EFFECT OF ALCOHOL CONSUMPTION ON THE PERSONALITY TRAITS OF COLLEGE STUDENTS IN DELHI-NCR

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Abstract

The present study examines the relationship between alcohol consumption and personality traits among college students. It also investigates gender differences in the effects of alcohol intake on personality. Using a descriptive survey methodology, data were collected from 100 college students through the Michigan Alcohol Screening Test (MAST). Pearson's Product Moment Correlation and t-tests were employed for data analysis. The findings reveal a significant negative relationship between alcohol consumption and two personality traits: Agreeableness and Conscientiousness, indicating that increased alcohol consumption is associated with lower levels of these traits. Additionally, a positive relationship was observed between alcohol consumption and the Neuroticism vs. Emotional Stability factor, suggesting that higher alcohol intake correlates with greater neurotic tendencies. No significant gender differences were found in the effects of alcohol consumption on personality traits. These findings highlight the complex relationship between alcohol use and personality, with implications for intervention strategies in young adult populations.

Key Words: Alcohol Consumption, College Students, Personality Traits

INTRODUCTION

Due to the different socio-cultural practices present throughout the country, alcohol consumption frequently poses a serious issue in developing nations like India. Different age groups are seen to be active users of this addiction. In addition, we can mention how urbanisation, cross-cultural interactions, and the media have changed society. Drinkers are often reported to have greater physical and mental health problems, which impede their personal growth and development and also have an impact on their interpersonal relationships with those around them. States should enact stringent laws that restrict alcohol use and educate the public on the harmful effects of alcohol on the body and psyche. Alcohol usage affects both young people and adults, including both males and women. Numerous studies on alcohol intake and its negative effects on humans have been done. A person's personality is impacted by alcohol intake, and the impacts might be immediate or cumulative. Risk-taking and dangerous behaviours are short-term behavioural impacts. On the emotional level, the effects include violence, depression, anxiety, overconfidence, reduced cognitive control, diminished conscientiousness, and decreased drive.

According to Raymond Cattell, personality is a pattern of traits that helps to understand the personality of an individual and predict his behaviour. Traits are persistent and shape an individual's personality. The personality is judged based on how a person responds in a situation, his feelings, emotions, intellectual level, and way of perceiving things and reciprocating accordingly could be categorised under the personality category.

There are numerous theories propounded by various psychologists as discussed further.

Gordon Allport Personality Traits

According to Gordon Allport, personality traits are genuine entities, that exist somewhere in the brain. We each inherit a distinct set of raw materials for given traits, which are subsequently modified by our experiences.

The distinctive way we react to our surroundings and the reliability of that reaction is described by our traits. When we are shy, we react differently to strangers than when we are friendly; or when we are self-confident.

Gordon categorized traits into two main types:

1. Common Traits: These are traits shared by most people within a culture.
2. Individual Traits: Allport classified these into three subcategories:
   - Cardinal Traits: Traits so dominant and influential that nearly every action can be traced back to them.

- Central Traits: Traits that we would mention when writing a careful letter of recommendation.

- Secondary Traits: Less obvious and consistent traits that are less crucial in defining our personality, such as food preferences and musical tastes.

Big Five Factor

The Big Five personality test is an extensively documented theory in personality assessment. The Big Five personality test, known as the OCEAN personality exam, is based on the Big Five model. This model defines human personality through five traits: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism, forming the acronym OCEAN. The Big Five test for personality depends on a scale with two extreme ends on which individuals are rated.

Alcohol Consumption

Alcohol, also known as ethanol, is a psychoactive substance found in beverages such as beer, wine, and spirits produced through distillation (hard liquor). It represents one of the oldest and most widely used recreational drugs, inducing the typical characteristics of intoxication with alcohol ("drunkenness"). Drinking alcohol is a habit for some people, but not for others. Because they drink alcohol so frequently, their brains begin to release dopamine, leading to addiction. Alcohol alters the chemistry of the brain, according to studies, influencing brain function. An individual becomes dependent on alcohol because it provides them with pleasurable feelings when consumed.

Alcohol consumption can have both direct and indirect effects on individuals, influencing them differently based on gender. The relationship between alcohol intake and various factors has been extensively studied, yet the precise threshold for excessive consumption remains undefined. For some individuals, consuming 30-60 ml may be considered normal, while for others, even 100 ml or less per week may pose the lowest risk. However, the optimal or safe amount of alcohol consumption has not been conclusively established.

Alcohol consumption can have acute and chronic adverse effects on the body and mind.

Acute Effects:

At blood alcohol levels up to 50 mg/dm³, alcohol induces euphoric behavior. Between 50–150 mg/dm³, it depresses brain centers, causing pale or flushed cheeks and eyes, and may lead to vomiting. Higher levels (150–250 mg/dm³) result in memory loss, slurred speech, muscle incoordination, and vomiting (Gee, 1979). Concentrations exceeding 250 mg/dm³ can cause severe neuro-motor impairment, comatose states, and potentially fatal outcomes.

Chronic Effects:

Long-term alcohol use leads to malnutrition, particularly when money is spent on alcohol rather than food, exacerbating health issues linked to poor nutrition. Alcohol's metabolic by-products contribute to illnesses, including gout (due to increased urate production) and kidney damage. Elevated triglycerides can result in diseases affecting the liver, pancreas, and major blood vessels. Chronic consumption damages the heart, muscles, and brain, increasing susceptibility to heart attacks. Liver cirrhosis, muscular atrophy, gastrointestinal disorders, central nervous system disruptions, and endocrine abnormalities often manifest clinically in chronic alcohol users.

Nutritional Deficiencies:

Chronic alcoholism depletes water- and lipid-soluble vitamins and essential minerals, leading to neurological and mental dysfunction (Devgun et al., 1992). Thiamine deficiency, common in alcoholics, can cause psychotic symptoms and neurological impairments. Overall, alcohol abuse has widespread and severe consequences, impacting both physical and mental health.

REVIEW OF RELATED LITERATURE

The following studies provide an overview of the work done in the field of Alcohol consumption and how the personality of an individual is affected.

Chinnusamy, Eugin & Janakiraman (2021) concluded in their study that 65% of participants' family members reported impaired interpersonal relationships due to alcohol consumption, with 45% reporting instances of beating.

Eashwar V.M. et al., (2020) mentioned the burden of alcohol consumption along with a remark on the national alcohol policies and its numerous negative consequences on the body and psyche.

Ramanan et al. (2016) found that half of the patients experienced strained relationships with family members, especially their spouses, children, and neighbors. The study highlights the significant impact of alcohol consumption on interpersonal relationships within the family and the broader community.

In their 2018 study, Hakulinen and Jokela examined the relationship between alcohol use and changes in the five major personality traits over time. They utilized data from six cohort studies, encompassing 39,722 participants, with a mean follow-up period of 5.6 years.

Alcohol use was assessed using four different metrics: average alcohol intake, binge drinking frequency, signs of alcohol use disorder, and a global indicator of risky alcohol use. The study found that risky alcohol use was associated with increases in extraversion and

decreases in emotional stability, agreeableness, and conscientiousness over the follow-up period. These associations were consistent across the different measures of alcohol use.

Blonigen, et. Al. (2015) proposes that alcohol use initiation is associated with changes in personality trait trajectories from early adolescence to young adulthood.

Soundararajan et al. (2014) propose that traits related to extraversion, particularly excitement seeking, may be linked to an increased risk of alcohol relapse. Predicting alcohol relapse by studying personality traits would help clinicians in improving treatment outcomes.

Das et al., (2006) found an improved knowledge of the connections between drinking and specific disorders. Their study also shows how intricate and multifaceted the connection between alcohol usage and negative health effects is. The average amount of drinking is anticipated to rise in southeast Asia, which includes India and the highest population density.

Malouff, J. et.al. (2007) did a study on the relationship between alcohol use and the five-factor model of personality, which found a link between personality disorder and alcohol use.

Ball (2005), Eysenck (1997), Rose (1998), and Sher et al. (2005) concluded that various personality traits are consistently linked to the development and manifestation of alcohol use disorders.

Brown et. al., (1979) claimed in their study that alcohol's impact on serotonin in the brain may be a factor in alcohol-related aggression because studies of impulsively violent people with antisocial personality disorder have higher serotonin levels than those of people with lower levels.

For the most populous nations in the world, including India, increases in average drinking volume are projected. There are cultural differences that affect the patterns of alcohol intake. Additionally, alcohol is connected to several diseases whose proportional burden on the world is expected to rise.

SIGNIFICANCE OF THE STUDY

In this modern and materialistic world, people are increasingly suffering from psychological problems, and frequent suicidal attempts are also observed. Some addictions, including alcohol, have further effects on a person's life in a variety of ways. The present study examines the relationship between alcohol intake and its effects on the personality of young college going students. In addition, the study aims to determine whether there are any notable differences in alcohol intake and its effects on personality between male and female individuals. The findings of the study may be useful and disseminated among young adults to make them informed about the harm that alcohol drinking causes to their relationships and

health. Therefore, investigators decided to investigate this issue.

OBJECTIVES

The objectives of the study are stated below:

1. To study the relationship between Alcohol consumption and the Extraversion factor of the personality of college going students.

2. To study the relationship between Alcohol consumption and the Agreeableness factor of the personality of college going students.

3. To study the relationship between Alcohol consumption and the Conscientiousness factor of the personality of college going students.

4. To study the relationship between Alcohol consumption and Neuroticism vs Emotional Stability factors of the personality of college going students.

5. To study the relationship between Alcohol consumption and the Imagination factor of the personality of college going students.

6. To study the relationship between Alcohol consumption and the personality of college going students.

7. To study the gender difference, if any, of effects of alcohol consumption on the personality of college going students.

HYPOTHESES

Keeping in view the above stated objectives the following hypotheses were formulated: -

H01: There will be no significant relationship between alcohol consumption and the Extraversion factor of personality of college going students.

H02: There will be no significant relationship between alcohol consumption and the Agreeableness factor of personality of college going students.

H03: There will be no significant relationship between alcohol consumption and the Conscientiousness factor of personality of college going students.

H04: There will be no significant relationship between alcohol consumption and Neuroticism vs. Emotional Stability factors of personality of college going students.

H05: There will be no significant relationship between alcohol consumption and the Imagination factor of personality of college going students.

H06: There will be no significant relationship between alcohol consumption and the personality of college going students.

H07: There will be no significant gender difference in effects of alcohol consumption on the personality of college going students.

VARIABLES

Alcohol consumption is an independent variable, whereas personality is a dependent variable.

RESEARCH METHODOLOGY

This study employed a descriptive survey methodology. To determine the relationship between alcohol use and its reactions to a person's personality, the gathered data was analyzed using Pearson's Product Moment Correlation and t-test. College students were requested to take the test voluntarily and anonymously, and data from 100 students—50 males and 50 females—was collected using Google Forms.

TOOLS AND TECHNIQUES

1. The Michigan Alcohol Screening Test (MAST)

One of the earliest and most reliable alcohol screening tests is the Michigan Alcohol Screening Test (MAST, 1971). The MAST includes questions about how the patient feels about family, career, and social issues that are frequently brought on by heavy drinking. The test was created to identify alcohol abuse among the general public.

Reliability and Validity

A thorough overview of validity and reliability studies of the MAST test was provided by Minnich and Colleagues (2018). They found that the grand internal consistency coefficient was .84 with average internal consistency coefficients of .85 and .82 for clinical and non-clinical samples respectively.

Studies have shown high levels of consistency in scores obtained from the MAST Test over different time periods. Specifically, test-retest reliabilities were found to be .97, .94, and .95 for 1-day, 3-day, and 7-day intervals, respectively (Zung, 1982; Teitelbaum & Carey, 2000).

2. The Big Five Personality Test

The "Big Five" model gained popularity and attracted a lot of attention. It is still the most commonly acknowledged theory of personality today and has been studied across numerous populations and cultures. The test has 50 items, which are categorised under five main factors which are Extraversion, Agreeableness, Conscientiousness, Emotional stability, and Intellect/Imagination each has 10 questions. If a person's score is high or low then, the personality is judged accordingly.

The validity and reliability of the test are as follows:

Big-Five Domain	Number of Items (+ve & -ve)	Mean Item Intercorrelation	Coefficient Alpha	Correlation with Markers*
		Shorter Scales		
I. Extraversion	5 + 5 = 10	.40	.87	.73 [.84]
II. Agreeableness	6 + 4 = 10	.31	.82	.54 [.66]
III. Conscientiousness	6 + 4 = 10	.29	.79	.71 [.90]
IV. Neuroticism vs. Emotional Stability	2 + 8 = 10	.38	.86	.72 [.84]
V. Imagination	7 + 3 = 10	.34	.84	.67 [.80]
Total/Mean	**26 + 24 = 50**	**.34**	**.84**	**.67 [.81]**
Total/Mean	**52 + 48 = 100**	**.31**	**.90**	**.70 [.78]**

{Source: *https://ipip.ori.org/neigFive5broadTable.htm*}

POPULATION AND SAMPLE

All the college-going students of Delhi-NCR comprised the population and a total sample of 100 students (N=100) of the 18-25 years of age group was taken by using a purposive sampling technique, including an equal number of male and female participants (n1=50) & (n2=50).

Settings

The entire study was conducted in a congenial or college environment. The data was collected during the leisure time of the participants.

Ethical Issues

All participants' consent for the study was obtained before the data collection. All the participants were oriented about the goal of the current study. Along with each participant's authorization, the appropriate College authorities' approval was also obtained. All participants were assured that their personal information wouldn't be shared with anybody and would only be utilized for research purposes.

STATISTICAL TECHNIQUES

To find out the relationship between alcohol consumption and the personality of the participants, Pearson's product-moment correlation 'r' was applied to the collected data. For the comparison of the data related to alcohol consumption and personality, the 't' test was

applied.

DELIMITATIONS

Due to time constraints and to make the proposed study more feasible, it was delimited as follows:

1. This study was conducted only on 100 college going students of Delhi - NCR.
2. This study was conducted on students of the age group of 18 to 25 years only.
3. This study does not include any factors of personality other than Extraversion, Agreeableness, Conscientiousness, Neuroticism vs. Emotional Stability, and Imagination.

FINDINGS AND DISCUSSIONS

OBJECTIVE 1: To study the relationship between Alcohol consumption and the Extraversion Factor of the Personality of college going students.

The null hypothesis to test objective 1 was formulated as follows:

H01: There will be no significant relationship between Alcohol Consumption and the Extraversion Factor of personality of college going students.

Table 1: Relationship between Alcohol Consumption and Extraversion Factor of Personality

Group	N=100, df=98	Calculated value of 'r'	Remarks
Females	**50**	**0.154**	**Not Significant**
Males	**50**		

Significant Critical value of r at .05= .205, .01= .267

Table 1 shows the relationship between alcohol consumption and the extraversion personality, and the value of Pearson's **r = 0.154** is insignificant. Hence, we can conclude that the relationship is not significant and the null hypothesis is accepted.

OBJECTIVE 2: To study the relationship between Alcohol consumption and the Agreeableness Factor of the Personality of college going students.

The null hypothesis to test objective 2 was formulated as follows:

H02: There will be no significant relationship between Alcohol Consumption and the Agreeableness Factor of Personality of college going students.

Table 2: Relationship between Alcohol Consumption and Agreeableness Factor of Personality

Group	N=100, df=98	Calculated value of 'r'	Remarks
Females	50	-0.237*	Significant at .05
Males	50		level of significance

Significant Critical value of r at .05= .205*, .01= .267

Table 2 shows a significant negative relationship between Alcohol Consumption and the Agreeableness factor of Personality and the value of Pearson's **r = -0.237** which is significant at a .05 level of significance which means that if Alcohol Consumption increases, Agreeableness decreases and vice versa.

Discussion

To sum up the findings of H02, it may be concluded that the findings of the research carried out by Malouff et. al. (2007) are conformable with the present findings that drinking alcohol is linked to low agreeableness.

Hence, null hypothesis 2: There is no significant relationship between alcohol consumption and the agreeableness personality factor of college going students was rejected.

OBJECTIVE 3: To study the relationship between Alcohol consumption and the Conscientiousness Factor of the Personality of college going students.

The null hypothesis to test objective 3 was formulated as follows:

H03: There will be no significant relationship between Alcohol Consumption and the Conscientiousness Factor of Personality of college going students.

Table 3: Relationship between Alcohol Consumption and Conscientiousness Factor of Personality

Group	N=100, df=98	Calculated value of 'r'	Remarks
Females	50	-0.218*	Significant at .05
Males	50		level of significance

Significant Critical value of r at .05= .205, .01= .267

Table 3 shows a significant negative relationship between alcohol consumption and the Conscientiousness factor of personality and the value of Pearson's **r = -0.218** at .05 level of significance which means that if alcohol consumption increases, Conscientiousness decreases and vice versa.

Discussion

To sum up the findings of **H03,** it may be concluded that the findings of the research carried out by Malouff et. al. **(2007)** are consonant with the present findings that drinking alcohol is linked to low conscientiousness.

Hence, null hypothesis 3: There is no significant relationship between alcohol consumption and the conscientious personality factor of college going students was rejected.

OBJECTIVE 4: To study the relationship between Alcohol consumption and Neuroticism/vs. Emotional Stability Factor of the Personality of College going Students.
The null hypothesis to test objective 4 was formulated as follows:

H04: There will be no significant relationship between Alcohol Consumption and Neuroticism vs. Emotional Stability Factor of the Personality of College going Students.

Table 4: Relationship between Alcohol Consumption and Neuroticism vs. Emotional Stability Factor of Personality

Group	N=100, df=98	Calculated value of 'r'	Remarks
Females	50	0.356**	Significant at .01
Males	50		level of significance

Significant Critical value of r at .05= .205, .01= .267

Table 4 shows a positive relationship between alcohol consumption and Neuroticism vs. Emotional Stability factor of personality and the value of Pearson's **r = 0.356** which is significant at a .01 level of significance.

Discussion

To sum up the findings of H04, it may be concluded that the findings of the research carried out by Malouff et. al. (2007) are consonant with the present finding that drinking alcohol is linked to high Neuroticism.

Hence, null hypothesis 4: There is no significant relationship between alcohol consumption and Neuroticism vs. Emotional Stability personality factor of college going students was rejected.

OBJECTIVE 5: To study the relationship between Alcohol consumption and the Imagination Factor of the Personality of college going students.

The null hypothesis to test objective 5 was formulated as follows:

H05: There will be no significant relationship between Alcohol Consumption and the Imagination Factor of Personality of college going students.

Table 5: Relationship between Alcohol Consumption and Imagination Factor of Personality

Group	N=100, df=98	Calculated value of 'r'	Remarks
Females	50	-0.156	Not Significant
Males	50		

Significant Critical value of r at .05= .205, .01= .267

Table 5 shows the relationship between Alcohol Consumption and Imagination factor personality and the value of Pearson's **r = -0.156** which is not significant. Hence, we can conclude that the relationship is not significant and the null hypothesis is accepted.

Hence, null hypothesis 5: There is no significant relationship between Alcohol Consumption and the Imagination Personality Factor of college going students was accepted.

OBJECTIVE 6: To study the relationship between Alcohol Consumption and Personality of college going students.

The null hypothesis to test objective 6 was formulated as follows:

H06: There will be no significant relationship between Alcohol Consumption and Personality of college going students.

Table 6: Relationship between Alcohol Consumption and Personality of College Students

Group	N=100, df=98	Calculated value of 'r'	Remarks
Females	50	-0.254*	Significant at .05 level of significance
Males	50		

Significant Critical value of r at .05= .205, .01= .267

Table 6 shows a significant negative relationship between Alcohol Consumption and Personality and the value of Pearson's r = - 0.254 is significant at a .05 level of significance.

Discussion

To sum up the findings of H06, it may be concluded that the findings of the research carried out by Hakulinen, C., & Jokela, M. (2018) are consonant with the present findings that drinking alcohol has been found to be associated with long-term personality trait changes in adults.

The Null Hypothesis 6: There is no significant relationship between Alcohol Consumption and the Personality Factor of college going students was rejected.

OBJECTIVE 7: To study the gender difference if any, of effects of alcohol consumption on the personality of college going students.

The null hypothesis to test the objective 7 was formulated as follows:

H07: There will be no significant gender difference in effects of Alcohol Consumption on the Personality of College going Students.

Table 7: Gender difference in effects of Alcohol Consumption and Personality of College going Students

Group	N=100, df=98	Calculated value of 't'	Remarks
Females	50	0.029	Not Significant
Males	50		

*Critical value of t at .05= 1.96

Table 7 shows that there is no gender difference in the effects of Alcohol Consumption and Personality of college students. Hence, null hypothesis 7: There is no significant gender difference in effects of alcohol consumption on the personality of college going students was accepted.

RECOMMENDATIONS

1. **Awareness and Education Programs:** Awareness campaigns in colleges should be conducted to educate students about the psychological and personality-related impacts of alcohol consumption. Alcohol education may be integrated into college orientation programs to help students make informed decisions.

2. **Counselling and Support Services:** Counselling centers in universities should offer guidance and support for students struggling with alcohol-related issues, and peer support groups and mentorship programs to promote healthier coping mechanisms should be encouraged.

3. **Policy Interventions:** Stricter campus policies on alcohol consumption should be enforced to reduce its negative effects on student personality development. Regular

workshops and mandatory sessions on responsible drinking habits are also recommended.

4. **Alternative Social Activities:** Promotion of extracurricular activities, such as sports, cultural events, and mindfulness programs are recommended, to provide students with alternative social engagement opportunities. Students should be encouraged to participate in stress-relief activities like yoga and meditation, which can help manage emotional instability without resorting to alcohol.

5. **Longitudinal Studies and Further Research:** Further studies with larger and more diverse samples should be conducted to understand the long-term impact of alcohol consumption on personality traits. Interventions that may help mitigate the negative effects of alcohol on personality, such as behavioral therapies or lifestyle modifications may be implemented.

6. **Gender-Specific Approaches:** Since no significant gender differences were found in the present study, further research could explore whether other demographic factors (such as socioeconomic background, cultural influences, or academic stress) play a role in alcohol's impact on personality.

CONCLUSION

The findings of the present study, "Effect of Alcohol Consumption on the Personality traits of College Students in Delhi-NCR" show a positive relationship between the dependent and independent variables. The major findings revealed a significant negative relationship between alcohol consumption and the Agreeableness factor of personality which means that if alcohol consumption increases, Agreeableness decreases and vice versa. The findings also show a significant negative relationship between alcohol consumption and the Conscientiousness factor of personality which means that if alcohol consumption increases, Conscientiousness decreases and vice versa and it shows a positive relationship between alcohol consumption and Neuroticism vs. Emotional Stability factor of personality. Furthermore, the results show a significant negative relationship between Alcohol Consumption and Personality and no significant gender difference in effects of alcohol consumption on the personality of college going students.

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