

Effects of Repeated Heavy Alcohol Intake

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Abstract

Social scientists, particularly psychologists have shown their keen interest in identifying psychological characteristics which would differentiate alcohol users from the non-users. A large number of comparative studies dealing with personality of alcohol users and non-users have figured in the recent literature. The present study is an attempt to understand the effects of repeated heavy alcohol intake. For this purpose, comparative estimate of occasional and habitual alcohol users and non-users in terms of their personality factors.

Keywords: Alcohol intake, GABA_A, Blood Alcohol Concentrations, Narcotics Control Bureau.

Introduction

The primary effect of alcohol is the rise in GABA_A receptor activation, promoting depression of the central nervous system. In distinct brain regions, GABA_A receptors are responsive to ethanol and are clearly involved in the acute actions of ethanol, ethanol tolerance, ethanol dependency, and self-administration of ethanol. These receptors are desensitized and decreased in number with repeated heavy alcohol intake, resulting in tolerance and physical dependency [1]. The dose of alcohol that can be processed biologically handled and its belongings contrast between genders. Equivalent amounts of alcohol devoured by people by and large outcome in ladies having higher blood alcohol concentrations (BACs). Ladies seem to turn out to be more weakened than men subsequent to drinking equal measures of alcohol, accomplishing higher blood alcohol fixations in any event, when portions are changed for body weight. This can be credited to numerous reasons, the principle being that ladies have less body water than men do [2]. A certain amount of alcohol is also more concentrated in the body of a woman. A certain amount of alcohol triggers a higher degree of intoxication for women due to varying releases of hormones relative to men.

Review of Literature

Alcohol consumption and abuse cause for 3.3 million deaths per year, or 6% of all deaths worldwide. The adverse impacts of substance consumption are far-reaching, ranging from human health complications, morbidity and death to repercussions for households, friends and the broader community [3]. The government of India has tried to prevent and control the Alcohol abuse in different areas. For example, the Indian government is taking measures like

setting up a special Narcotics Control Bureau to combat the growing illicit alcohol trade with its headquarters in the capital and zonal operation offices at Calcutta, Bombay, Madras and Varanasi, which are the key trafficking centres in India. Narcotic alcohol and Psychotropic Substance Act, 1985 provides deterrent punishment to alcohol related offenses. A mandatory minimum imprisonment of 10 years with a fine of Rs. 1 lakh extendable up-to 20 years with a fine of Rs. 2 lakhs has been provided under this Act. For the second conviction, the punishment would be 15 years mandatory minimum imprisonment and a fine of Rs. 1.5 lakhs extendable up-to 30 years and a fine of Rs. 3 lakhs. Under amendments made in 1989, death penalty has been prescribed in some cases on second conviction. Bail is usually not granted in such cases. Consumption of alcohol too is considered an offence. It is punishable with imprisonment for 6 months to one year depending upon the drug. A chronic, abusive alcohol consumption reduces with 50 percent the endorphins concentration in the brain. Endorphins are essential for maintaining an invigorated state of mental health.

The most prevalent lifetime disorder included antisocial personality disorder, phobias, psychosexual dysfunction, severe depression, and dysthymia. Patients who used alcohol and other substances were the most mentally ill. Patients of DIS mental conditions have more serious issues with alcohol and other medications. Barbiturate/ sedative/ hypnotic, amphetamine and substance dependence is more likely to have a DIS mental disorder [4].

Early clinical studies characterized mental deficiencies that were generally associated with alcohol disorders and found their etiological relationship to alcohol disorders. The “neo-Kraepelinian revolution” in psychiatry, which also took place in the 1970s, is a more rigorous diagnostic technique and a range of biomedical research methods to study co-occurring disorders with clinical comorbidity Influenced research [5].

Any medical condition we studied was more likely to develop in alcoholics than in non-alcoholics. Associations with antisocial personality disorder, other drug use and mania were especially intense. The correlation between alcoholism and depressive disorders has been positive but not very good. The prevalence of such conditions raised the probability of alcoholics using treatment facilities, but also did not increase the likelihood that drinking problems would be reported to a doctor. The results support recent reports of comorbidity in clinical populations and indicate that doctors need to be more cautious against alcoholism [6].

One-fifth to one-third of elevated risk of mortality among alcoholics is explained by suicide. In nations with high alcohol utilization, the suicide rate is additionally high and is expanding with all out expanded alcohol utilization. Comorbidity is basic among suicide casualties, and substance use disorder is most as often as possible joined with burdensome issues. Interpersonal harm within 6 weeks prior to suicide is more frequent among alcoholics than among non-suicide victims [7].

Method of the Study

The study was to make a comparative estimate of occasional and habitual alcohol users and non-users in terms of their personality factors as measured through the Cattell 16 PF, appropriate statistical techniques had to be used. The choice of the statistical techniques and the analyses of the data were guided by the demands of the hypotheses.

Results and Discussion

Humble Vs Assertive

To verify the hypothesis formulated in respect of submissiveness Vs Dominance or Humble Vs Assertive trait as measured and drug use, i.e., habitual and occasional drug users would be more assertive than non-users, relevant statistics were used. Table no. 1 presents summary of the findings.

Table 1. Analysis of Variance of scores of the Three Groups

Source	Df	SS	MS	F	p-value
Between	02	311.13	155.56	48.01	.01
Within	297	962.78	3.24		
Total	299	1273.91			

The findings as summarized in table no. 1 show that the three groups under study differ significantly in terms of their scores on Humble Vs Assertive trait of personality ($F=48.01$, $df=2/297$, p less than .01). The ANOVA result encourages us for further comparison of the mean scores across the three groups. Findings are presented in table no. 2.

Table 2. Comparison of Habitual users, Occasional users and Non-users in terms of their Mean Scores (N=100 in each group)

Groups	Mean	SD	t-matrix		
			a	b	c
a) Habitual	5.71	2.04	-	8.79*	7.19*
b) Occasional	3.60	1.40		-	1.45
c) Non-users	3.12	3.00			-

* p less than .01

The findings as presented in table no. 2 reveal that habitual alcohol users ($X=5.71$) have scored significantly higher than occasional alcohol users ($X=3.60$) and non-users ($X=3.12$). The obtained t-values of 8.79 and 7.19, respectively have been found to be significant beyond chance, although occasional alcohol users have scored higher than non-users, the difference between two means is not significant even at .05 level of confidence.

Thus we see that humble vs assertive trait contribute substantially to make differentiation between groups under study. Since high scores indicate dominance or assertive trait and low scores submissiveness or humble, it can be said that habitual alcohol users are more dominant or assertive as compared to occasional alcohol users and non-users. It is often observed that such persons who are assertive, self-assured, hostile or extra punitive, authoritarian and who disregard authority drink more and smoke more. This commonsense observation is also upheld by an empirical research carried out by Tripathi (1978). Thus, it can be said that the present findings are in expected direction and supported by commonsense observation and an empirical finding. However, the findings of the present study cannot be generalized due to dearth of direct studies in this area.

Sober Vs Happy-go-lucky

To verify the expectation that habitual and occasional alcohol users would be more happy-go-lucky as compared with non-users, data have been subjected to statistical analysis.

Table 3. Analysis of Variance of Scores of the Three Groups

Source	Df	SS	MS	F	p-value
Between	02	127.13	63.56	18.47	.01
Within	297	1022.29	3.44		
Total	299	1149.42			

It is obvious that the three groups, namely, habitual, occasional and non-users differ in terms of their scores on Sober Vs. Happy-go-lucky trait of personality as measured ($F=18.47$, $df=2/297$, p less than .01). Thus further comparison across the three groups is needed.

Table 4. Comparison of Habitual users, Occasional users and Non-users in terms of their scores (N=100 in each group)

Groups	Mean	SD	t-matrix		
			a	b	c
a) Habitual	4.71	1.79	-	4.03*	4.69*
b) Occasional	3.66	2.02		-	.61
c) Non-users	3.49	2.10			-

* p less than .01

The data as comprised in table no. 4 show that habitual alcohol users ($X=4.71$) have scored significantly higher mean scores than occasional alcohol users ($X=3.66$) and non-users ($X=3.49$). The comparison of habitual alcohol users Vs. occasional alcohol users as well as habitual users vs non-users has yielded t-ratios of 4.03 and 4.69, respectively which are significant beyond .01 level of confidence. Although occasional alcohol users have scored slightly higher than non-users, the mean difference is found to be statistically insignificant ($t=.61$, $df=198$, p greater than .05).

The findings as summarized reveal that the contribution of Sober Vs. Happy-go-lucky trait is substantial to make differentiation between the three groups. But the inter group comparison is not encouraging. Our expectation that habitual and occasional alcohol users would be more happy-go-lucky as compared to non-users is partially supported by the present data. Habitual alcohol users in the present case have been found to be happy-go-lucky whereas occasional alcohol users and non-users are sober. It may be reiterated that the high scorers tend to be cheerful active, talkative, frank, expressive, and carefree. These traits are typical manifestations of an extravert. Keeping this as basis, workable hypothesis and alcohol abuse has been formulated for empirical verification. Findings are more or less in the hypothesized direction.

The present study also reveals that the influence of the peer group is the main factor in initiation of the habit. About three-fourth of the subjects (76.00%) report that they started using alcohol under the influence of friends and companions. Another large group of the respondents (63.00%) reports that they picked-up the habit by imitating elder members in the family. Thus it is easy to infer that 'bad company' is the most important factor as far as the initiation of alcohol abuse by the college youth is concerned. Likewise, if there are many persons addicted to alcohol in the family, the younger section would also tend to develop the habit.

Conclusion

In the present context, it would not be out of place to mention that studies conducted earlier have focused attention only on the two groups users and non-users. Further it has been noted that in most of the studies, the focus was very limited and thus a systematic investigation covering a larger sample drawn from habitual and occasional alcohol users (experimental group) as well as non-users (Control group) is needed. Keeping foregoing considerations in view, the present study has been undertaken to investigate the personality characteristics of habitual users, occasional users and non-users.

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