

ALCOHOL USE AMONG ADOLESCENTS AND ITS ASSOCIATION WITH PERSONALITY FACTORS AND AGE OF ONSET OF ALCOHOL USE: A NARRATIVE REVIEW

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Abstract

Background: Consumption of alcohol is a persistent social issue which is escalated when alcohol is easily available to the adolescents. The big five personality traits are seen to be relevant in the use of alcohol among adolescents. Early use of alcohol is a robust cause in developing alcohol dependency in later stages of life.

Purpose: The present study aims to understand the role of personality traits and age of initiation of alcohol use among adolescents.

Methodology: Different databases like PubMed and Google Scholar were used to find research papers for this review paper. Past 16-year papers were considered for this study.

Results: Researchers have shown that impulsivity, extraversion, sensation seeking, being less open to experiences, non-conscientiousness have a relationship with alcohol use among adolescents. Friends' alcohol use, poor parent child relationship, childhood adversity, parents' alcohol consumption and extreme temperament profile are seen to be significantly associated with early age onset for drinking.

Conclusion: Personality traits and age have an impact on adolescents' alcohol use. Considerable research has been done in the are of personality however, more attention needs to be focused on the age of initiation for using alcohol. This study will help in devising measures for adolescents at an early stage thereby preventing them from being dependent on alcohol.

Keywords: Alcohol Use, Personality factors, Age, Gender, Adolescents

1. Introduction

Adolescence is a developmental period between the age of 10 to 19 years marked by multitude of changes which increases the vulnerability of alcohol consumption among young adolescents (Merline, Jager & Schulenberg, 2008). Alcohol use is harmful and addictive with a strong association with dependence producing properties. Consumption of alcohol is regarded as the world's third largest risk factor for disability and disease (NICE Clinical Guidelines, 2011). Adolescent are seen to use alcohol for several reasons to fit in a peer group, reduce stress, experimentation or just as an escape from difficult life situations here it is important to identify such factors at an early stage and design appropriate intervention plan to help adolescent escape from being dependent on alcohol (Sinha, 2008). In various societies, drinking alcohol has become a part of celebration in every social occasion which tend to initiate alcohol use among adolescence due to its easy availability and acceptance worldwide. Worldwide it is approximated that more than

half of population above the age of 15 years has consumed alcohol and nearly about 2.3 billion people are found out to be current drinkers. (Lourde&Kodali, 2020). Researchers have carried out an extensive research on this issue in past as well as it has become a leading problem among adolescent's life which can be contributed due to several other reasons as well. Researchers have identified that drinking heavily and binge drinking among adolescents and young adults have led to several physiological changes in the brain resulting in thinning and lowering the prefrontal cortex and cerebellar regions capacity with a reduction in the development of white matter (Cservenka&Brumback, 2017).Campanell et al. (2013) found elevated brain activity in fronto-parietal regions during working memory, verbal learning, and inhibitory control tasks. In response to alcohol cues, relative to controls or light-drinking individuals, binge and heavy drinkers show increased neural response mainly in mesocortico-limbic regions, including the striatum, anterior cingulate cortex, hippocampus, and amygdala (Adinoff, 2004). This leads to changes in the adolescent's behaviour furthermore which may become a serious concern not only for adolescents but also for their parents and the social environment they live in, therefore, this study attempts to identify the contributing factors that may lead to consumption of alcohol by observing their age of onset and personality factors that play a major role behind it.

2. Study Selection

Previous research papers from the year 2005 to 2021 were taken into consideration for this study. Papers were searched using various electronic databases like PubMed and Google scholar. Keywords used for searching papers were "Alcohol use and adolescents", "Alcohol use and personality factors"; "Age of onset and alcohol use", "Alcohol use".

3. Results

Table 1 *Studies included in the narrative review.*

Author and Year	Country	Sample	Comparator	Variables	Measure
Lourde&Kodali, 2021	India	210 adolescent males	—	Socio Demographics, Monthly pocket money, Family history of alcohol consumption, friends' history of alcohol consumption	Structured survey
Noorbakhsh, Afzali, Boers, & Conrod, 2020	Montreal	3286 Adolescents	Gender Differences	Neurocognitive Functioning, Alcohol, Cannabis	Completion of Structured Survey for 5 consecutive years

Valencia, Tran, Lim, Choi, & Oh, 2019	Korea	68043 Adolescents	—	Socio-demographics, Alcohol drinking, Sexual behaviour, Smoking, Socioeconomic status, Age at initiation	Secondary data
Boson, Wennberg, Fahlke, & Berglund, 2019	Sweden	853 Adolescents	Gender Differences	Mental well-being, Alcohol inebriation, Personality traits, Externalising problems, Internalising problems	Secondary data
Loose, Acier, & El-Baalbaki, 2018	France	Adolescents and Adults		Personality Traits,Alcohol use,Drinking motives	Modified Drinking Motives Questionnaire, Audit, Big Five Inventory French (BFI-Fr)
Gallego et al., 2018	Spain	120 Scottish and 221 Spanish Adolescents	Scottish and Spanish Adolescents	Personality factors and peers	The Alcohol Intake Scale, NEO-PI 3, Junior version of Spanish NEO-PI-R
Hormenu, Elvis Hagan Jnr & Schack, 2018	Ghana	1400 school going adolescents	Southern, Western and Cenrtal parts of the region	Drinking behaviour, frequency of drinking, drunkenness, educational level of first drinking behaviour, perception of friends drinking behaviour, sources of drinking, reasons of alcohol usage	Generic School Heath Survey Questionnaire
Pape, Rossow&Brunborg, 2018	Norway	Adolescents	Gender	Parenting, underage drinking	Secondary Data
Adan, Forero, & Navarro, 2017	Spain	Adolescents, Young people	—	Binge drinking, Personality traits	Secondary data

Miller, DiBello, Lust, Meisel, & Carey, 2017	North East India	568 Young Adults	–	Sleep, Impulsivity, Alcohol use	Daily Drinking Questionnaire, Brief Young Adult Alcohol Consequences, UPPS Impulsive Behaviour Scale, Sleep adequacy was measured with the help of Semi Structured Questionnaire
Ramos-Olazagasti, Bird, Canino, & Duarte, 2016	South Bronx, New York, San Jaun, Caguas	Adolescents	Legal Drinking Age	Childhood Adversity, Early Initiation of alcohol use	Secondary Data
Pedersen & von Soest, 2015	Norway	9207 Adolescents		Alcohol consumption, Parental factors, conduct problems, Binge drinking, Use of other substances, Depressive symptoms, social integration, Sexual behaviour, Loneliness	Revised version of Quantity /Frequency approach, Depressive mood inventory, Parental Bonding Instrument, UCLA Loneliness scale, Self-perception profile for adolescents, 15 item measure of conduct problems, Substance use was assessed with the help of Semi Structured Questionnaire
Granville- Garcia et al., 2014	Brazil	574 adolescents	–	Age, Relationship with parents, Parent's profile	Semi- Structured Questionnaire
Scholes-Balog et al., 2013	Australia	927 school children	Gender	Early age drinking, social, contextual and individual factors	Alcohol Use, Risk and Protective Factors, Honesty

Ryan, Jorm&Lubman, 2010	Australia	Adolescents (8 to 17 years)	—	Age of consuming alcohol, parental modelling, provision of alcohol, alcohol-specific communication, disapproval of adolescents drinking, general discipline, rules about alcohol, parental monitoring, parent-child relationship quality, family conflict, parental support, parental involvement, general communication	Secondary Data
Schulte, Ramo& Brown, 2009	USA	Adolescents	Gender	Biological and Psychosocial factors	Secondary Data
Spijkerman et al., 2008	Netherlands	1344 pairs consisting of an Adolescent and one parent	Alcohol specific parenting practices, Parents' Socioeconomic Status	Alcohol use, Alcohol specific parenting practices, Socioeconomic status	Semi structured questionnaires, Quantity frequency Index
van der Vorst, Engels, Deković, Meeus, &Vermulst, 2007	Netherlands	428 Dutch families with atleast two adolescent children	Age and adolescents who were not drinking alcohol at baseline measurement and adolescents who had been drinking at baseline	Socio-demographics, Personality, Alcohol specific rules, Alcohol use	Longitudinal study
Dube et al., 2006	California	8417 Adolescents	Age	Socio-demographics, Adverse childhood experiences, Age at initiating alcohol use	Retrospective cohort study

Table 1 shows the information extracted from the studies which comprised author, country, sample, comparator, variables, and measures. Findings suggest that contributory factors that lead to early initiation of alcohol use at an early age are childhood adversity, socio-economic status, quality of parent child relationship, monthly pocket money, broken families, parents and friends alcohol consumption and personality traits like impulsivity, sensation seeking, being less open to experiences, non-conscientiousness and agreeableness were seen to anticipate alcohol consumption among adolescents. A strong parent child relationship, parental involvement, limiting access to alcohol as well as having good conversation about alcohol use are found as protective factors for adolescent alcohol use.

4. Discussion

ROLE AGE OF INITIATION IN ALCOHOL USE

Early initiation of alcohol can be linked to a variety of causes like adverse childhood experiences, parents' alcohol use, difficulties adjusting in schoolsocioeconomic status provision of alcohol and parent child relationship. There is a constant need to establish protective factors in early initiation of alcohol use. There were certain contributory factors that led to initiation of alcohol among adolescents during community festivals, different geographical locations, and usage of alcohol as a form of medicine (Hormenu et al., 2018). Considerable research has been done to explore the factors of consumption of alcohol in the adolescent population (Ryan et al,2010) which identified the parental factors associated with alcohol consumption among adolescents, among the blooming factors identified were quality of parent child relationship, parent child communication, Parental modelling, and limited availability of alcohol. Adolescents who are aggressive, anxious, withdrawn, antisocial, depressed, hyperactive, and disruptive are at a greater risk of initiating alcohol use (Adger&Saha, 2013). Adverse outcomes are associated with early onset of alcohol use, one of the most prevalent being alcohol dependence and abuse. Alcohol use behaviour is enhanced due to various aspects of community specifically acceptability perceived availability and normality of Alcohol use (Scholes-Balog et al., 2013). Onset of alcohol use among adolescents is marked by increased risk of alcohol use disorders alcohol even though in small amounts have devastating effects on one's life. Adolescents who initiate alcohol use early in their life are at a prolonged risk of problem drinking and various health and social problems. adolescents who consumed alcohol were seen to express higher levels of social integration and acceptance as well as psychological problems in adolescents (Pederson & Von Soest, 2015) Research studies also link childhood conduct disorder with early onset of drinking and association of early initiation of alcohol use with increased suicide attempts(Ahuja et al., 2021). Parental divorce and initiation of alcohol use in early adolescence it was seen that impact of parental divorce on initiation of alcohol use was aggravated at higher levels of parents drinking(Jackson et al., 2016). Childhood adversities reflecting sociocultural stressors,

child maltreatment and parental maladjustment had a potential link with early initiation of alcohol use (Ramos-Olazagasti et al., 2016). Early onset of alcohol drinking is also associated with poorer social functioning and health (Donoghue et al., 2017).

PERSONALITY FACTORS AND ALCOHOL USE

Personality traits were first described by psychologist Gordon Allport. Personality traits differ among every individual and are seen to be relatively stable over time. Allport (1961) states that personality is a dynamic organization within the individual of those psychosocial systems that determine characteristics and behaviour. Considerable research has been carried out to explore personality factors which initiate alcohol use among adolescents. Adan, Forero & Navarro (2017) found that among personality traits unconscientiousness extroversion and being less open to experiences had a significant relationship with binge and frequent drinking.

During adolescence intense impulsivity is seen as a risk factor for indulging in alcohol use. Stautz & Cooper (2013) stated that among impulsivity related traits Positive urgency and sensation seeking were seen to have greater association with alcohol use wherein problematic alcohol use was seen to show greater association with negative and positive urgency. Extreme temperament profile with a merge of immature character was identified as a positive predictor of inebriation across gender precisely and indirectly through mental health (Boson, Wennberg, Fanlke & Berglund, 2019). The Big five personality traits are seen to have a clear relationship with alcohol consumption (Loose, Acier & El-Baalbaki, 2018). Low conscientiousness and agreeableness were seen to anticipate alcohol use through peer alcohol consumption at weekends (Gallego et al., 2018; Hakulinen et al., 2015).

Conclusion

This review paper made an attempt to identify the various research papers that discuss the role of personality traits and age of onset on adolescent's alcohol consumption. Previous studies have established a significant relationship between age of onset as well as personality traits for alcohol use among adolescents. There is also an increasing need to investigate the role that one's community play in imitation of alcohol use.

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