.7	11.53	61.4	5.66	66.5	8.66
Well-Being (WB)	50.0	6.11	51.6	7.72	50.4	6.70
Responsibility (RE)	43.4	9.03	42.8	3.85	43.7	7.26
Socialization (SO)	40.2	6.27	42.8	8.87	41.4	6.92
Self-Control (SC)	46.0	8.91	49.0	8.15	45.2	6.80
Tolerance (TO)	52.9	9.92	54.6	6.87	51.1	10.89
Good Impression (GI)	47.4	6.62	47.6	9.09	45.6	7.06
Communality (CM)	53.0	6.57	53.1	4.91	50.6	7.53
Achievement via						
Conformity (AC)	51.6	7.00	55.2	8.38	55.0	6.13
Achievement via						
Independence (AI)	61.8	9.45	63.8	5.39	60.6	6.06
Intellectual						
Efficiency (IE)	53.8	6.37	59.3	7.02	59.3	5.66
Psychological						
Mindedness (PY)	57.5	5.58	59.2	7.97	59.6	9.81
Flexibility (FX)	57.7	11.22	66.6	6.38	63.1	10.72
Femininity (FE)	50.7	7.10	49.6	10.80	47.5	7.12



Figure 1: Mean Subscale Scores for Groups 1, 2, and 3.

score in Self-Acceptance. However, while these findings appear suggestive, they are not conclusive. No further measures were made with these results.

Age

Age factors were not controlled in this study. The age range is from 24 to 55 years of age, with a mean age of 38.3. The majority of those volunteering for this study were under age 39 (60 percent). A frequency distribution identified age groups 33 and 39 as the largest in the sampling, with 13.3 percent of overall volunteers in each $(\underline{n} = 4)$.

When age by group was examined by ANOVA, no conclusive findings emerged. However, Groups 1, 2, and 3 had mean ages of 40.2, 37.9, and 36.8, respectively. Sixty percent of the distilled spirits drinkers were over the age of 40. In comparison, 40 percent of the beer drinkers and 20 percent of the wine drinkers were above age 40. Although group differences cannot be seen as significant, a trend for the older individuals in this sample to identify themselves as distilled spirits drinkers is of note.

Gender

As stated previously, gender was not a controlled element in this study design. There were equal numbers of male and female participants by chance. Since this occurred, it seemed reasonable to evaluate this factor.

Groups 1 and 3 had a fairly even distribution of males and females: 6-4 and 7-3, respectively. Group 2, the wine drinkers, however, had eight female and two male members. The result of a Chi-square test revealed no significance. However, the result (.06) indicates a trend in this sample for more wine drinkers to be female.

Limitations

As this study is exploratory in nature and intent, it is necessarily limited. The small sample size, although adequate for this study's purpose, makes generalizations of the results restricted.

As stated earlier, this study utilized a convenience sample of a specialized population--graduate psychology students. The use of such a sample is, in itself, limiting. The homogeneity of this population is perhaps responsible for the similarity in overall CPI profiles. A more heterogeneous sampling would perhaps yield a more wide-range response.

It is likely that individuals who volunteered for this study are different from those students who did not volunteer. By soliciting subjects for this study, a specific rather than general quality of sampling is achieved. In sum, it is likely that this sample does not fairly represent any other population. Any statements about the findings can only be applied to this population.

This study is also limited by some methodological difficulties. The CPI was self-administered, as is customary. However, the lack of a uniform testing environment is a potential drawback. A wide range of test situations are possible with the current study design. Although controlled testing situations are not required for a valid CPI, a more controlled environment would insure compliance. Instead, this study contained a built-in incentive (viewing test results) which was aimed at minimizing any test fraudulence.

This study also gathered some information by selfreport. Personal information and beverage preference items (the short questionnaire form) relied solely upon individual self-report. This study assumed this information to be correct. The reliability of this data may, therefore, be questioned.

Another difficulty encountered in this study's design is the limitations of the statistical tool. The analysis of variance, although best suited for evaluating the data generated by this study, assumes a linear relationship between variables. As previous studies cited in the literature review section have indicated, there is most likely an interactive relationship between personality traits. This interactive relationship escapes consideration with the one-way ANOVA test. In future studies, a larger sample could utilize a multivariate analysis to better address this interaction of traits.

CHAPTER 4

DISCUSSION

It is the intention of this section to summarize the observations of this study and to discuss the inferences for future research. It was expected that through preliminary study, information about the adult social drinker would be discovered. The insights achieved through this current study, though inconclusive, assist in the development of a more precise study question about the relationship of personality to alcoholic drink choice.

It has been established in prior studies that the personality traits of sociability, ascendancy, and lack of responsibility are positively correlated with the use of alcoholic beverages in a student population (Sparks & Tucker, 1971; Schaninger, Lessig, & Panton, 1980). It is not surprising that the data collected in this study generally concur with these earlier findings.

When compared to the norm, all Groups in this study's sample achieved higher scores in social presence, self-acceptance, and achievement via independence. Lower scores were found in the areas of responsibility and socialization. Despite these similarities, however, these earlier researchers did not consider interbeverage differences, as in the current study.

As mentioned in the literature review, Rickman and Warren (1985) represent possibly the only published research which considered inter-beverage differences. Where Rickman and Warren discovered differences with respect to health reports, this current study concerned itself with personality traits.

After preliminary study, no significant differences in personality measurements were found between any two beverage choice groups. In fact, Mean Group profiles were remarkably similar (Figure 1). This may be due, in part, to the sampling. Given a larger, less homogeneous sample, perhaps significant differences would emerge. Further study would bear this out.

Mildly suggestive findings of this study show that, as a group, the distilled spirits drinkers in this sample were older than the other two drink groups. This Group also achieved the lowest scores in two personality trait measures: intellectual efficiency and flexibility. The beer drinkers tended to be the highest in selfacceptance.

The most promising study finding is the high number of female wine drinkers in the sampling. Although it is a fairly common generalization that wine is a "feminine" drink, wine ads appear to target a female audience. Empirical evidence which supports the idea that wine

drinkers are typically female would be valuable feedback to market researchers.

Therefore, the questions raised by the results of this exploratory study are summarized as follows: (1) Are beer drinkers more self-accepting than drinkers who prefer wine or distilled spirits? (2) Is the social wine drinker usually female? (3) Are those individuals who prefer distilled spirits over other alcoholic beverages older, less flexible, or less intellectually efficient than other social drinkers?

Although the study's findings are inconclusive and can only be considered suggestive, they do lend insights toward more specific study questions. Clearly, the use of a larger, more diverse sampling could test these preliminary insights.

Future study would also do well to take into consideration a more "psychographic" approach (Wells, 1974). Lifestyle and product attributes could be considered in addition to psychological variables, age, and sex. This widened scope would give a clearer picture of the dynamics in the relationship of the social drinker to the drink of choice. It is hoped by this writer that eventually a hypothesis about the perceived benefit (expectation) of alcohol use and preference for the consumer could also be devised. Testable evidence in this area would have implications for both market and behavioral science researchers.

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APPENDIX

APPENDIX

PERSONALITY CORRELATES OF ALCOHOLIC DRINK PREFERENCE

Thank you for volunteering for this project. Please provide the following information, indicating only <u>one</u> answer for each question. Remember that your confidentiality is at all times assured. Return all test materials with you in TWO WEEKS.

Volunteer #_____ Age_____ M/F

Is there a history of diagnosed alcoholism in your immediate family?

Yes_____ No____

Circle your usual choice of alcoholic beverage from the following:

Bourbon/Scotch	Wine/Champagne
Gin	Vodka
Rum	Beer (all types)