

THE EFFECTS OF ALCOHOL ON COLLEGE STUDENTS

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INTRODUCTION

The National Institute on Alcohol and Alcoholism (NIAAA) defines binge drinking as any drinking of alcohol that brings blood alcohol concentration (BAC) to 0.8 or higher. (NIAAA, 2022) The Centers for Disease Control and Prevention (CDC), however, defines this as five or more drinks for men and four or more drinks for women. (CDC, 2022) Whichever way binge drinking is defined, it is still apparent that binge drinking in college students is extremely common and can potentially be detrimental to one's health. Binge drinking can lead to alcohol poisoning, a problem that college campuses across the nation face, and in severe cases this condition can lead to brain damage and even death. This is what makes binge drinking such a big problem for America and, with some simple pacing techniques and other intervention strategies, its effects can be rightfully mitigated.

While binge drinking can and does occur in those not belonging to a university or scholarly institution, the majority of literature on the subject is focused on its effects on young adults in the college age range. Rates of alcohol consumption among this age group have been concerning for decades and continue to be a concern with the frequency of binge drinking remaining high, 30-40% of all individuals in this age range. (National Library of Medicine, 2018) This concern is justified by the overwhelming nature of the symptoms associated with alcohol poisoning, the subsequent effect of drinking too much too fast. The Mayo Clinic describes these symptoms as ranging from confusion, vomiting, and irregular breathing to hypothermia, unconsciousness and death. A condition that causes this much damage and is so commonly found in a specific group is something to be looked into in hopes of reducing these numbers and creating support for those who might overindulge.

It is important, as a college student, to understand the resources one has and the behavior one can subscribe to if found in a situation where binge drinking is normalized. While many college students participate in party culture and nightlife, it is also important to not push the limits of oneself purely because one would like to fit in or feel like it is necessary. Hazing rituals are a normalized and supported part of Greek life which typically leads to excessive drinking for the sake of humiliating the younger class. This "tradition" gets passed on and institutionalizes binge drinking in college supported groups and does nothing to help the overwhelming negative effects of binge drinking. It is imperative that one seeks help if themselves or a friend is

experiencing the symptoms of alcohol poisoning as a result of binge drinking whether or not it makes one seem “uncool” or tarnishes one’s reputation.

Some interventions and strategies have been put into place in order to reduce these binge drinking related injuries and death for college students specifically. Many institutions across the country offer support groups and professional help through the university. In addition to this, there are also hotlines and educational programs in place to help those who seek them. One of the best ways to fix binge drinking early in life and make sure it doesn’t develop into a worse problem is to educate oneself utilizing these resources and overcoming the normalization of binge drinking that is in place. These resources could be extremely helpful to college students who may be engaging in dangerous behaviors associated with binge drinking and alcohol. The problem that needs to be further explored is how the institutions get students to utilize these researches and understand that they can seek help if necessary. Many students don’t even realize there is a problem until it is too late and leave institutions with alcohol related deaths that are completely preventable. This paper will identify the parts of a specific health belief model and how it can be related to the binge drinking problem among college students in America.

THEORY

The theory best suited to analyze and identify binge drinking is the social ecological model. The CDC describes this model as a complex interplay between several different layers and factors, all ultimately helping to understand how these factors put people at risk for or protect them from a problem detrimental to human health. (CDC, 2022) Several different versions of this model exist with different overlapping layers including, intrapersonal, interpersonal, organizational, institutional, environmental, community, social, policy, etc. The social ecological model chosen to represent binge drinking for the purpose of this paper includes the intrapersonal, interpersonal, organizational/community, and policy layers. These layers will help better define binge drinking as a problem and strip it down to its most basic parts.

The social ecological model, first introduced by Urie Bronfenbrenner in the late 1970s, has become a standard in the field of public health for understanding how a problem affects a person or community at multiple levels . It was first developed to illustrate human development but has evolved to be able to illustrate health complexities on a larger scale. The model is made up of several circles nested within each other to display both internal and external factors. Since

it is common belief that health is affected by the interaction of characteristics not only possessed by the individual but also by the community, the social ecological model is perfect for displaying the disparities of binge drinking. (Kilanowski, 2017)

The topic of binge drinking is multifaceted and complex as the line between frequent drinking ending in serious consequences, such as alcohol poisoning, and a normal level of drinking can be quite blurred for college students. It is also difficult to distinguish whether or not the problem is rooted in individual behavior or the influence of those in the community and those with which the student is affiliated with. This is where the social ecological model will be beneficial as it can better pick apart each layer and identify how each factors into the problem of binge drinking as a whole.

INTRAPERSONAL DETERMINANTS

Intrapersonal factors are components within an individual that may influence their actions. These components are closely related to one's knowledge, attitudes, and skills. Other factors that can contribute to this could be one's identity and purpose, personality, morals, and biological or genetic dispositions. Consuming alcohol is heavily determined by one's individuality and beliefs. The actual action of drinking alcohol requires the individual to personally consume an alcoholic beverage. Each person has unique ideologies that may affect their probability of partaking in a behavior such as drinking alcohol.

In college, students are under an immense amount of pressure. Adjusting to a new environment, social network, academics, and overall college experience is a lot for an individual to take in. It is inevitable for an individual to try to adapt and to fit into their new atmosphere. With alcohol being heavily advertised to increase confidence, an individual may see the consumption of alcohol as an outlet to one's self-efficacy. A research led by Kaidy Stautz states that alcohol-promoting advertisements may affect a young adult's decision in consuming alcohol. The study involved showcasing alcohol-promoting advertisements and the emotional responses an individual may have. The study states that negative connotations of the effects of alcohol consumption, rather than the positive effects, contribute to a reduction of young adults consumption of alcohol in order to increase one's confidence. (U.S. National Library of Medicine, 2016) This may contribute to the mental adversities of one's self esteem and can

overall contribute to the evaluation of an individual's self-worth and confidence in the attempt to fit into the college atmosphere.

Another reason for consumption of alcohol amongst college students is tied to stress. There is constant, immeasurable amounts of academic and social pressure while in college. In order to find an escape from the stress, many college students turn to alcohol consumption. A study done by Penn State researchers states that more students consumed alcohol to cope with stress levels, rather than for fun or celebration. The study showed that with each stressor that an individual was experiencing, there was an 8% increase of the likelihood that the student was going to consume alcohol. These stressors included rigorous academic demands, social life, existing family demands, and the struggle of living independently for the first time. (Pace Recovery Center, 2021) Although the effects of alcohol may lower feelings of stress, it does not actually reduce the source of stress. Alcohol is a depressant, a drug that reduces stimulation and slows down the brain. With the brain slowing down, it may give an individual feelings of relaxation, increased happiness, and a greater sense of well-being. The consumption of alcohol as a coping method for stress may lead to long-term effects and can lead to further mental health issues. (GoodRx, 2022) Drinking alcohol to cope with stress, in addition to drinking for social settings, leads to an overall high consumption of alcohol.

Another factor that may affect one's inclination to consume alcohol is their genetic disposition. Although there is no "gene for alcoholism", there are other genes that increase the risk for alcohol dependency and/or alcohol-associated diseases. The ALDH2 and ADH1B genes have shown to be linked to how the body breaks down alcohol. Variations in these genes have been linked to an increase in acetaldehyde, a chemical produced when alcohol is metabolized in the body. Individuals with certain mutations in these genes have higher levels of acetaldehyde after drinking alcohol. Higher levels result in unpleasant side effects such as increased heart rate, flushing, and nausea. If an individual has a variation of these two genes, they will have more negative effects to alcohol, thus will be less likely to consume alcohol. (GoodRx, 2022) Other genetic factors that affect an individual's risk for alcoholism include: tolerance, sensitivity, allergies, and symptoms of withdrawal to alcohol. Scientists are continuing to study the role of genetics that tie into alcoholism. Although there is no specific gene that will cause you to develop alcohol use disorder, family history of alcohol addiction is shown to have a genetic predisposition.

INTERPERSONAL DETERMINANTS

Interpersonal factors are outside components that may influence an individual's behavior. These factors may include: family, friends, or social networks. Each person has important figures in their life that potentially impacts their actions and way of life. Parents, or a guardian, is crucial in the development of a person's ideologies which then will influence their future behaviors or choices. A study done by Joan E. Grusec states that parent cognitions, beliefs, thoughts, and feelings have a close correlation with a child's actions, whether it be positive or negative. (Encyclopedia on Early Childhood Development, 2014) Parents who consume alcohol tend to influence an individual's future choices in drinking alcohol. If a child grows up seeing only the negative effects of alcohol, it is more likely that one may stray away from the drug in the future. Although, seeing the "good effects" of alcohol may encourage a child to partake in the action in the future. This ultimately guides the behavior choices an individual may make in college.

These family choices of drinking alcohol may also be linked to race, ethnicity, and culture. This can be due to certain cultural beliefs which makes it more normalized in drinking alcohol at a younger age. A study done by Karen Chartier states that alcohol use and binge drinking in people aged 12-17 years were highest for Whites, followed by Hispanics, then Blacks, and Asians. With ages 18-24, Whites and Native Americans were shown to have the most prevalence of exceeding daily use of alcohol. (National Institute on Alcohol Abuse and Alcoholism, n.d.) Some cultures or religions do not allow the consumption of alcohol, which then decreases the likelihood of alcohol abuse. Because of these reasons, cultural differences are shown to be linked to the increase or decrease of the possibility of consuming alcohol in college.

The biggest interpersonal factor of consuming alcohol is peer pressure from friends. A study by Hannah Hill was done to measure the effects of alcoholism and peer pressure on college students. The statistics suggested that nearly two in every three college students have experienced alcohol-based peer pressure at some point. Following this question, the study conductors asked if students begin drinking because of peer pressure, to which 31.8% yes, while 36.4% said no. (Volume Two First Year Project Series, n.d.) The results of this study proposes that nearly half of students fall into peer pressure in social situations where there is alcohol. The reasons behind partaking in drinking ties back into intrapersonal factors and social identity. An individual may be influenced by social networks to drink in order to improve their own

self-efficacy. This constant social pressure affects confidence levels, which may result in a shift of one's ideologies.

ORGANIZATIONAL/COMMUNITY DETERMINANTS

The behavior of consuming alcohol among college students can also be examined at the organizational/community level of the socioecological model, which determines the setting for drinking interactions. College students are typically community-oriented people, and therefore make decisions with their wider groups of peers or are influenced by the organizations they participate in. For example, Greek life in college is a very common aspect of college culture. There are 750,000 members of Greek sororities and/or fraternities in the United States, and a total of 9 million Greek alumni (Bankrate). In a particular study on alcohol consumption among Greek life participants, it was determined that students within Greek systems drank more alcohol per week and participated in "heavy drinking" more often than their counterparts (Cashin and Presley, 2015). The same study showed that fraternity and sorority members believed that friendships were easier to make and maintain and that organizational events were heightened through the use of alcohol (Cashin and Presley, 2015). Other events such as hazing groups of individuals by forcing them to drink is another aspect of drinking culture in college. This is a form of a rite of passage or initiation into group memberships; typically, but not limited to, Greek affiliations (Hollmann, 2002).

In the paper titled, "Using Alcohol-Free Options to Promote a Healthy Campus Environment," it was noted that many students drink because they feel they have nothing else to do (Everfi). It has therefore been found that having many organizational activities provided for college students is associated with less drinking (Finlay and Ram, 2012). This demonstrates that college students resort to drinking in social settings when they do not have other activities planned, such as playing sports or being physically active with each other in other ways. An increase in alcohol-free extracurricular activities has helped to lower the amount of alcohol that college students consume and how often they consume it (Everfi), which demonstrates the behavioral tendency to drink alcohol with community members out of boredom or lack of other options.

Community peer pressure is another aspect of alcohol consumption at the community/organizational level. A study found that peer pressure to drink is very common

among college students within the first six weeks of their first year (NIAAA). This demonstrates the community level because it is the first time that students are introduced to other students within their institution, causing them to want to fit in with their community members. If one's whole community is seemingly drinking and getting excited about going out to drink, the individual will succumb to that peer pressure and do the same.

SOCIETY/POLICY DETERMINANTS

The behavior of alcohol consumption for college students can also be examined from the societal level, which regards federal, state, and local laws as well as implementations of alcohol policies among colleges and universities and the advertising and pricing of alcohol. One initiative being studied is that the legal drinking age should be lower. The idea behind this is that the appeal to purchase, consume, and most importantly, *over consume* alcohol would be mitigated if young adults were allowed to do this at the age of 18 rather than 21 (Carpenter, 2011). In fact, more than 100 university/college presidents signed the *Amethyst Initiative* in 2011, which called for the reexamination of the minimum legal drinking age in the United States (Carpenter, 2011). This idea has been explored through comparison of the US drinking age versus the drinking age in other countries, which exemplifies that young people in the US do not learn how to drink responsibly while living at home with their parents or in settings where moderate drinking is normal (Frieze and Grube, 2010).

Another policy that can be viewed from the societal level of the socioecological model is the consequences that underaged people face for consuming alcohol and being caught. Rather than being educated about the negative health and decision making effects of alcohol use and abuse, young adults are punished with community service, going to court, and paying large fines and restitutions (Pirius, 2022). Such consequences are completely unrelated to the actual behavior of drinking alcohol underaged, and therefore do not change the behavior itself. Additionally, students do not have any respect for police officers when it comes to them enforcing the underaged drinking law and giving out Minor in Possession (MIP) charges. One student who received an MIP at Louisiana State University said in an interview, "My lawyer just said it's a money grab... They don't actually care. It's just the money, because they [police officers] could drink at 18" (Munster, 2020). This demonstrates that underaged people, including college students, do not believe that the police force cares about their health, safety, and

wellbeing, but rather that they only care about making money and being powerful. This is another reason why underaged people do not follow the underaged drinking law.

Another important aspect of the society level for the behavior of drinking alcohol as a college student is that alcohol advertisements are targeted at young people. One study found that underaged people see an average of 3 alcohol advertisements per day and that their perception of drinking alcohol is affected favorably because of it (Prevention Action Alliance, 2022). Alcohol consumption in college students increases because of this targeting tactic because the alcoholic beverages look and sound like they will be fun to drink as well as the fact that this demographic is vulnerable and easily swayed. Overall, there are many determinants of alcohol consumption by college students at the society/policy level of the socioecological model.

SUGGESTIONS FOR INTERVENTION

It is imperative that, going forward, such a negative stigma surrounding both underage drinking and excessive drinking in college be somewhat revised. Programs that are put into place at universities today tend to severely punish students for first time offenses and charge obscene amounts of money for a singular infraction. In order to be more proactive and effective about binge drinking, educational classes and programs should be implemented for college students before and, if necessary, after binge drinking might occur. These educational classes could be oriented more around informing students of the negative consequences of binge drinking and teaching how alcohol drinking should be properly paced instead of just telling students not to drink. This would be way more effective in bringing awareness to the subject and, theoretically, bring the rates of binge drinking down. Although consequences such as legal action and fines do cause binge drinking rates to seemingly go down, this just causes it to be done out of the legal eye and may cause a student to not seek medical care out of fear.

Another intervention that could be proposed would be to implement many other alcohol-free activities on college campuses. College students have admitted to drinking because they feel as if there is nothing else to do. In this case, having other organized activities to participate in with other students who are not drinking could help individuals choose not to drink as often or at all. For example, organized sporting events like club sports and intramural sports is a great healthy alternative to drinking. Other examples mentioned in literature include dances, sporting events, educational events, eating and cooking events, arts and crafts events, etc.

Promoting healthy habits and providing a safe space for students to come together and participate in alcohol-free activities and events is a simple way to reduce alcohol consumption within this demographic.

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