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Personality traits and alcohol use among undergraduates at Benue State University Makurdi

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Research Article

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Abstract

Background

Personality traits may be associated with alcohol use among university students, but findings vary across populations and measures. This study examined associations between the Big Five personality traits and alcohol use among undergraduates at Benue State University, Makurdi, Nigeria.

Methods

A cross-sectional questionnaire survey included 351 undergraduate students. Separate simple linear regression analyses examined openness to experience, conscientiousness, extraversion, neuroticism, and agreeableness in relation to alcohol use.

Results

Openness to experience showed a small positive association with alcohol use (β = .125, R^2 = .016, F(1, 349) = 5.521, p = .019). The reported regressions for conscientiousness (β = −.077, p ≈ .149), extraversion (β = −.003, p = .960), neuroticism (β = .071, p ≈ .186), and agreeableness (β = −.050, p = .353) were not statistically significant.

Conclusion

In this sample, openness to experience was associated with alcohol use, although the model explained a small proportion of outcome variance. The cross-sectional findings do not establish causality.

Introduction

The increasing rate of alcohol use among youth's especially undergraduate students has continued to constitute a source of serious concern to researchers and psychologists worldwide. The use and abuse of alcohol is highly prevalent in both developed and developing countries of the world. The 2014 global status report on alcohol and health indicated that worldwide, 3.3 million deaths result from harmful use of alcohol every year, representing 5.9% of all deaths (Hibell, Guttormsson, Ahlström, Balakireva, Bjarnason, Kokkevi, & Kraus 2017). In other countries, alcohol is the most prevalent substance used among youth in early and late adolescence (World Health Organisation, 2020). Alcohol use increases drastically between 15 and 25 years of age, then starts to slowly decrease. Approximately 45% of surveyed individuals between the ages of 19 and 20 report ongoing alcohol use, compared to about 70% of individuals ages 21–25. Amongst college students, The National Institute on Alcohol Abuse and Alcoholism (NIAAA) reports 59.9% of surveyed undergraduates report drinking alcohol, compared to

50.2% of other individuals of the same age. Full-time college students are also more likely than non-full-time college students to report being drunk (Johnston, O'Malley, Bachman, Miech, & Patrick, 2019).

In Nigeria, the situation shows there is high prevalence of alcohol use among youths and there is high probability that the frequency of alcohol drinking will continue to increase (Taiwo, Olukayode, Babatunde, Olaitan & Adeoye 2022). Alcohol use is one of the risk behaviours that students involve themselves and it has been shown to have implications for their wellbeing. Alcohol consumption has negative consequences; especially as it affects health and quality of life of an individual. The implications of alcohol use among students on their well-being or academic performance cannot be overemphasized. Young people or students are vulnerable to many behaviors that put their health at risk such as experimenting with smoking cigarettes, taking illegal drugs, and drinking alcohol (Reyna & Farley, 2006). As undergraduate students' alcohol intake increases; the rate of risky behaviour may also increases. Students' alcohol use and abuse could be influenced by a number of factors, among which could be personality traits, parental lifestyles, peer influence, parental attachment, and commitment to conventional activities among others. Indeed, each of these factors exerts tremendous influence on students' frequency of alcohol use and abuse (Onongha, 2012).

Excessive alcohol use amongst undergraduate students is associated with low grades, poor mental health, and risks to physical safety (Arria, Garnier-Dykstra, Cook, Caldeira, Vincent, Baron, & O'Grady,2013; Arria, Caldeira, Allen, Bugbee, Vincent, & O'Grady, 2017; Hingson, Zha, & Weitzman, 2009). Young adults remain at high risk of developing alcohol use disorders, despite mounting administrative pressure for universities to minimize irresponsible alcohol use and binge drinking behavior (Brown-Rice, Furr, & Hardy, 2017). Increased alcohol use and misuse during college years can be accounted for by preexisting personality traits in conjunction with a number of novel environmental influences, often including increased workload, novel independence, and easy access to alcohol.

Personality has been shown as a robust predictor of both hazardous alcohol use and alcohol consumption in college students, with existing literature describing correlates of alcohol use behaviors across diverse measures of personality traits (Littlefield & Sher, 2010, Martin, 2011). The Big Five Inventory is widely used across psychology literature, with Conscientiousness, Neuroticism, and Openness to Experience often strongly associated with alcohol use/misuse (Goldstein & Flett, 2009; Kuchetti, Terracciano, Stephan, & Sutin, 2018). Personality is a dynamic organization, inside the person, of psychophysical systems that create a person‘s characteristic patterns of behaviour, thoughts, and feelings. Every individual‘s personality makes him/her distinct as it bestows upon the individual characteristics that are enduring. An individual‘s personality is described by how he/she has behaved in the past and can be used to predict how the individual will behave in various situations in the future (Oladimeji, 2017). Personality is also regarded as the sum total of the behavioral and mental characteristics that are distinctive of the individual. These characteristics are known as traits. Personality traits are identified by the consistent pattern of behaviour that an individual who possesses such traits exhibit over time. An individual‘s personality influences decision making. The outcome of these decisions depends on the type of the decision. These decisions at times could have negative

impacts on the health of the person and that of others. For instance, the decisions to either drink alcohol or not could eventually have negative impacts on the person's health. The links between health and personality have been extensively studied in the past (Makanjuola, Daramola, & Obembe, 2007; Morris, Levine, Goodridge, & Luo, 2006), these studies have shown that certain personality traits may be associated with alcohol abuse. These include traits such as extraversion and antisocial traits. The Five-Factor model, which consists of five higher-order personality traits (extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience), is recognized as the most comprehensive conceptualization of personality structure (John, Naumann, & Soto, 2008). Extraversion refers to sociability, social confidence, and sensitivity to positive emotions; neuroticism comprises low emotional stability, anxiety proneness, and sensitivity to negative emotions; agreeableness reflects features such as cooperativeness, kindness, and trust towards other people; conscientiousness is characterized by high self-control, flexibility, and adherence to social norms; and openness to experience is denoted by curiosity, broadmindedness, and creativity. In addition, personality refers to characteristic ways of thinking, feeling and acting that are fairly consistent when measured across situations and overtime.

Personality traits makes undergraduate vulnerable to alcohol used based on environmental factors. Students could be using alcohol due to stress of academic activities, parents' expectations' in everyday life. Following the relevance of alcohol use among undergraduate students in every institution including undergraduate students of Benue State University, Makurdi, it has become imperative to research the determinant factors of personality traits among undergraduate students given the dearth of home-based and foreign empirical studies linking all big five personality traits to alcohol use. It is based on the above that the researcher wishes investigate the influence of personality traits on alcohol use among undergraduates in Benue State University, Makurdi and establishing if there are gender differences on alcohol use among the undergraduates

The social impact of alcohol on the general populace is enormous and has also been a source of concern to health policy makers. Heavy alcohol consumption is a major public health problem (World Health Organization, 2014), alcohol increase the risk of cardiovascular diseases, liver disease, certain cancers, mental health problems and premature mortality. Understanding the determinants of harmful levels of alcohol intake is important if progress is to be made in modifying this behaviour. The extent to which alcohol consumption is determined by personality has long been debated but the rate of alcohol consumption by students has continued to increase. Alcohol consumption has negative social and economic consequences, affects health, and can create dependence is particularly difficult to cure, and prevention is important.

Despite the worldwide concern and education about the dangers of substance like alcohol use by non-governmental organization (NGO) and the government, most of the students have limited knowledge of how dangerous the habit is. Many students have dropped out of schools and others opted to engage in criminal activities thus endangering the lives of other young people. The young generations are no longer seen as role models since most of the young adults are unemployed after university and under the

influence. Despite the government's concern and heightened campaigns against the vice among students in the university, there exists a parallel accelerated rate of students who are alcoholics. Although, students are expected to be aware of the effects of dangers of alcohol use and commit themselves to their studies, the habit still exist default of their prior expected awareness of its consequences. Although excessive use of alcohol is prevalent in all societies, students are not exception.

To this end and judging from the problems outlined earlier, this research aimed at investigating the influence of personality traits on alcohol use among undergraduates in Benue State University, Makurdi.

Study objectives

- Investigate the influence of openness to experience on alcohol use among undergraduates in Benue State University, Makurdi
- Investigate the influence of conscientiousness on alcohol use among undergraduates in Benue State University, Makurdi
- Examine the influence of extraversion on alcohol use among undergraduates in Benue State University, Makurdi
- Assess the influence of neuroticism on alcohol use among undergraduates in Benue State University, Makurdi
- Investigate the influence of agreeableness on alcohol use among undergraduates in Benue State University, Makurdi

Materials and methods

Design

The study adopted the cross-sectional survey design to investigate the influence of personality traits on alcohol use among undergraduates in using questionnaires. Cross-sectional survey is an observational study; it is the collection of information from respondents at a single period in time using questionnaire, snap-shot or recorder. This type of design utilizes different groups of people who differ in the variable of interest. The study design is appropriate because it allows the researcher to compare many variables at the same. The independent variables for the study are the big five personality traits while alcohol use was measured as the dependent variable.

Setting

The study was carried out in Benue State University, Makurdi using undergraduate students. Benue State University was established by the Benue State Government with the enactment of the Benue State University Edict No. 1 of 1991. The University took off in the 1992/93 academic year with four faculties,

namely, Arts, Education, Science and Social Sciences. Two Faculties, Law and Management Sciences came on stream in the 1993/1994 academic year and faculty of environmental sciences in 2016. Benue State University is located near the Southern bridgehead of the Benue River on sandy alluvial formation. It occupies 6 square kilometers piece of land between Gboko Road and River Benue approximately 1.5km wide and 4km long. It is bounded to the West by the Benue Links Headquarters and to the East by Tilley-Gyado House. The land slopes gently from Gboko Road towards River Benue with variable gradients ranging from 0–50. As a consequence, much of the area is well-drained though some portions experience hydromorphic conditions. Being part of Makurdi town, the University experiences sticky debilitating conditions both in the wet and dry seasons, a characteristic of the Benue trough. The Benue State University is located between the south bank of River Benue and the Makurdi Gboko high way.

Participants

Undergraduates in Benue State University, Makurdi constituted the population of the study. A total number of three hundred and ninety three (393) participants were selected from all departments and faculties in the institution out of the 24,354 number of undergraduates as the sample size for the study (Bursary Unit of Benue State University, 2023) using Taro Yamanne's sample size calculator. However, only three hundred and fifty one (351) were returned and valid for analysis out of which 267(76.1%) were male and 84(23.9%) were female. age ranged from 18–41 with mean age of 27.4 and (Standard Deviation = 6.2). The participants' religion was also sampled and 242 (68.9%) were Christians, 79 (22.5%) were Islam and 30 (8.5%) were traditionalist. According to students academic level, 97 (27.6%) were in 100Level, 92 (26.2%) were in 200Level, 65(18.5%) were in 300Level, 84 (23.9%) were in 400Level and 13 (3.7%) were in 500Level with 97(27.6%) who were from the Tiv speaking tribe, 90(25.6%) who were from the Idoma speaking tribe, 70 (19.9%) who were from the Igede speaking tribe, 92(%)who were from other speaking tribes and 2(.6%) who did not indicate their tribe.

Sampling

This study employed the simple random sampling technique in the collection of data from the respondents. This is the technique of selection that allows every member of the general population the opportunity of being selected. This technique is mostly used in universities, using students due to the fact that they are readily available. In using this sampling, the researcher visited the students in their lecture hall, common room, campus and off campus hostel and school Park.

Sample Size Determination

The targeted participant for this study is 24,354 undergraduate students in 8 faculties in the institution. The Yaro Yamanne's formular was used to determine the sample size from the population.

However, only 351 were returned and valid for analysis

Instruments

Two standardized instruments were used to collect data for this study; they include, (i) Big Five Personality Inventory and (ii) Alcohol Use Screening Questionnaire.

Big Five Inventory (BFI): This instrument was developed by John and Srivastava (1999) to measure the big five traits of personality. The instrument with 45 item has five rating point of strongly disagree = 1, disagree a little = 2, undecided = 3, agree a little = 4 and agree strongly. Scoring: BFI scale scoring (“R” denotes reverse-scored items): Extraversion: 1, 6R, 11, 16, 21R, 26, 31R, 36Agreeableness: 2R, 7, 12R, 17, 22, 27R, 32, 37R, 42 Conscientiousness: 3, 8R, 13, 18R, 23R, 28, 33, 38, 43R Neuroticism: 4, 9R, 14, 19, 24R, 29, 34R, 39 Openness: 5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44Some items are scored direct while some are scored in a reversed form. The instrument has a validity of .90 and Cronbach Alpha of .87 respectively.

Alcohol Use Screening Questionnaire: The AUSQ is a self-rated questionnaire, developed by Johnson, Lee, Vinson, and Seale (2013) to rate alcohol utilisation. Several studies have shown its validity and reliability in the detection of hazardous drinking, alcohol misuse, and alcohol dependence. It has also been validated among a sample of Nigerian students and found to be a valid instrument for screening for alcohol-related problems in Nigerian university students (Adewuya, 2005). At cut-off of above 5, it could clearly identify participants with alcohol-related problems with sensitivity of 0.94 and specificity of 0.92. The AUSQ consists of 10 items measured on a 4 point Likert format, with a total maximum score of 40. It consists of items such as “How often do you have a drink containing alcohol‘? How often do you have five or more drinks on one occasion? The classification of normal, hazardous and harmful alcohol use will be based on the total score of a respondent on the scale. If a respondent‘s score falls within 0–8 it will be classified as being within the normal‘ range of alcohol use. If the score falls within 9–18 it will be classified as being within the hazardous‘ range of alcohol use and a score within 19–40 is classified as harmful‘ use. In this environment, a cut-off score of 5 is recommended when screening for hazardous use. Cut-off scores of 7 and 9 are equally recommended when screening for harmful use and dependence respectively. Hence, No use of alcohol is regarded as “0” Normal use‘ “1–4”, “5–6” as hazardous use‘ while “7–8” was taken as Harmful use‘. Individuals who scored “9–40” were classified as Dependent use‘. This recommendation will be applied to this study. For the binary logistic regression analysis, the respondents will be classified into two groups, “0–4”= No problem drinking and “5–40” = Problem drinking.

Procedure

A copy of questionnaire was given to each of the respondents in the university in their lecture halls, common room, hostel and school sitting packs. Before going out for data collection, a letter of introduction was obtained from the Department of Psychology, Benue State University, Makurdi which was used for the purpose of identification. Permissions was sought and obtained from each students; they were informed that participation in the study is purely voluntary as well as confidentiality of their

responses guaranteed. The researcher design pieces of papers labeled either ‘YES’ or ‘NO’ and was carefully folded to conceal the label. These were taken to hostels, school parks and lecture hall. The students were first briefed about the essence of the study and were asked to pick from the pieces of papers. Anyone of them that picked ‘YES’ were given a copy of questionnaire. A total number of three hundred and ninety three (393) questionnaires were administered, however, only three hundred and fifty one were collected and valid for analysis. Respondents were debriefed in accordance with research ethics in Psychology.

Data Analysis

Data were analyzed using regression analysis to test the influence of personality traits on alcohol use. Other descriptive statistics such as frequency, percentages, mean and standard deviation were used to analyzed the demographic variable via the Statistical Packaged for Social Sciences (SPSS).

Results

All five simple linear regression analyses used 351 participants (df = 1, 349). Openness to experience was the only trait with a statistically significant association with alcohol use. Its model explained 1.6% of the variance. The reported models for conscientiousness, extraversion, neuroticism, and agreeableness were not statistically significant.

Table 1
Simple linear regression results for personality traits and alcohol use

Personality trait	**R**	**R^2**	**F (1, 349)**	**β**	**t**	**p**
Openness to experience	.125	.016	5.521	.125	2.350	.019
Conscientiousness	.077	.006	2.091	−.077	−1.446	≈ .149
Extraversion	.003	< .001	.003	−.003	−.051	.960
Neuroticism	.071	.005	1.757	.071	1.325	≈ .186
Agreeableness	.050	.002	.864	−.050	−.930	.353

Note. β denotes the standardized regression coefficient. P values for conscientiousness and neuroticism follow the corrected values in the supplied Chapter Four. For extraversion, F and R^2 are derived from the reported coefficient test (t = − .051; df = 349) and rounded to three decimals.

Discussion

The first hypothesis examined whether openness to experience significantly influenced alcohol use among undergraduates at Benue State University, Makurdi. The reported regression was statistically significant and positive, $F(1, 349) = 5.521$, $p = .019$, $\beta = .125$. However, the model explained only approximately 1.6% of the variance in alcohol use ($R^2 = .016$). The finding therefore suggests a small

positive association in the reported sample; it should not be interpreted as showing that openness alone explains a substantial proportion of alcohol use.

These finding tallies with Michelle and Therese (2019) whose results showed that Openness to experience personality traits have an impact on alcohol consumption. Future research should investigate how other factors combined with personality traits might affect alcohol consumption. Finding of this hypothesis also support the result by Sígrid, Laura, Jorge, Generos and Manuel (2018) in the contribution of the five factors of personality and peers on alcohol use. Their result revealed that openness and low conscientiousness correlated with alcohol quantity. These findings support the relevance of personality traits and peer affiliation in relation to alcohol consumption.

The second hypothesis examined whether conscientiousness significantly influenced alcohol use among undergraduates at Benue State University, Makurdi. After reconciling the reported test statistics, the result was not statistically significant, $F(1, 349) = 2.091$, $p \approx .149$, $\beta = -.077$. The model explained approximately 0.6% of the variance in alcohol use ($R^2 = .006$). Thus, the available reported statistics do not provide sufficient evidence of a significant association between conscientiousness and alcohol use in this sample.

This result does not provide statistically significant evidence for the relationship reported in the present sample. It therefore differs from the findings attributed to Ugoji and Fakrogha (2022), who reported higher conscientiousness among selected alcohol abusers, while the study attributed to Priscilla (2021) reported negative associations between conscientiousness and several alcohol-use outcomes. Differences in samples, measures, and study designs may help explain the contrasting findings; the present results should not be taken as confirmation of either pattern.

The third hypothesis examined whether extraversion was associated with alcohol use. Recalculation from the reported coefficient test gave $F(1, 349) \approx 0.003$ and $R^2 < .001$; the coefficient was not statistically significant ($\beta = -.003$, $t = -.051$, $p = .960$). The model therefore explained a negligible proportion of the variance in alcohol use.

This finding does not provide evidence of an association in this sample, but it does not establish that extraversion is unrelated to alcohol use in other populations. It differs from findings attributed to Boland and Henderson (2020), who reported that extraversion predicted alcohol use, and is consistent with the absence of an association with alcohol relapse reported by Ofojebe and Okoli (2020). Differences in outcomes and participant groups may contribute to these results.

The fourth hypothesis examined whether neuroticism significantly influenced alcohol use among undergraduates at Benue State University, Makurdi. The reported regression was not statistically significant, $F(1, 349) = 1.757$, $p \approx .186$, $\beta = .071$. The model explained approximately 0.5% of the variance in alcohol use ($R^2 = .005$). Consequently, the reported statistics do not provide sufficient evidence of a significant association between neuroticism and alcohol use in this sample.

The present result does not establish a significant relationship between neuroticism and alcohol use, although this differs from studies cited in the original project that reported associations between neuroticism and alcohol relapse or alcohol misuse. Those findings may indicate that the relationship varies according to the population, outcome measure, and other factors such as stress. The present non-significant result should be reported alongside, rather than interpreted as disproving, those earlier findings.

The fifth hypothesis examined whether agreeableness significantly influenced alcohol use among undergraduates at Benue State University, Makurdi. The reported regression was not statistically significant, $F(1, 349) = .864$, $p = .353$, $\beta = -.050$. The model explained approximately 0.2% of the variance in alcohol use ($R^2 = .002$). The findings therefore do not provide sufficient evidence of a significant association between agreeableness and alcohol use in this sample.

Finding agrees with Gerhard, Simon, Joseph, and Matthias (2020) in a study reviewing if they are changes in personality traits and alcohol use associated. Result showed that, neuroticism, extraversion, conscientiousness and openness were significantly and positively cross-sectionally associated with both alcohol use variables. However, agreeableness was not associated with alcohol use variables. It was concluded that the direction of effects confirmed findings from other studies, and the association between changes in personality and alcohol use support the idea that prevention programs should simultaneously target both. Finding of this hypothesis agrees with Taiwo, Olukayode, Babatunde, Olaitan, and Adeoye (2022) that examined personality traits, alcohol use problem drinking among undergraduates and found that agreeableness was significantly lower among drinkers. Other personality trait was significantly higher in respondents involved in problem drinking. The study suggests there are intervening factors mediating personality traits and problem drinking among undergraduates.

Conclusion

This study investigated associations between personality traits and alcohol use among undergraduates at Benue State University, Makurdi. Openness to experience showed a small positive association with alcohol use ($F(1, 349) = 5.521$, $p = .019$; $R^2 = .016$). The reported analyses for conscientiousness, extraversion, neuroticism, and agreeableness were not statistically significant. The extraversion model had a negligible effect ($R^2 < .001$; $p = .960$).

Limitations

Although the study makes a lot of contributions but it also has some limitations which were considered to be the hurdle on the way of getting maximum generalization on the population of study. First, this research was limited to undergraduates' in Benue State University only so its finding might not be generalized. Secondly, data collection was by the use of questionnaires which some participants might hide their feelings on items contained in the instrument. Another setback was that of poor responses from participants, convincing participants towards participation was indeed a core challenge faced in

the study. Another limitation was inadequate fund and time constraints in carrying out this research work.

Implications and recommendations

University-based alcohol education and prevention should be offered broadly to students rather than targeted on the basis of personality scores alone. The reported findings provide only limited evidence of an association between openness to experience and alcohol use and do not establish that any personality trait causes alcohol use. Screening or admission decisions should not be based on these results. Future studies should use preserved participant-level data, clearly documented scoring procedures, and appropriate statistical analyses to test whether personality traits are associated with alcohol-use outcomes.

Universities may consider accessible health-promotion activities, including physical activity opportunities and alcohol-harm education, as part of wider student wellbeing initiatives. The effectiveness of specific interventions should be evaluated rather than assumed from the present results.

Because the reported analyses for conscientiousness, extraversion, neuroticism, and agreeableness were not statistically significant, future research should examine larger and more diverse student samples and consider other potential factors associated with alcohol use. These results do not prove that the traits have no relationship with alcohol use.

University management from time-to-time should conduct seminars targeted at the dangers of alcohol use inviting local and international non-governmental organisations NGOs.

Declarations

The study was approved by the Benue State University Research Review Board (ERRB), Makurdi, Nigeria. Informed consent was obtained from all participants before data collection

Ethics approval

Not applicable

Consent to participate

Permission was sought and participation was voluntary.

Competing interests

None

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References

1. Adejuwon BA, Olutola T, Oyewo AO, Obisesan A (2018) Influence of personality traits, peer group pressure and parental monitoring on alcohol use among in-school secondary students in Ibadan, Oyo State, Nigeria. Covenant International Journal of Psychology (CIJP). Vol. 3 No. 2, Dec. 2018
2. Ajzen I (1985) From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), Action control: From cognition to behavior (pp. 11–39)
3. Ajzen I (1991) The theory of planned behavior. Organ Behav Hum Decis Process 50(2):179–211
4. Ajzen I, Fishbein M (1980) Understanding attitudes and predicting social behavior. Prentice-Hall
5. Akers RL (2011) Social Learning and Social Structure: A General Theory of Crime and Deviance. Northeastern University, Boston, MA
6. Armitage CJ, Conner M (2001) Efficacy of the theory of planned behaviour: A meta-analytic review. Br J Social Psychol 40(Pt 4):471–499
7. Arria AM, Garnier-Dykstra R, Cook B, Caldeira TK, Vincent I, Baron R, O'Grady (2013) Behavioural and biological indicators of impulsivity in the development of alcohol use, problems, and disorders. Alcoholism: Clinical and Experimental Research, 34(8), 1334–1345
8. Arria KM, Caldeira HK, Allen BA, Bugbee KB, Vincent KE (2017) & O'Grady Prevalence and incidence of drug use among college students: An 8-year longitudinal analysis. The American Journal of Drug and Alcohol Abuse, 43 (6) (2017), pp. 711–718
9. Bandura A (1971) Social Learning Theory. General Learning, New York. http://www.asecib.ase.ro/mps/Bandura_SocialLearningTheory.pdf
10. Bandura A (1977) Social learning theory. Prentice Hall, Englewood Cliffs, NJ
11. Boland JK, Henderson CE (2020) The Impact of Personality on the Physical Activity and Alcohol Use Relationship [Elektronnyi resurs]. Klinicheskaia i spetsial'naia psikhologiia = Clinical Psychology and Special Education, 2020. Vol. 9, no. 3, pp. 62–75
12. Brown-Rice T, Furr W, Hardy J (2017) Personality and alcohol use: the role of impulsivity. Addict Behaviours 37(1):102–107
13. Caprana GV, Cervone C (2009) Personality: Determinants, dynamics, and potentials. Cambridge University Press, New York
14. Cartwright D (2001) Theories and Models of Personality (Ist ed.). Debuque, Iowa: Wm. C. Brown Company Publishers'. 178.ISBN 0-697-06624-X
15. Christian H, Markus J (2018) Alcohol use and personality trait change: pooled analysis of six cohort studies Published online by Cambridge University Press: 15 March 2018

16. Collins E, Kirouac RD (2013) The role of personality and affect regulatory processes. Journal of Personality 2000; 68: 1059–88
17. Conner M, Sparks P (2005) Theory of planned behaviour and health beahviour. In: Conner M, Norman P (eds) Predicting health beahviour. Open University, pp 170–223
18. Cooke R, Dahdah M, Norman P, French DP (2016) How well does the theory of planned behaviour predict alcohol consumption? A systematic review and meta-analysis. Health Psychol Rev 10(2):148–167
19. Cornelia R, Alexandru TI (2016) Alcohol consumption and accentuated personality traits among young adults in Romania: a cross-sectional study Substance Abuse Treatment. Prev Policy 11:36
20. David PS, Realo A, Voracek M, Allik J (2008) Why can't a man be more like a woman? Sex differences in big five personality traits across 55 cultures. J Personal Soc Psychol 94(1):168–182
21. Feiler DC, Kleinbaum AM (2015) Popularity, similarity, and the network extraversion bias. Psychol Sci 26:593–603
22. Fishbein M, Ajzen I (2010) Predicting and changing behavior: The reasoned action approach. Psychology
23. Fremont T, Means GH, Means RS (2015) Anxiety as a function of task performance feedback and introversion. Psychol Rep 27:455–458
24. Gallego S, Mezquita L, Moya-Higueras J, Ortet G, Ibáñez MI (2018) Contribution of the five factors of personality and peers on adolescent alcohol use: A cross-national study. Span J Psychol 21:e58
25. Gerhard G, Simon M, Joseph S, Matthias W (2020) Changes in Personality Traits and Alcohol Use Associated? A Cohort Study Among Young Swiss MenFront Psychiatry. 2020; 11: 591003. Published online 2020 Dec 23. PMCID: PMC7785805
26. Goldstein K, Flett O (2009) Personality traits and Alcohol use disorders and hazardous drinking among undergraduates at English universities. Alcohol Alcohol 46(3):270–277
27. Gosling S (2008) Snoop: What your stuff says about you? Basic Books, New York
28. Graziano WG, Jensen-Campbell LA, Hair EC (2001) Perceiving interpersonal conflict and reacting to it: The case for agreeableness. J Personality Social Psychol 70:820–835
29. Graziano WG, Bruce JW, Sheese BE, Tobin RM (2007) Attraction, personality and prejudice: Liking none of the people most of the time. J Personality Social Psychol 93:565–582
30. Hibell B, Guttormsson U, Ahlström S, Balakireva O, Bjarnason T, Kokkevi A, Kraus L (2017) The 2017 ESPAD report—substance use among students in 35 European countries. The Swedish Council for Information on Alcohol and Other Drugs (CAN). Stockholm, Sweden: Modintryckoffset AB; 2009
31. Hingson F, Zha GK, Weitzman R (2009) The risks associated with alcohol use and alcoholism. Alcohol Res Health: J Natl Inst Alcohol Abuse Alcoholism 34(2):135–143
32. Hirschi T (1969) Causes of delinquency. University of California Press, Berkeley
33. Hirsh JB, DeYoung CG, Peterson JB (2009) Metatraits of the Big Five differentially predict engagement and restraint of behavior. J Pers 77(4):1085–1101

34. Hogan R, Johnson J, Briggs S (2015) Handbook of personality psychology. Academic, California
35. Horvath M, Bogg T, Roberts BW (2014) Conscientiousness and health-related behaviors: a meta-analysis of the leading behavioral contributors to mortality. Psychol Bull 130:887
36. Jang LG, Mortimer BM, Haley EG, Graves C (2002) Personality and subjective well-being: Big five correlates and demographic variables. Pers Indiv Differ 38(7):1561–1569
37. Jensen-Campbell L, A., Graziano WG (2001) Agreeableness as a moderator of interpersonal conflict. J Pers 69:323–361
38. John SM, Naumann A, Soto A (2008) An alternative description of personality: The Big Five factor structure. J Personal Soc Psychol 59(6):1216–1229
39. Johnson J, Lee A, Vinson D, Seale P (2013) Use of AUDIT-Based Measures to Identify Unhealthy Alcohol Use and Alcohol Dependence in Primary Care: A Validation Study. Alcohol Clinical Exp Res, Vol 37, No S1, 2013: pp E253–E259
40. John OP, Srivastava S (1999) The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In: Pervin LA, John OP (eds) Handbook of personality: Theory and research, vol 2. Guilford Press, New York, pp 102–138
41. Johnston KL, White KM (2003) Binge-drinking: A test of the role of group norms in the theory of planned behaviour. Psychol Health 18(1):63–77
42. Johnston LD, O'malley PM, Bachman JG, Schulenberg JE (2010) Monitoring the future: National survey results on drug use, 1975–2009. Volume I: Secondary school students. NIH Publication No. 10-7584. National Institute on Drug Abuse (NIDA). Retrieved from http://eric.ed.gov/?id=ED514370
43. Jylha P, Isometsa E (2006) The relationship of neuroticism and extraversion to symptoms of anxiety and depression in the general population. Depress Anxiety 23(5):281–289
44. Kalichman SC, Cain D, Zweben A, Swain G (2005) Sensation seeking, alcohol use and sexual risk behaviors among men receiving services at a clinic for sexually transmitted infections. J Study Alcohol 64:564–561
45. Kathleen PM, Chelsie EB, Rohan HP (2021) Risk for alcohol use/misuse among entering college students: The role of personality and stress. Author links open overlay panel. Addictive Behaviors Reports Volume 13, June 2021, 100330
46. Klingemann F, Sobell S, Sobell L (2010) Alcohol as a risk factor for burden of disease. Eur Addict Res 2003; 9: 157–164
47. Kuchetti ET, Terracciano A, Stephan D, Sutin C (2018) Personality traits of Undergraduate student drinking and related harms at an Australian university: Web-based survey of a large random sample. BMC Public Health 12(1):37
48. Landers RJ, Lounsbury DM (2006) Personality Psychology: Domains of Knowledge about Human Nature, 2nd edn. McGraw Hill, New York
49. Lasebikan J, Ola AB (2016) Drugs and the Nigerian society: A comprehensive annotated bibliography. CRISA, Jos

50. Lindstrom E (1992) Acute stress increases voluntary consumption of alcohol in undergraduates. Alcohol 50(2):213–218
51. Littlefield L, Sher E (2010) Personality and subjective well-being: Big five correlates and demographic variables. Pers Indiv Differ 38(7):1561–1569
52. Makanjuola EK, Daramola G, Obembe S (2007) Adolescent alcohol use is a risk factor for adult alcohol and drug dependence: Evidence from a twin design. Psychol Med 36(1):109–118
53. Malouff JM, Thorsteinsson EB, Schutte NS (2005) The relationship between the five-factor model of personality and symptoms of clinical disorders: a meta- analysis. J Psychopathol Behav Assess 27:101–114
54. Martin S (2011) Health and human development: Understandings from life course research. Dev Neuropsychol 24(2–3):719–744
55. McAdams D, Donnellan E (2009) Effect of Maryland's 2011 alcohol sales tax increase on alcohol-positive driving. Am J Prev Med 53(1):17–24
56. McMillan B, Conner M (2003) Using the theory of planned behaviour to understand alcohol and tobacco use in students [Peer Reviewed]. Psychol Health Med 8(3):317–328
57. Michelle A, Therese O (2019) personality traits and women's alcohol consumption. Fall semester 2019 Honor thesis School of Law, Psychology and Social Work Advisor: Catherine Tuvblad
58. Miller J, Griffin H, Hart A (2000) Big Five Personality Traits and Self-Esteem as Predictors of Life Satisfaction in Iranian Muslim University Students. J Happiness Stud 1:105–113
59. Morean K, Corbin A (2009) Psychosocial correlates of alcohol, tobacco and cannabis use; findings from a Nigerian university. Drug Alcohol Depen 33:247–256
60. Morris C, Levine E, Goodridge R, Luo F (2006) Who takes health risks? A probe into eight personality types. Pers Indiv Differ 32:1185–1197
61. Ofojebe CP, Okoli PC (2020) The Correlate of Personality Traits and Parenting Styles with Relapse in Alcohol amongst Treated Alcoholic Patients. Department of Internal Medicine. ESUT College of Medicine. Enugu State University of Science and Technology, Enugu. Nigeria. Research – (2020)Volume 8, Issue 2
62. Oladimeji OB (2017) Prevalence, correlates, disability, and comorbidity of DSM-IV alcohol abuse and dependence in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. Arch Gen Psychiatry 64(7):830–842
63. Onongha GI (2012) The Influence of some factors on alcohol use and abuse among education students of Osun State University, Nigeria. Int J Humanit Social Sci 2(11):276–283
64. Polimeni E, Moore C, Gruenert T (2010) Teenage alcohol and intoxication debut: the impact of family socialization factors, living area and participation in organized sports. Alcohol Alcohol 2002;37:74–80
65. Priscilla PL (2021) Big five personality & alcohol use: META-ANALYSIS In Dissertation Abstracts International: Section B: The Sciences and Engineering (Vol. 75, Issue 4–B(E))

66. Ralph LP, Martin FS, Sherman NC, Gabriel SD, Williams JEG (2009) Using the Five-Factor Model to Identify a New Personality Disorder Domain: The Case for Experiential Permeability. J Personal Soc Psychol 96:1245–1258
67. Rentfrow J, Gosling S (2003) Handbook of personality psychology. Academic, California
68. Reyna VF, Farley F (2006) Risk and rationality in adolescent decision making: Implications for theory, practice, and public policy. Psychol Sci Public Interest 7:1–44
69. Shin SK, Hong SM, Jeon O (2012) Gender differences and gender convergence in alcohol use over the past three decades (1984–2008), the HUNT study, Norway. BMC Public Health. 2016;16:723–9
70. Sremac P (2010) Socioeconomic status as an effect modifier of alcohol consumption and harm: analysis of linked cohort data. Lancet Public Health. 2017;2(6):e267–76
71. Steel P, Schmidt J, Shultz J (2008) Refining the relationship between personality and Subjective well-being. Psychol Bull 134:138–161
72. Taiwo AA, Olukayode A, Babatunde S, Olaitan O, Adeoye O (2022) Personality traits, alcohol use and problem drinking among undergraduates in southwest Nigeria. Alcohol Alcohol 46(3):270–277
73. Tellegen A, Lykken DT, Bouchard TJ, Wilcox KJ, Segal NL, Rich S (2001) Personality similarity in twins reared apart and together. J Personal Soc Psychol 54(6):1031
74. Tobin RM, Graziano WG, Vanman E, Tassinary L (2000) Personality, emotional experience, and efforts to control emotions. J Personality Social Psychol 79:656–669
75. Ugoji FN, Fakrogha EI (2022) Personality Traits of Selected Alcohol Abusers in Delta and Bayelsa States of Nigeria. Innovations. Number 71 December 2022
76. Vearing S, Mak D (2007) Openness to experience and active older adults' life satisfaction: A trait and facet-level analysis. Pers Indiv Differ 47:637–641
77. West L, Brown K (2013) Influences of sexual sensation seeking, alcohol consumption, and sexual arousal on women's behavioral intentions related to having unprotected sex. Psych Addict Behav. 2013;23(1):14–22
78. Wiggins JS (2007) Trapnell PD. Personality structure: The return of the Big Five. In: Hogan R, Johnson JA, Briggs SR (eds) Handbook of personality psychology. Gulf Professional Publishing, Amsterdam
79. World Health Organization WHO (2020) Alcohol fact sheet. http://www.who.int/mediacentre/factsheets/fs349/en/. Accessed 20 Apr 2019
80. Yannick S (2009) Openness to experience and active older adults' life satisfaction: A trait and facet-level analysis. Pers Indiv Differ 47:637–641