General Strain Theory:

How Stress in College Students Influences Alcohol and Marijuana Use

By

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Abstract

College is the time for individuals to explore themselves and who they are as independent people; however, it is not always filled with positive experiences. It is a new environment with different people, exciting opportunities, and potentially unfamiliar stressors. These stressors in their lives, such as stress from academics, relationships, and finances, could lead them to use substances such as alcohol and marijuana. College-aged students are also more likely to suffer from symptoms of depression which is closely linked to substance abuse (Walker & McNulty, 2021). It is important to examine the use of substances among college students to get a better understanding of how to target that population in order to decrease the levels at which substances are consumed. This study will examine this topic within the realm of the General Strain Theory and examine how and why students self-medicate from strain in their lives with various substances.

Chapter 1

Introduction

When looking at the depiction of college or university settings in the media and entertainment, such as on tv shows or movies, there is an atmosphere that encourages heavy drinking and drug use. It has normalized the expectation to participate in these activities when attending college. Early research has found that the two main reasons why college students drink are for social purposes and emotional escape or relief (Labrie et al., 2007). College students are under tremendous pressure as they navigate life on their own, classwork, extracurriculars, and finances. These may be stressors that are new to them. This can cause emotional distress and lead students to alcohol or drug abuse to relieve this pressure. Social motivators and peer influence also play a large role as most drinking in college is done in a social setting (Labrie et al., 2007). For most students, this is their first experience of freedom away from their parents, so they experiment with alcohol and drugs. The party culture on campuses and greek life further this notion that drinking is a part of this experience and encourages students to partake in this risky behavior. This has created a dangerous environment for students as it can lead to harmful consequences.

Students who drink regularly are more prone to dangerous circumstances that can hurt them physically, academically, or psychologically. Excessive drinking is closely associated with damaged property, trouble with authorities, injuries, and fatalities (Labrie et al., 2007). It also hurts students in an academic sense as their focus might be shifted from school to social activities. Students who use substances regularly are more likely to spend fewer hours studying, miss class time, have lower GPAs, and fail to graduate or be unemployed after graduation (Welsh et al., 2019). There has also been a well-established link between substance use and

mental health problems. In a study conducted by Walter and McNulty (2021), they found a significant relationship between stress and substance use as well as substance use and depression. College students are already highly susceptible to mental health problems and substance use can further this issue.

The drinking culture in college promotes dangerous activities and is harmful to students. Research furthering the knowledge of what motivates students to drink is necessary in order to combat this national crisis. It can help develop programs and interventions targeted at the levels of alcohol and drugs being consumed. There are contradictions in the current literature on whether or not alcohol is consumed as a result of stress or as a social motivator. The current study hopes to contribute to the existing knowledge and provide more insight into how stress contributes to substance use.

This study will examine the alcohol and marijuana intake of undergraduate students in relation to their stress levels. The students being surveyed are a part of the student population at Appalachian State University. This paper will consist of five sections. Chapter Two will focus on the previous literature that exists pertaining to alcohol and marijuana use in American undergraduate students. It will also discuss prior research on stress and mental health relating to substance use. Chapter Three will show the methods being used for data collection in the study, variables, and a data analysis plan. Chapter Four will contain the results of the study. Chapter Five will provide a discussion of the results, limitations, implications of the study results, and recommendations for future research.

Chapter 2

Literature Review

College students have a wide variety of stressors that include academic pressure, finances, and peer and romantic relationships (Pate & Bolin, 2019). They move to a new town or city away from home without a sense of familiarity. There is pressure to make friends and live out what is meant to be "the best years of your life." If students feel they have failed to connect with their peers or form meaningful relationships within a short period, it can be stressful and cause a sense of loneliness (Pate & Bolin, 2019). Academic requirements are another major cause of strain (McIntyre et al., 2018). There is the burden of choosing a major, which can put a large amount of stress on students who do not know what career path they want to take. The expectation for students to thrive in classes and get involved in extracurricular activities can enhance their stress levels. Another contributing factor to stress in college students is financial pressure. For most students, this is the first time they are living on their own and have to be their sole provider. Between taking classes and having a job, it will lead to an increased amount of stress and lack of sleep (Peltz et al., 2020). College students are in a high-stress environment that places heavy demands on both their mental and physical well-being (McIntyre et al., 2018). They constantly have expectations they feel pressured to fulfill, leading them to feel strain in everyday life.

Humans have a strong desire for a social identity, which is why interpersonal relationships are very important for young adults and college-aged students. The psychological need for affiliation is fulfilled by others and being away from family means students will need to form different connections (Jackson & Finney, 2002). Establishing meaningful relationships early in college can have a positive impact on a student's mental health. Adults who have strong emotional support from others have reported lower levels of stress and symptoms of depression

(Tran et al., 2018). The stress of feeling lonely could lead to an increased risk of symptoms of anxiety or depression. A study conducted by (McIntyre et al., 2018) on university students in England found loneliness to be the strongest predictor of mental distress among college students. Identifying with a group of individuals decreases an individual's chance of poor mental health and improves social connectedness (McIntyre et al., 2018). Students may go to a college or university where they do not know anyone, which puts an added strain on making friendships soon after arriving. According to an older study by Jackson and Finney (2002), problems in intimate relationships are frequently reported to be a cause of stress. Fighting or the ending of a friendship can put a lot of strain on a student and enhance their feelings of loneliness or diminish their mental well-being. In both studies, we see that companionship plays a large role in the mental health of college students. Friendships are vital as students need an emotional support system and when that is lacking, it can cause anguish.

Along with peer relationships, romantic relationships can also cause an element of stress. In a study directed by Darling et al. (2007), they found that in college romantic relationships, stress is related to breakups, unhealthy relationships, and lack of a romantic partner. Some may expect to find a significant other in college and not attaining that goal can be disheartening. It can cause a sense of loneliness and a lack of self-worth (Pate & Bolin, 2019). Going into college in a relationship can cause uncertainty about the future and if it will last. Maintaining long-distance relationships can put a student through stress over a potential breakup (Pate & Bolin, 2019). Strain can also arise from abusive relationships. According to a College Dating Violence study, forty-three percent of college-aged women reported violent or abusive dating behaviors, but one in five women reported actual physical abuse or threats (Minoletti, 2019). Being in a relationship that is abusive can be debilitating and affect other aspects of the victim's life. It

could inhibit their academic performance or make them feel isolated (Sparks & Gruelle, 2016).

For most, college is the time for students to explore themselves and their identities. This includes

romantic identity, which puts strain on them to be in relationships or keep their existing ones.

Maneuvering your way through the academic world can be challenging and stressful for

many. It is far different from high school in which time management and independent thinking

are crucial. Once an individual begins college, they are most likely to experience independence

away from their family for the first time (Beiter et al., 2015). They now have to make decisions

for themselves and can choose their schedule. This comes with the need for responsibility

because it can be easy to fall behind on schoolwork. Academic strain can be very consuming to

most students. In a study conducted by Beiter et al. (2015) at Franciscan University, it was found

that academic success and post-graduate plans were two major concerns when looking at the

mental health of students. If students are unsure of what they want to major in or what they want

to do as a career, it can cause strain damaging their mental health. Other contributing factors to

academic stress are test-taking, poor grades, volume of class material, lack of time, and grade

point average (Pate & Bolin, 2019). Many feel the pressure to succeed in their area of study and

if a student is used to getting good grades in high school and is struggling in college, the

introduction of negative stimuli by getting bad grades can cause strain (Pate & Bolin, 2019). The

research suggests that academic strain can impact students' mental health and cause a tremendous

amount of stress. Individuals come to college for an education and to plan for their future. This is

a large load for students to hold knowing that their choices determine their future.

Finances are one of the top reported stressors for adults in the United States (Tran et al.,

2018). This is an increasing problem for young adults who are entering the world of student

loans and financial independence. In a study conducted by Tran et al. (2018), it was found that

stressful financial situations among college students were tied to general anxiety. Many college-aged students begin to lose financial support from their families and become self-sufficient. Juggling work and school can impact grades, sleep, social life, etc. (Peltz et al., 2020). Peltz et al. found working while in an undergraduate program negatively impacts a student's mental health and sleep schedule. Sleep is an important factor in both physical and mental health. Not getting enough sleep because of work and school can increase an individual's likelihood of having symptoms of depression or anxiety (Peltz et al., 2020). A student who spends the majority of their time at work or school also can feel a sense of loneliness due to the lack of socialization. College is constantly depicted as a time to have fun and be social, and students who work can feel isolated or alone because they are unable to meet this expectation. Struggling with financial issues can be crippling for some that worry about having to pay for rent and food, it can also hinder their academic performance as well. As tuition costs go up, more students have looked for jobs making student employment rates increase (Beerkens et al., 2011). The studies conducted tell us that students who work or are financially independent have overall increased rates of stress which are linked to symptoms of anxiety and depression. They, on average, get less sleep which can impair their cognition and academic success.

Stress and Mental Health

Students in higher education are at the age most vulnerable to developing a mental illness (Brown, 2016). Over the years, mental health has become a more prioritized topic, but anxiety and depression have steadily increased among college students. According to Brown (2016), the peak onset of mental illness symptoms is at age 18 to 25, and three-quarters of those with mental illnesses begin to have symptoms before their mid 20's. This is a significant number and demonstrates how mental illness disproportionally affects young adults at a time in their life that

is focused on change. Studies show that stressors students face directly relate to symptoms of anxiety and depression (Pate & Bolin, 2019). According to a French study by Saleh et al. (2017), university students have low levels of self-esteem and optimism and high levels of stress and psychological distress. This may be due to the rising problems college students face such as increased rigor of academics or increasing cost of tuition.

Forty percent of the general college student population have reported feeling depressed within the past year (Pate & Bolin, 2019). It is a growing concern among scholars and mental health professionals and raises the problem of suicide and self-harm. In a study conducted by Sheldon et al. (2021), it was found that twenty-five percent of students experience depression, and fourteen percent experience suicidal thoughts. These statistics suggest that the prevalence rate of depression is higher among students than in the general population (Sheldon et al., 2021). Anxiety is another disorder commonly found among college students. Sixty-three percent of students in 2018 felt overwhelming anxiety (LeBlanc & Marques, 2019). College students' stress contributes to these statistics and enhances their risk of showing symptoms of mental illness.

Substance Use in College-Aged Students

College is socially accepted as the time to be expanding one's boundaries and trying new things, which in turn has been directly related to experimenting with different types of drugs and substances. Seventy-five percent of college students drink alcohol, forty-three percent smoke marijuana, five percent use cocaine, and 5 percent use hallucinogens (Bayba, 2022). According to Bayba, the use of substances can lead to poor academic performance, addiction problems later in life, and sexual misconduct. In a study conducted by Walker and McNutly (2021), they found a well-established link between strain and substance use as well as depression and substance abuse. Many students will use substances as a way to self-medicate for their stress and attempt to

alleviate the strain they feel as a result of the unique pressures they are under (Pate & Bolin, 2019). Pate and Bolin also found a significant relationship between the use of hard drugs and marijuana and depressive symptoms. As mentioned earlier, mental health issues begin to arise, if they haven't already, between the ages of 18 to 25, so college students are at the peak age for symptoms of depression and anxiety (Brown, 2016). The use of drugs could enhance these symptoms. These studies showcase the strong connection between substance use, strain, and mental illness and how it affects college students.

Students also use prescription drugs, such as Adderall, to enhance their academic performance (Pate & Bolin, 2019)**.** Prescription stimulant misuse, commonly defined as the use of medication without a prescription or the use of another medication, has prevalence rates of ten point three percent in full-time students and eleven point 2 percent in recent college graduates (Schepis et al., 2021). Students take these drugs to increase concentration and improve grades, however, studies have shown there to be no relation between the two (Schepis et al., 2021). As academic rigor increases in universities across the United States, the abuse of prescription medication might increase, adding to the problem already existing.

Strain Theory

The criminological theory selected for application in this study is Strain Theory. Strain theory analyzes why people commit crimes and suggests that the negative emotions from stress are the underlying cause (Campbell, 2020). Strain is defined by Higgins and Marcum (2016) as disparities between culturally defined goals and ways of achieving these goals which result in stress. When strain theory was first introduced, there was the misconception that individuals of the lower class were the ones to undergo strain and feel the need to commit deviant acts. Early criminologists believed it was generational and criminals passed their antisocial views and

attitudes to their kids who would then continue the cycle, but since then it has been recognized that people from all social classes feel strain in various ways (Campbell, 2020). These strains could be due to finances, relationships, work, or academics. Generally, people have things in their life that cause them stress and their reaction to this stress could be legitimate or illegitimate.

Strain theory was strongly influenced by sociologist Emile Durkheim's concept of deregulation (Higgins & Marcum, 2016). Deregulation was the idea that rules and expectations in society had fragmented and left people unable to behave, which Durkheim believed led to criminal behavior. Stemming off deregulation, Durkheim (1893) introduced the concept of anomie. Anomie asserts people have lessened moral control over behavior and those who struggle with achieving success suffer from anomie (Higgins & Marcum, 2016). These two factors were the driving force behind anomie and strain theories that were later progressed by sociologists and criminologists including Robert Merton (1938) and Robert Agnew (1992).

Robert Merton (1938) used Durkheim's concept of anomie to introduce the Anomie Strain Theory. His theory attempted to explain modern societies and individuals' adaptations to stress or struggle for success (Higgins & Marcum, 2016). According to Merton (1988), the pressures placed on members of society to live up to expectations or "fit in" caused a lot of strain, but people will take whatever means necessary to obtain their goals (Higgins & Marcum, 2016). If there was no legal way for someone to respond to the strain, they would resort to illegal activities. For example, if an individual could not afford their bills, they would resort to selling drugs. Either people will conform to societal rules or they will innovate new ways or techniques of achieving their objectives (Higgins & Marcum, 2016).

Criminologist Robert Agnew (1992) developed the General Strain Theory and extended existing knowledge of how strain can lead individuals to commit deviant acts. He argued strain

theory through a micro-level perspective and examined the sources of strain (Higgins &

Marcum, 2016). Agnew (1992) defined strain as dislikable conditions or events for individuals.

With this definition, it was able to encompass many more offenders and motivations behind

crimes. According to Agnew (1992) and Brezina (2017), dislikable events or conditions can

present themselves in three ways: blockage of one's goals or the inability to achieve something,

the presence of negative stimuli or being exposed to undesirable circumstances, and the loss of

positive stimuli. The negative emotions associated with these types of strain are what motivates

individuals to commit a crime (Brezina, 2017). Not everyone that experiences a strain, however,

will commit a crime or act in a deviant way. Those likely to react in such a way, lack the

resources to help cope or lack support from others. Everyone experiences strain in their life,

whether that be from financial situations, relationship problems, or work. The General Strain

Theory suggests that some people will react in healthy ways by seeking out help and resources,

while others will turn to deviancy to alleviate or fix these strains.

Agnew's (1992) General Strain Theory pivoted away from just financial strain and

explored other aspects of life. This theory has been used to explore the strain that college

students feel and how it increases their deviant behavior. Academic, financial, and social

pressures enhance the likelihood of students engaging in drugs such as alcohol and marijuana.

This study will utilize the General Strain Theory to explore this topic more in-depth.

The Present Study

As shown above, there have been many studies conducted on the topic of general strain

and how it affects college students' use of marijuana and other substances with a focus on

depression and mental health. However, there has been conflicting research on the correlation

between alcohol use and depression (Pate & Bolin, 2019). Studies have found there to be a

positive correlation, while others found there to be a negative correlation. A research study conducted at a midsize university in the United States found there to be a negative correlation between alcohol use and depression (Pate & Bolin, 2019). This relationship could be due to the social aspect of drinking while in college. Students will drink with their friends on weekends or go out to parties. More research would need to be done to fully understand the relationship between alcohol use and depression.

College students face a lot of stress relating to their academic studies, financial situations, and relationships. This stress can turn into the use of substances such as alcohol or drugs as a way of coping with these strains. Looking at this growing issue through the lens of the General Strain Theory can help further the knowledge and research into this topic. It highlights the reasons and potential outcomes of why college students cope with illegal substances. Digging deeper into the relationship between alcohol and strain would also be beneficial.

Chapter 3: Methodology

Hypothesis

This study examines Appalachian State University's alcohol and marijuana use among undergraduate students. The principal variables of interest are stress levels, alcohol use, and marijuana use. Additional variables include the type of stress, and how their alcohol and marijuana use relates to stress. The hypotheses for this study are as follows:

H1: Students consume alcohol at a higher rate than marijuana.

H2: Students use alcohol to relieve stress, avoid problems, and cope with feelings at a higher rate than marijuana.

Research Design

This study was conducted at Appalachian State University, a public university located in Boone, North Carolina. The sample for this study was a convenience sample, as the researcher had easy access to the students of the Department of Government and Justice Studies. This study consisted of quantitative data acquired through an online survey sent to students. The survey was sent out to two professors, one teaching a large intro to the criminal justice section and one teaching a large intro to political science class, requesting their permission to forward the survey to the students in their classes. These classes were selected as they contain many students from a variety of majors and class ranks. The professors then discussed the survey with students in their classes and shared it with them to complete. The study was anonymous. This study was granted Institutional Review Board (IRB) approval. The questions in the survey included demographic information, stress-level questions, and self-reporting questions about alcohol and marijuana.

Variables

The variables of interest in this study include stress levels, types of stress, alcohol use, marijuana use, and the relationship between stress levels and the use of alcohol and marijuana. These variables have differing levels of measurement displayed in Table 1. Some variables have a nominal measurement, such as stress level, alcohol use, marijuana use, types of stressors, major, and gender. Age is ordinal.

Table 1.

Variables Table

Variables of Interest	Level of Measurement	Attribute of Variable of Interest
Age	Ordinal	18-20, 21+
Gender	Nominal	Male, Female, Non-Binary, Other
Class Rank	Nominal	Freshman, Sophomore, Junior, Senior
Stress Level	Nominal	I never feel stressed; I sometimes feel stressed; I feel stressed about half the time; I feel stress most of the time; I always feel stress
Type of Stressors	Nominal	Academic, Work, Relationship, and Finances
Alcohol Use	Nominal	I never drink alcoholic beverages; I drink alcoholic beverages a few times a month; I drink alcoholic beverages one to two times a week; I drink alcoholic beverages two to three times a week; I drink alcoholic beverages four or more times a week

Marijuana Use	Nominal	I never use marijuana; I use marijuana a few times a month; I use marijuana one to two times a week; I use marijuana two to three times a week; I use marijuana four or more times a week

Data Analysis Plan

This study will provide a comparative descriptive analysis of the data collected. It will occur in three stages. First, the descriptive statistics will be analyzed to get a better understanding of our sample and how to best interpret the results. This will be followed by an analysis of stress levels and in what areas the respondents are most stressed, whether that be academics, relationships, finances, or job-related. Finally, the results of self-reported alcohol and marijuana use and how it relates to stress will be analyzed to determine the frequency of substance use to deal with stress.

Chapter 4

Results

Frequencies and Descriptive Statistics

The results from the survey were analyzed using the Qualtrics MX Platform. Thirty-four respondents, or 40.96% of the sample, identified as male; forty-nine respondents, or 59.04% of the sample, identified as female (See Table 2). No respondents identified as non-binary or other.

Table 2.

Frequency of Gender

Gender	Frequency	Percent
Female	49	59.04
Male	34	40.96
Total	83	100

Seventy-six respondents, or 91.57% of the sample, were ages 18-20 and seven respondents, or 8.43% of the sample, were ages twenty-one or older (See Table 3).

Table 3.

Frequency for Age

Age	Frequency	Percent
18-20	76	91.57
21+	7	8.43
Total	83	100

Thirty-nine of the respondents, 46.99% of the sample, are freshmen; twenty-four of the respondents, 28.92% of the sample, are sophomores; twelve of the respondents, 14.46% of the sample, are juniors; eight of the respondents, 9.64% of the sample, are seniors (See Table 5).

Table 4.

Frequency of Class Rank

Class Rank	Frequency	Percent
Freshman	39	46.99
Sophomore	24	28.92
Junior	12	14.46
Senior	8	9.64
Total	83	100

Stress Levels

The stress levels of students were measured by asking them a variety of questions about their sleep patterns and how often they feel stress due to academics, having a job, finances, peer relationships, and romantic relationships. The results are in the table below.

Table 5.

Frequency of Stress

	Never	Sometimes	Half of the Time	Most of the Time	Always	Total
How often do you feel overwhelmed?	4	24	19	26	6	79
How often do you have trouble falling asleep at night?	10	22	25	14	8	79
How often do you get 7-8 hours of sleep?	2	25	21	28	3	79

How often do you lose focus on a task?	1	25	19	22	11	78
How often do you feel stressed?	1	12	20	31	15	79
How often do you feel stressed due to academics?	3	14	25	22	15	79
How often do you feel stressed due to a job?	25	32	11	7	3	78
How often do you feel stress due to peer relationships?	13	25	15	20	6	79
How often do you feel stress due to romantic relationships?	21	26	11	14	7	79
How often do you feel stressed due to finances?	9	19	17	17	17	79

Alcohol Use

Sixty-four of the respondents, or 86.49%, have consumed alcohol before, and ten of the respondents, 13.51% of the sample, have not consumed alcohol before (See Table 5).

Table 6.

Frequency of Prior Alcohol Use

Alcohol Consumption	Frequency	Percent
Have consumed alcohol	64	86.49
Have not consumed alcohol	10	13.51
Total	74	100

Out of those that have consumed alcohol, five respondents, or 8.33%, never drink alcohol anymore; twenty-four respondents, or 40%, report to drinking alcohol a few times a month;

sixteen respondents, or 26.67%, report drinking alcohol one to two times a week; fourteen of the

respondents, or 23.33%, report drinking alcohol two to three times a week; one respondent, or

1.67%, reports drinking four or more times a week (See Table 6).

Table 7.

Frequency of Consumption

Alcohol Consumption	Frequency	Percent
Never	5	8.33
A Few Times a Month	24	40
1-2 Times a Week	16	26.67
2-3 Times a Week	14	23.33
4 or More Times a Week	1	1.67
Total	60	100

Thirty-six of the respondents, or 60%, report that they never drink alcohol to relieve

stress; twenty-one of the respondents, or 35%, report to sometimes consuming alcohol to relieve

stress; three of the respondents, or 5%, report that they always consume alcohol to relieve stress

(See Table 7).

Table 8.

Frequency of Respondents Who Drink to Relieve Stress

Alcohol Consumption	Frequency	Percent
Never	36	60
Sometimes	21	35
Always	3	5
Total	60	100

Thirty-three of the respondents, or 55%, report that they never drink alcohol to cope with feelings or avoid problems; twenty-four percent of the respondents, or 40%, report that they sometimes drink to cope with feelings or avoid problems; three of the respondents, or 5%, report they always drink to cope with feelings or avoid problems (See Table 8).

Table 9.

Frequency of Respondents Who Drink Alcohol to Cope with Feelings or Avoid Problems

Alcohol Consumption	Frequency	Percent
Never	33	55
Sometimes	24	40
Always	3	5
Total	60	100

Twenty-one of the respondents, or 35%, report drinking alcohol one to two times a week to relieve stress from school, work, or finances; three of the respondents, or 5%, report drinking alcohol two to three times a week to relieve stress; one respondent, or 1.67%, report drinking alcohol three to four times a week to relieve stress; thirty-five of the respondents, or 58.33%, report never drinking to relieve stress (See Table 9).

Table 10.

Weekly Frequency of Respondents Who Drink to Relieve Stress From School, Work, Etc.

Weekly Alcohol Consumption	Frequency	Percent
Never	35	58.33
1-2 Times a Week	21	35
2-3 Times a Week	3	5
3-4 Times a Week	1	1.67

Total	60	100

Eighteen of the respondents, or 30%, report drinking alcohol one to two times a week to avoid problems or cope with feelings; three of the respondents, or 5%, report drinking two to three times a week to avoid problems or cope with feelings; one respondent reports drinking alcohol three to four times a week to avoid problems or cope with feelings; thirty-eight of the respondents, or 63.33%, report never drinking alcohol to avoid problems or cope with feelings (See Table 10).

Table 11.

Weekly Frequency of Respondents Who Drink to Avoid Problems or Cope with Feelings

Weekly Alcohol Consumption	Frequency	Percent
Never	38	63.33
1-2 Times a Week	18	30
2-3 Times a Week	3	5
3-4 Times a Week	1	1.67
Total	60	100

Marijuana Use

Fifty-two of the respondents, or 65.82%, have used marijuana before, twenty-seven of the respondents, or 34.18%, have not used marijuana before (See Table 11).

Table 12.

Frequency of Prior Marijuana Use

Marijuana Consumption	Frequency	Percent
Has Used Marijuana	52	65.82

Have Not Used Marijuana	27	34.18
Total	79	100

Of the respondents who have used marijuana before, sixteen, or 34.78%, report using marijuana a few times a year; seven of the respondents, 15.22%, report using it a few times a month; four of the respondents, 8.70% report using one to two times a week; seven of the respondents, 15.22%, report using it two to three times a week; twelve of the respondents, 26.09%, report using it four or more times a week (See Table 12).

Table 13.

Frequency of Marijuana Usage

Marijuana Usage	Frequency	Percent
Few Times a Year	16	34.78
Few Times a Month	7	15.22
1-2 Times a Week	4	8.70
2-3 Times a Week	7	15.22
4 or More Times a Week	12	26.09
Total	46	100

Twelve of the respondents, or 26.09%, report never using marijuana to relieve stress; Twenty-three of respondents, or 50%, report sometimes using marijuana to relieve stress; eleven of the respondents, or 23.91%, report always using marijuana to relieve stress (See Table 13).

Table 14.

Frequency of Respondents Who Use Marijuana to Relieve Stress

Marijuana Consumption	Frequency	Percent

Never	12	26.09
Sometimes	23	50
Always	11	23.91
Total	46	100

Seventeen of the respondents, or 36.96%, report never using marijuana to cope with feelings or avoid problems; twenty of the respondents, or 43.48% report sometimes using marijuana to cope with feelings or avoid problems; nine of the respondent's, or 19.57%, report always using marijuana to cope with feelings or avoid problems (See Table 14).

Table 15.

Frequency of Respondents Who Use Marijuana to Cope with Feelings or Avoid Problems

Marijuana Consumption	Frequency	Percent
Never	17	36.96
Sometimes	20	43.48
Always	9	19.57
Total	46	100

Eleven of the respondents, or 23.04%, use marijuana one to two times a week to relieve stress from school, work, finances, etc; five of the respondents, or 10.64%, report using marijuana two to three times a week to relieve stress; three respondents, or 6.38%, report using marijuana three to four times a week to relieve stress; eight respondents, or 17.02%, report using it four or more times a week to relieve stress (See Table 15).

Table 16.

Weekly Frequency of Respondents Who Use Marijuana to Relieve Stress From School, Work,

Etc.

Weekly Marijuana Consumption	Frequency	Percent
Never	20	42.55
1-2 Times a Week	11	23.40
2-3 Times a Week	5	10.64
3-4 Times a Week	3	6.38
4 or More Times a Week	8	17.02
Total	47	100

Seven of the respondents, or 14.89%, report using marijuana one to two times a week to

cope with feelings or avoid problems; three of the respondent's, or 6.38%, report using marijuana

two to three times a week to cope with feelings or avoid problems; two respondents, or 4.26%,

report using marijuana three to four times a week to cope with feelings or avoid problems; seven

respondents, or 14.89%, report using it four or more times a week to cope with feelings or avoid

problems; twenty-eight of the respondents, or 59.57%, report never using marijuana to cope with

feelings or avoid problems (See Table 16).

Table 17.

Weekly Frequency of Respondents Who Use Marijuana to Avoid Problems or Cope with

Feelings

Weekly Alcohol Consumption	Frequency	Percent
Never	28	59.57

1-2 Times a Week	7	14.89
2-3 Times a Week	3	6.38
3-4 Times a Week	2	4.26
4 or More Times a Week	7	14.89
Total	47	100

Chapter 5: Discussion

The purpose of the current study is to examine the alcohol and marijuana intake of Appalachian State undergraduate students in relation to their stress levels. Prior research has found that strain in everyday lives leads individuals to abuse substances to find relief or an escape. The main goal of this study was aimed at answering whether the stressors that college students face lead them to consume alcohol and marijuana. This chapter will provide a discussion of the results, limitations, and recommendations for further research.

Results

The first research question that this study aimed to answer was about the levels of alcohol and marijuana consumed by students. Many students have consumed both alcohol and marijuana, with a small percentage that have not. This is consistent with national statistics about college student substance intake (Bayba, 2022). Most respondents also reported that they have begun drinking alcohol and using marijuana more since beginning college. This is not surprising considering the party culture on college campuses. When looking at the consumption of alcohol, more students reported drinking a few times a month, however, the vast majority reported drinking one to two times a week or two to three times a week. When asked if they only drink in

social situations, 76.67% of respondents said yes, and 23.33% reported no. Looking at marijuana

consumption, the majority of respondents only use it a few times a year or they use it four or

more times a week. This is an interesting find because those are two extremes. When asked if

respondents only use marijuana in a social setting, 53.32% said yes, and 44.68% reported no.

This is a lot closer margin than that of alcohol. Overall, more respondents have consumed

alcohol than marijuana, but marijuana seems to be used at a more consistent rate.

The second research question that this study aimed to answer is about stress levels among

students. This was measured by asking many questions about overall feelings of being

overwhelmed and stressed as well as their stress levels relating to different stressors that are

common in college students. When asked how often they feel overwhelmed, 7.59% said always,

32.91% said most of the time, 24.05% said half of the time, 30.38% said sometimes, and 5.06%

said never. The majority of respondents feel overwhelmed most of the time or only some of the

time. When asked about their overall feeling of stress, 18.99% said always, 39.24% said most of

the time, 25.32% said half of the time, 15.19% said some of the time, and 1.27% said never. As

you can tell by the statistics, most students feel overwhelmed a large majority of the time. This is

not surprising as it was to be expected.

The common stressors of college students are academics, peer relationships, romantic

relationships, finances, and relating to a job. When asked about their stress due to academics, the

majority of respondents are stressed about half the time or most of the time. Only 3.80% said

they are never stressed about academics. Looking at stress levels due to a job, the majority of

students said never or only some of the time. 3.85% reported always being stressed over a job.

Due to the sample that was taken, this is not surprising because 68.12% reported not having a

job. When asked about stress due to peer relationships, the majority of respondents reported

sometimes feeling stressed or feeling stressed most of the time. Only 7.59% reported always

being stressed over peer relationships. When looking at stress over romantic relationships, most

reported never having stress or only sometimes. There was a fewer majority that are stressed

most of the time or always. Finally, when asked about stress over finances, there was an even

split between half the time, sometimes, and always. 24.05% reported being stressed sometimes

and 11.39% reported never being stressed over money. These results are interesting because they

tell us that the majority of students feel overwhelmed or stressed. It also tells us that more

students are stressed over academics and finances than other stressors.

The third research question that this study aimed to answer was the relationship between

alcohol and marijuana use and stress. For alcohol, the majority of respondents reported never

drinking alcohol to relieve stress. Only 5% reported always drinking to relieve stress. The same

is true when they were asked about alcohol consumption to cope with feelings or avoid

problems, however, there was a slight increase in respondents who reported they sometimes

drink to cope with feelings or avoid problems than those who drink to relieve stress. We also see

the trend continue when asked how many times a week they drink to relieve stress or to cope

with feelings or avoid problems. The majority reported never drinking or only one to two times a

week. These findings are surprising because I expected more students to drink in order to cope

with their stress considering that one of the two main reasons why students drink is for emotional

escape and relief (Labrie et al., 2007). This could be due to a small sample size and the

concentration of freshman and sophomore respondents.

In contrast to respondents' use of alcohol, the majority of respondents reported sometimes

or always using marijuana to relieve stress. We also see that more respondents report that they

sometimes use marijuana to cope with feelings or avoid problems, however, a larger majority use

it to relieve stress. When asked how many times a week they use marijuana to relieve stress from

school, work, finances, etc., more respondents reported never or only one to two times a week.

But, there is also 17.02% who use marijuana four or more times a week to relieve stress which is

significantly greater than that of alcohol use. We see similar findings when looking at the results

of how many times a week students use marijuana to cope with feelings or avoid problems. The

majority never use marijuana to cope with feelings or avoid problems. There is a larger

percentage that use marijuana to relieve stress than cope with feelings. These are interesting

findings because when comparing alcohol and marijuana usage, a larger percentage use

marijuana to relieve stress and cope with feelings/avoid problems than they do alcohol.

Considering that alcohol is used more commonly than marijuana, I did not expect to find

marijuana used more to manage stress.

Limitations

There are multiple limitations to the study. The sample size (N=83) is not large enough

for generalization when compared to the overall population of Appalachian State University. The

population of undergraduate students as of the Fall of 2022 is 18,558 (University, n.d.). The

sample size is .4% of the population. Another limitation is not enough diversity between class

ranks. 46.99% of respondents are freshmen and 28.92% are sophomores. This could have led to

not as accurate results due to accessibility to substances and lower stress levels. 91.57% of the

sample is between the ages of 18 and 20, so they are unable to buy alcohol which could also limit

their access.

Conclusion

The current study found that in the overall sample of 83 respondents, stress levels are

high in general, and stress related to academics and finances. They are still stress related to peers

and romantic relationships as well as jobs, but they are less prominent. The study also found

there to be a stronger relationship between marijuana use and stress than alcohol use and stress.

However, it is still a small relationship between both substances and stress. This means, that only

one of the two predicted hypotheses was correct. Alcohol is used more frequently than marijuana

in general, however, marijuana is used more the relieve stress and cope with feelings. Due to the

excessive use of alcohol and marijuana among college students in America, it is important to

continue to grow our knowledge in the area. Using harmful substances can have a significant

impact on an individual's life, especially those that are college-student age. Further research

should put an emphasis on marijuana use in college students and how it is related to stress.

Resources

Bayba, M. (2022, March 1). *College Drug Use Statistics.* Addiction Group.

      https://www.addictiongroup.org/addiction/college-drug-abuse-statistics/

Beerkens, M., Mägi, E., & Lill, L. (2011). University studies as a side job: Causes and

      consequences of massive student employment in Estonia. *Higher Education, 61*(6), 679–

      692. https://doi.org/10.1007/s10734-010-9356-0

Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S.

      (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of

      college students. *Journal of Affective Disorders*, *173*, 90–96.

      https://doi.org/10.1016/j.jad.2014.10.054

Brezina, T. (2017, February 27). *General Strain Theory*. Oxford Research Encyclopedia of

      Criminology and Criminal Justice.

      https://doi.org/10.1093/acrefore/9780190264079.013.249

Brown, P. (2016). The invisible problem? Improving students' mental health. *Higher Education

      Policy Institute*, 66.

Campbell, J. (2020). Strain Theory (sociology). In *Salem Press Encyclopedia*. Salem Press.

      https://login.proxy006.nclive.org/login?url=https://search.ebscohost.com/login.aspx?

      direct=true&db=ers&AN=87325011&site=eds-live&scope=site

Darling, C. A., McWey, L. M., Howard, S. N., & Olmstead, S. B. (2007). College student stress:

      The influence of interpersonal relationships on sense of coherence. *Stress and Health*,

      23(4), 215–229. https://doi.org/10.1002/smi.1139

Higgins, G. E., & Marcum, C. D. (2016). *Criminological Theory* (C. A. Archbold & G. L. Mays,

      Eds.). Wolters Kluwer.

Jackson, P. B., & Finney, M. (2002). Negative Life Events and Psychological Distress among

     Young Adults. *Social Psychology Quarterly*, *65*(2), 186–201.

     https://doi.org/10.2307/3090100

Labrie, J. W., Hummer, J. F., & Pedersen, E. R. (2007). Reasons for Drinking in the College

     Student Context: The Differential Role and Risk of the Social Motivator. *Journal of*

     Studies on Alcohol and Drugs, *68*(3), 393–398.

LeBlanc, N. J., & Marques, L. (2019, May 28). *Anxiety in college: What we know and how to*

     cope. Harvard Health. https://www.health.harvard.edu/blog/anxiety-in-college-what-we-

     know-and-how-to-cope-2019052816729

McIntyre, J. C., Worsley, J., Corcoran, R., Harrison Woods, P., & Bentall, R. P. (2018).

     Academic and non-academic predictors of student psychological distress: The role of

     social identity and loneliness. *Journal of Mental Health*, *27*(3), 230–239.

     https://doi.org/10.1080/09638237.2018.1437608

Minoletti, C. (2019, March 1). *College Dating Violence and Abuse Poll*. One SAFE Place.

     https://ospshasta.org/2019/03/01/college-dating-violence-and-abuse-poll/

Pate, M. C., & Bolin, R. M. (2019). Examining the Relationship Between Strain and the Use of

     Nonmedical Prescription Drugs Among College Students. *Journal of Drug Issues*, *49*(1),

     163–182. https://doi.org/10.1177/0022042618812398

Peltz, J., Bodenlos, J., Kingery, J., & Rogge, R. (2020). The Role of Financial Strain in College

     Students' Work Hours, Sleep, and Mental Health. *Journal of American College Health*.

     https://doi.org/10.1080/07448481.2019.1705306

Saleh, D., Camart, N., & Romo, L. (2017). Predictors of Stress in College Students. *Frontiers in*

     Psychology, *8*. https://www.frontiersin.org/article/10.3389/fpsyg.2017.00019

Schepis, T. S., Buckner, J. D., Klare, D. L., Wade, L. R., & Benedetto, N. (2021). Predicting

college student prescription stimulant misuse: An analysis from ecological momentary

assessment. *Experimental and Clinical Psychopharmacology*, *29*(6), 580–586.

https://doi.org/10.1037/pha0000386

Sheldon, E., Simmonds-Buckley, M., Bone, C., Mascarenhas, T., Chan, N., Wincott, M.,

Gleeson, H., Sow, K., Hind, D., & Barkham, M. (2021). Prevalence and risk factors for

mental health problems in university undergraduate students: A systematic review with

meta-analysis. *Journal of Affective Disorders*, *287*, 282–292.

https://doi.org/10.1016/j.jad.2021.03.054

Sparks, E., & Gruelle, K. (2016). *Intimate Partner Violence*. Routledge.

https://doi.org/10.1201/9781315381343

Tran, A. G. T. T., Lam, C. K., & Legg, E. (2018). Financial Stress, Social Supports, Gender, and

Anxiety During College: A Stress-Buffering Perspective. *The Counseling Psychologist*,

46(7), 846–869. https://doi.org/10.1177/0011000018806687

University, A. S. (n.d.). *Appalachian State University / Facts*. Retrieved November 27, 2022,

from https://www.appstate.edu/about/facts/

Walker, T., & McNulty, T. (2021). The Relationship between Substance Use, Strain, and

Depression among College Students. *Journal of Student Research*, *10*(1).

https://doi.org/10.47611/jsr.v10i1.1132

Welsh, J. W., Shentu, Y., & Sarvey, D. B. (2019). Substance Use Among College Students.

Focus: Journal of Life Long Learning in Psychiatry, *17*(2), 117–127.

https://doi.org/10.1176/appi.focus.20180037