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# Binge Drinking in Emerging Adulthood: Prevalence, Predictors, and Preventions

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**Received Date:** April 23, 2022

**Published Date:** May 26, 2022

**Abstract**

This review examines a common alcohol abuse pattern named binge drinking, focusing on its prevalence in an important developmental period – emerging adulthood. Definition of binge drinking is introduced. Then evidence is provided to explain why binge drinking is most popular among emerging adults, compared to other age groups. Predictors of binge drinking are discussed, including but not limited to living situation, instability events, employment status, and college attendance. Finally, preventive interventions targeting emerging adults are proposed, as well as suggestions for future research.

**Keywords:** Binge drinking; Alcohol consumption; Transitional period; Emerging adults

**Introduction**

Alcohol abuse is not only an important public health problem, but also one of the primary preventable causes of death in humans [1]. According to the National Survey on Drug Use and Health [2], the prevalence of alcohol use and abuse was highest in 18 to 25-year-olds in the United States from 2002 to 2020, among all the age groups. This age range (18 to 25) is when the transition to adulthood takes place for most young people, which lasts so long nowadays and constitutes a distinct new period of life named emerging adulthood [3]. The present review examines the evidence for alcohol consumption in a common abuse pattern termed binge drinking [1,4,5], focusing on its prevalence, predictors, and preventions targeting emerging adults. Definition of binge drinking is first introduced, then key features of emerging adulthood are presented to explain the high prevalence of binge drinking in emerging adults, compared to other age groups. Predictors of binge drinking are next discussed, with focus on those that are specific

to emerging adulthood. Finally, preventive interventions to reduce binge drinking are proposed, as well as limitations of current literature and suggestions for future research.

**Five Drinks**

Binge drinking (aka heavy episodic drinking, risky single-occasion drinking, etc.) was introduced as a term to describe the consumption of large quantities of alcohol in the 1990s and has received great interest in recent decades [4,5]. According to the National Institute on Alcohol Abuse and Alcoholism [6], binge drinking is defined as “a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08-gram percent or above. For the typical adult, this pattern corresponds to consuming five or more drinks (male), or four or more drinks (female), in about two hours”. A standard drink refers to 0.5 oz of alcohol, equating to one 12-oz beer, one 5-oz glass of wine, or one 1.5-oz shot of distilled

spirits [6]. The lower cutoff for women (i.e., four drinks) is due to gender differences in the metabolism rate for alcohol [4,5].

Specifically, women metabolize alcohol more slowly than men, which leads to higher BAC levels compared with men at the same drink level. Women also experience alcohol-related problems for less consumption than men, even with body mass being controlled. This 5/4 measure has become the most popular and widely used assessment of binge drinking.

However, unlike the standardized quantity of 5/4 drinks per occasion, the time frame of binge drinking lacks consistency in scientific studies [1,7]. In other words, there is no uniform criterion regarding how frequently a person has to binge drink to be considered a binge drinker. Research has variably defined the time frame of binge drinking as at least once in the past week [8], past two weeks [9], past month [10], past three months [11], past six months [12], and past year [13]. Although the frequency and intensity of binge drinking that place one at risk of alcohol use disorders may vary by individual, adopting different time frames hinders direct comparison across studies. In addition, binge drinking is not the same as alcoholism or alcohol dependence [1], it would be problematic to differentiate these terms/concepts without a consistent time frame of binge drinking.

Therefore, a more refined definition of binge drinking incorporating a consistent time frame is necessary and calls for attention of future research.

### Prevalence in Emerging Adulthood

Emerging adulthood (defined as from age 18 to 25, might last through the twenties for some people) is the age period when percentage/prevalence is highest for most types of substance use and abuse [14]. Results from the 2019 National Survey on Drug Use and Health indicated 34.3 percent (11.6 million people) of young adults aged 18 to 25 were binge drinkers (i.e., binge drank on at least one day in the past month) [2]. Among these binge drinkers, 24.1 percent (2.8 million people) were heavy drinkers (i.e., binge drank on at least five days in the past month). Even though these percentages in 2019 were lower than those in 2015 to 2017 (yet similar to 2018), they were higher than any other age group. Despite the decline in 2019, which was partially attributed to a reduction in underage (i.e., < 21) alcohol use, alcohol use and abuse have been highest in 18 to 25-year-olds since 2002. Not only alcohol but illicit drug use is highest in emerging adulthood. According to the same survey, marijuana, cocaine, and heroin use have also been highest among 18 to 25-year-olds since 2002.

Prevalence of substance use and abuse among emerging adults is not a complete myth. The distinctiveness of emerging adulthood sheds light on this issue. Emerging adulthood is characterized by five distinct features, making it separate from adolescence and full adulthood: it is the age of identity explorations, emerging adults explore the self and try out different life options; it is the age of instability, changes take place in various aspects of life such as love, work, and education; it is the most self-focused age, which dues to lack of obligations to others; it is the age of feeling in-between,

emerging adults consider themselves neither adolescent nor adult; and it is the age of possibilities, opportunities flourish in emerging adulthood and it is possible to navigate life into numerous directions [15]. These five features may explain the high rate of binge drinking in emerging adulthood to a large degree.

### Identity Explorations

As the two central domains of identity development, love and work become more serious during emerging adulthood [14]. People start to ask themselves what kind of partner and job they would like to choose for the long term, which requires them to self-explore. To be specific, they need to truly understand themselves (e.g., what they are capable of, what they are passionate about, what they value the most in a romantic partner/relationship) in order to make the right decisions. This process of identity explorations can be challenging and confusing to many emerging adults, and it may involve a wide range of novel experiences including trying out alcohol. Additionally, establishing a stable identity may cause negative emotions such as stress and some emerging adults use binge drinking as a coping mechanism as a result [4]. Difficulties associated with identity explorations can motivate alcohol consumption as well [14].

### Instability

Emerging adulthood is arguably the most unstable life period due to its transitional nature. In the self-exploration process, emerging adults experience frequent changes in multiple areas of life, mainly including romantic relationship, career, education level, and place of residence [14]. All these changes could disrupt their lives and lead to anxiety, sadness, and other negative mental states. Concurrent with this negativity is an increase in self-medication, which can be a cause of binge drinking [4]. Emerging adults consume large amounts of alcohol to alleviate negative moods following instability events, especially traumatic events such as breakups. The incidence of psychopathology also increases in emerging adulthood [16], making binge drinking for self-medication more common.

### Self-Focus

Emerging adulthood is a life stage that grants great freedom [17]. In contrast to people in other developmental stages, emerging adults are exceptionally free from obligations and commitments to others [14]. Unlike adolescents, emerging adults no longer live under the rules set by their parents and teachers. In fact, most emerging adults leave their parents' household as they enter college [18]. Unlike full adults, emerging adults have not taken on roles that require lasting daily responsibilities, such as being a parent. This high level of freedom allows emerging adults to devote all their time, energy, attention to themselves and in summary, be self-focused. They may engage in behaviors that will be less acceptable in full adulthood because of the freedom, which may include binge drinking. In addition, when social control is weak, behaviors that violate social norms are more likely to occur [14]. For instance, leaving home puts emerging adults out of the supervision of their parents and therefore could increase alcohol involvement. Research [19], also indicates a significant increase in alcohol consumption among emerging adults as they transition to independent living.

## Feeling In-Between

Emerging adults have mixed feelings about their status as adults [20]. On one hand, they feel that they have passed adolescence and on the other hand, they feel that adult roles and responsibilities are still at a distance [21]. The majority of 18 to 25-year-olds feel they have reached adulthood in some ways but not others [14]. Research investigating college students has consistently shown the majority of 18 to 25-year-olds do not feel they have achieved adult status, specifically, only about a quarter of the population consider themselves to be adults [20]. The ambivalence towards adult status could enhance participation in binge drinking in two ways.

First, emerging adults may feel entitled to make decisions for themselves in terms of alcohol use, without having to obtain parents' consent because they are no longer adolescents [14]. Second, since most emerging adults do not consider themselves to be adults yet, they may not feel obligated to meet adult standards of behavior such as avoiding drunk driving and avoiding becoming drunk. In other words, not being fully adult could be seen as a permission to binge drinking by emerging adults.

## Possibilities

Emerging adulthood is the age of possibilities, reflecting in luxuriant opportunities in multiple life domains (e.g., relationships, jobs) and emerging adults' optimistic attitude towards life [21]. Emerging adults tend to perceive a variety of life directions as available and therefore have high hopes for the future. Because of this high level of optimism, they may make light of the potential negative consequences associated with alcohol use [14]. They may also try out risky and stimulating things such as binge drinking in the belief that they can give them up after growing into full adults. This strong optimistic bias in emerging adulthood could largely promote binge drinking.

Alcohol consumption reaches its peak in emerging adulthood and the five distinguishing features discussed here help explain this high prevalence. Viewing emerging adulthood as a separate developmental stage is helpful to understand the behaviors of people at this age period. Given the long-lasting high rate of binge alcohol use, it is possible that there are other features of emerging adulthood which apply specifically to binge drinking, in addition to the five features proposed by Arnett [15]. Future research should explore undiscovered features of emerging adulthood and binge drinking inspires a direction.

## Predictors in Emerging Adulthood

Factors that predict binge drinking have been widely studied in scientific research, ranging from demographic factors such as socioeconomic status (SES) to contextual factors such as social norms. This review focuses on predictors that are specific to emerging adulthood, although some longitudinal predictors are introduced as well. Identifying unique predictors in emerging adulthood is important for prevention science to target this high alcohol consumption group.

## Living Situation

In comparison to other age groups, living situation is more

unstable in emerging adulthood and can affect one's alcohol consumption in multiple ways. First, leaving parents' residence brings increased risk of binge drinking [17]. Most emerging adults move out of their parents' home for college (or work) and therefore move out of parents' supervision as well. Living independently allows emerging adults to decide for themselves whether to drink alcohol or not, and it also gives them opportunities to try out novel (possibly risk-taking) activities including binge drinking. Kypri K, et al. [19] suggests noteworthy increases in alcohol involvement (both quantity and frequency) following transition from living with original family to independent living, among emerging adults.

Second, living with roommates (other than a romantic partner) is associated with more alcohol consumption than living alone [22]. Emerging adults who live with roommates tend to be heavier drinkers due to social/peer influence. Living with a romantic partner (marriage or cohabitation), however, decreases the risk of binge drinking [23]. Young adults living with a romantic partner display lower rates of binge drinking than their single peers, which is likely due to social norms. For example, marriage places responsibilities on both parties (e.g., making money, child rearing) and takes away a certain degree of freedom, thus risky behaviors such as binge drinking may not be seen as acceptable after marriage. Cohabitation indicates relational commitments as well. Other living situations may also have influences on binge drinking such as living on-campus or off-campus (i.e., with or without monitoring of university dormitory officials), the latter tends to be linked to higher rates of binge drinking [14].

## Instability Events

As a distinguishing quality of emerging adulthood, instability could be a source of negative emotions [14]. This is because the instability of emerging adulthood reflects in frequent changes and changes are unsettling and overwhelming in nature [20], which could cause stress, anxiety, and sadness. Some examples of instability events in emerging adulthood include moving home, ending a romantic relationship, changing job, and so on. Although these events may also take place during other life periods, the possibilities are much higher in emerging adulthood in general. Since binge drinking can be used as a coping mechanism to relieve negative emotions [4], emerging adults may adopt it to recover from or feel better after instability events. Research [17], supports a positive relationship between negative events/emotions and binge drinking.

## Employment Status

It is well-documented that the hours of employment are positively associated with alcohol use in adolescence [22]. However, this relationship does not persist into emerging adulthood. On the contrary, working serves as a protective factor of alcohol use disorders among emerging adults [17]. Emerging adult men with jobs are less likely to binge use alcohol than emerging adult men in college. Unemployed emerging adult women are heavier drinkers than their employed peers, however, this correlation fades away with age [24]. The effect of employment is different at different age groups. During adolescence, employment offers independence

from parental control [22]. Adolescents working long hours are more likely to engage in alcohol consumption due to the belief that employment gives them independence from parents and families. The influence of employment turns around when entering emerging adulthood with unemployment increasing heavy drinking [24]. It may be that emerging adulthood itself grants great independence and freedom, therefore the independence derived from employment in adolescence no longer makes an impact. Instead, being unemployed probably means less responsibility and more spare time, leading to increased alcohol involvement. After emerging adulthood, as people finish education and get married, the role of employment may change again.

### College Attendance

Binge drinking is also influenced by college attendance [17]. Having plans to attend college in high school is associated with increased risk of binge drinking in emerging adulthood. There is evidence that college students tend to drink less frequently but with larger quantities than their non-college peers. Casswell S, et al. [24], found that college students engaged in more heavy quantity drinking occasions although they drank on less days of the month, compared to those with a high-school degree. Nevertheless, educational achievement has a positive impact in the long run. Well-educated individuals consume smaller quantities of alcohol than those with fewer educational qualifications, this relationship persists over the emerging adult years. Moreover, the risk of alcohol use disorders is lower among college completers than non-college completers [17]. It is possible that striving to perform well in college causes pressure and leads to heavy drinking as a coping method, however, the mechanism linking college attendance and drinking behavior needs to be further studied.

### Other Predictors

Some major longitudinal predictors of binge drinking include personality traits, parents, peers, and environment (e.g., family atmosphere, neighborhood, culture). Concerning the Big Five personality traits, it has been consistently found that binge drinking is positively associated with extroversion but negatively correlated with agreeableness, conscientiousness, and neuroticism/emotional stability [4,7]. Impulsivity and sensation seeking are two other significant and consistent predictors in terms of personality traits, with both positively correlated with binge drinking [8,9]. These two traits are more salient among younger people. Parents can be a big influence on their offspring's drinking behavior. Individuals with authoritarian or uninvolved/neglectful parents are more likely to be binge drinkers [4]. Parental alcoholism and antisociality are also risk factors of binge drinking [25]. Peers is another important factor for binge drinking and is especially influential in late adolescence through emerging adulthood. Having alcohol-using friends and/or being exposed to peer alcohol use increases own alcohol use through role modelling and perceived social norms [4]. It is noteworthy that the predictors can interact with each other and exert an influence together. For examples, individuals with a healthy and intimate parent-child relationship are less likely to be affected by peers than those from dysfunctional families; peer influence on binge drinking is stronger among emerging adults

who moved out of parents' home than among those still living with parents [17].

Even though predictors of binge drinking have been extensively studied, predictors that are unique to emerging adulthood remain under-researched. Future research could proceed from the five distinct features (or other features) of emerging adulthood to make new discoveries. In addition, most studies on binge drinking or alcohol use pointed to risk factors, whereas fewer paid attention to protective factors that decrease or moderate the probability of engaging in heavy drinking. Reinforcing protective factors can (potentially) effectively reduce the risk and therefore deserves closer attention of future studies.

### Preventive Interventions

Binge drinking is linked to a variety of negative consequences, including harms to the self and harms to others. Severe harms to the self include deaths, injuries, and irreversible disabilities, most of which are caused by traffic accidents due to drunk driving [1,17]. Binge drinking may lead to problematic sexual behaviors such as unintended sexual activities and sexual assaults, increasing the risk of sexually transmitted diseases [4]. Binge drinking may result in academic problems as well, such as missing classes and earning lower grades. Harms to others from binge drinkers can also be significant, thus should not be ignored. An intoxicated driver can cause others' deaths or lifelong disabilities. A woman who drinks alcohol during pregnancy can give birth to children with fetal alcohol syndrome.

Therefore, effective preventive interventions to reduce binge drinking are of great importance and necessity. Interventions informed by the current literature mainly include limiting alcohol availability (e.g., reducing density of liquor outlets around college campuses, banning underage alcohol purchase), preventing negative family influence (e.g., targeting parents' alcohol use and family management skills), personalizing interventions (e.g., incorporating feedback), and supporting employment (e.g., opening more jobs, resisting working overtime) [4,17]. However, many of them need to be further developed for higher effectiveness. Future research should devote more energy to interventions tailored towards emerging adults as well.

Enlightened by emerging-adult predictors of binge drinking, the following preventive interventions are proposed: enhancing social norms, such as increasing punishment levels for drunk driving and illegal parties; utilizing social media, stressing the harmfulness of binge drinking through social media influencers such as YouTubers; establishing (on-campus) interventional programs, introducing strategies in terms of drinking reduction and emotional regulation; encouraging therapy for better mental health; and making psychological counseling more available and affordable.

### Conclusion

This review examines the current literature on binge drinking among young people at an important developmental stage – emerging adulthood. Definition, prevalence, predictors, and



preventive interventions regarding binge drinking are discussed, with a particular focus on emerging adults. Suggestions for future directions are proposed and summarized as follows. First, the definition of binge drinking needs to be refined by incorporating a consistent frequency/time frame, because quantity and frequency are two different dimensions. Although the frequency/time frame of binge drinking is defined in many studies, it lacks consistency. Second, additional features of emerging adulthood in relation to binge drinking are worth exploring, given its long-lasting peak prevalence. Next, predictors of binge drinking that are specific to emerging adulthood need to be further investigated. Arnett's [15], five features of emerging adulthood might enlighten this process. Last, preventive interventions for binge drinking should be further developed, which could be inspired by its unique predictors in emerging adulthood.

Moreover, a clearer and more complete picture of binge drinking in emerging adulthood would benefit from research consisting of non-college emerging-adult samples. Even though recruiting non-college attending emerging adults might be challenging, they are a significant portion of the population and could be different from their college attending peers in various domains. Research findings would not be representative of the entire emerging-adult population without including non-college samples.

### Acknowledgement

None.

### Conflict of Interest

Author declare no conflict of interest.

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