Arkansas Statewide Collegiate Substance Use Assessment, 2021

ARKANSAS DEPARTMENT OF HUMAN SERVICES

Arkansas Collegiate Substance Use Assessment 2021

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**ARKANSAS
DEPARTMENT OF
HUMAN
SERVICES**

Division of Aging, Adult and
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UA LITTLE ROCK | MidSOUTH CENTER FOR PREVENTION AND TRAINING

UNIVERSITY OF ARKANSAS AT LITTLE ROCK

Coordination and management of the assessment facilitated through collaboration between the University of Arkansas at Little Rock Survey Research Center and the University of Arkansas at Little Rock MidSOUTH.

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Report Highlights

- The 16-20-year-old age range is repeatedly the age where respondents identified first use of alcohol, tobacco, and other drugs.

- The transgender/gender non-conforming/non-binary population is a potentially at-risk collegiate population given incidences of substance usage over their lifetime, age of first usage, and recent usage. This demographic group has been excluded from other analyses for peer collegiate substance use studies. Future research is therefore strongly recommended.

- More than one and one-half percent (1.54%) of respondents thought about suicide more than 10 times over the past 30 days.

- The survey encompasses 2-year, 4-year, and post-baccalaureate institutions, as well as public and private universities & colleges.

- The survey instrument aimed at being inclusive of all college students. Given the changing landscape of higher education, and the shifting context of whom constitutes as a college student, this assessment aimed at capturing perceptions and behaviors of as many types of college students as possible – even if they are nontraditional for similar collegiate level assessments. Subsequent analysis should be conducted highlighting different demographic group responses and substance usage. For this assessment the demographic variables included: (1) Gender; (2) Race; (3) Ethnicity; (4) Marital Status; (5) Work Status; (6) Permanent Residence; (7) Student Status; (8) Degree Type; (9) Undergraduate level; (10) Graduate level; (11) Current residence; (12) Class Modality; and (13) Cumulative Grade Point Average.

Alcohol:

- The average number of alcoholic beverages consumed per week is about 1.5 drinks.

- Over the past 30 days, 44% of total respondents noted drinking 1+ alcoholic drinks (32.4% for 18–20-year-old & 55.7% for 21 years and older).

- Nearly 40% of college students first try alcohol between the ages of 16-20.

- 21% of respondents reported binge drinking over the past 30 days.

- Alcohol-related behaviors and alcohol use disorder symptoms occurring at least once over the last 30 days included:

  - Hangover (16.1%)
  - Performed poorly on test/ project (15.7%)
  - Nauseated/ Vomited (14.8%)
  - Missed class (13.6%)
  - Thought about suicide (9.4%)
  - Memory loss (8.72%)
  - Injured/ Hurt (6.7%)

- Female alcohol usage was more frequent while male alcohol consumption was higher.

Tobacco:

- 41.34% of respondents have used Tobacco at least once.

- Reported usage, at least once, over the past 30 days were as follows:

    - Total respondents (11.74%)
    - 18-20-year-olds (7.5%)
    - 21+ years old (15.6%)

- Most frequent tobacco users (10 or more instances over the past 30 days) were the 26 and older age category.

Vaping:

- 31.75% of respondents reported vaping over their lifetime.
- Most students who reported vaping also reported that they had done so 10+ times in the last 30 days.
- Substances vaped at least once over the past 30 days included:
    - Nicotine (15.65%)
    - Marijuana (7.65%)
    - Flavorings (3.99%)

Marijuana:

- 41.34% used at least once in their lifetime

- Respondent's age of first use highest categories:

    - 16-20 (23.77%)
    - 11-15 (8.23%)
    - 21-25 (4.55%)

- Last 30 days usage:

    - Vaped marijuana (7.65%)
    - Used Marijuana (12.48%)

- Half of the respondents that reported using marijuana over the past month (12.48%) indicated using it 10 or more times (6.22%)

Recent Changes & Impact of COVID-19:

- During the previous 12 months, 15.38% of respondents reported an increase in alcohol use, while 3.25% reported an increase in illegal substance use.

- When asked about the impact of the Covid-19 pandemic on substance use, 13.96% of the respondents reported an increase in their use of alcohol, tobacco, or illegal drugs, while 6.63% reported a decrease in their use of these substances.

Campus Perceptions:

- Student perceptions of peer usage is profoundly overestimated.

Other Substance Use:

- o Across nearly all substances, the age of first use was between 16 and 20.

- o Lifetime Occasions of Use (at least once over lifetime):
  - Amphetamines (13.8%)
  - Hallucinogens/ Psychedelics (9.79%)
  - Cocaine (8.05%)
  - Sedatives (7.69%)
  - Designer Drugs (6.97%)
  - Methamphetamine (4.29%)
  - Inhalants (3.53%)
  - Steroids (3.32%)
  - Opiates (2.94%)

- o Last 30 days using substance at least once:
  - Amphetamines (3.39%)
  - Sedatives (1.33%)
  - Hallucinogens/ Psychedelics (1.04%)

- o When reviewing respondent's self-reported substance use over the past 30 days, respondents, on average, were likely to report using 1-2 times or more than 10 times.

Prescription Drugs & Opioids:

- o Most common age of first use for prescription opioids is 16-20 (8.41% of respondents)

- o Over the last 30 days, 1.65% of respondents used prescription opioids and 1.84% of respondents used another person's prescription drugs at least once.

Introduction

Overview

An inaugural statewide collegiate substance use assessment was conducted by the University of Arkansas at Little Rock Survey Research Center from August to October 2021 using a web-based survey instrument. The assessment was funded by the Arkansas Department of Human Services Division of Aging, Adult, & Behavioral Health Services and the coordination, management, and facilitation were through collaboration between the Survey Research Center and University of Arkansas and MidSOUTH, both of University of Arkansas at Little Rock. The purpose of the assessment was to collect self-reported information on college students' substance use, the behaviors and consequences related to use, and students' perceptions of substance use on college campuses across the state of Arkansas.

Importance of Assessment

The Arkansas Epidemiological Outcomes Work group indicated that there is a statewide deficiency of collegiate-level data measuring incidence of substance use within the college population (AFMC, 2019). The collegiate level data is important based on a variety of factors, but this data is particularly relevant given that "this category of the population may present as a high risk for first-time users of illicit substances" (AFMC, 2019, p. 13). The data collected for this assessment represents the first systematic Arkansas statewide data collection where college students self-reported information related to substance use, consequences of use, and perceptions of substance use on college campuses. Data collected as part of this assessment will be utilized to create safer campuses and will leverage the Substance Abuse Block Grant, which is set to help plan, implement, and evaluate activities that prevent and treat substance abuse on college campuses.

Risk Factors Specific for Substance Use in College Campuses:

College enrollment represents a distinct phase in life that initiates the transition from adolescence to independent adulthood and a period of increased exposure to the pressures of alcohol, tobacco, and other substance use (Welsh, Shentu, & Sarvey, 2019). Over the past decade there has been a nationwide increase of cannabis, stimulant, and other illegal drug use across U.S. college campuses (Welsh, Shentu, & Sarvey, 2019) to the point that substance use disorder has become one of the most pervasive health problems for American college campuses (Schulenberg, Johnston, O'Malley, & Bachman, 2017). Substance use disorder is also a major behavioral and health concern among the college students themselves (Rimsza & Moses, 2005). Substance use is associated with multiple negative outcomes for college students including higher probability of unemployment after graduation, lower academic performance, failure to graduate, and increased risk of committing or experiencing sexual assault (Arria, Caldeira, Bugbee, Vincent, & O'Grady, 2015; Arria, et al., 2013; Horsman, 2014; Rimsza & Moses, 2005; Wolaver, 2002;), as well as associations with significant general medical and psychiatric mortality and morbidity for some students (Skidmore, Kaufman, & Crowell, 2016; White, Hingson, Pan, & Hsiao-ye yi, 2011). There is an added importance for higher education institutions to address substance use among students given the unique nature of planning treatments for colleges (e.g., aspects of confidentiality, unique financial constraints, potential university involvement/oversight) (Welsh, Shentu, & Sarvey, 2019). Additional risk factors specific to college campuses and the collegiate population are included in the narratives for the different substances as presented within the report.

Impact of COVID-19/ Recent Trends

The COVID-19 pandemic, and resulting economic and social impacts, have led to global widespread adverse psychological issues, depression, and anxiety (Qiu, et al., 2020) which have been tied to increased substance use and increased addictive/behavioral addictions (Alexander & Ward, 2018). The COVID-19 pandemic and various public health control measures may have increased risks associated with addictive behaviors and substance abuse (Sun, et al., 2020; National Institution on Drug Abuse of USA, 2021; Sun, Bao, & Kosten, 2020). Previous studies on the impacts of disasters have shown higher rates of alcohol usage, smoking, and increased risk behaviors (DiMaggio, Galea, & Li, 2009; Lee, Kang, Bell, & Marmot, 2014). Within the college-aged population, a recent study (Firkey, Sheinfil, & Woolf-King, 2021) indicated that domestic college students reported a 26.9% increase in alcohol consumption and a 15.1% increase in cannabis usage in response to the COVID-19 pandemic. Concomitantly, recent provisional data (2021) from the Center for Disease Control and Prevention's National Center for Health Statistics demonstrated that overdose deaths in the United States hit an all-time high for the 12-month period ending in 2021 – which was a 28.5% increase from the previous year. This dramatic increase in overdose deaths was seen in opioids, synthetic opioids, methamphetamines, cocaine, and natural and semi-synthetic opioid (prescription pain medication).

Methodology

The Arkansas Collegiate Substance Use Assessment (ACSUA) was conducted by the University of Arkansas at Little Rock Survey Research Center from August to October 2021 using a web-based survey instrument through Qualtrics. The assessment was funded by the Arkansas Department of Human Services Division of Aging, Adult, & Behavioral Health Services and coordination and management was facilitated through collaboration between the University of

Arkansas at Little Rock Survey Research Center (UALR SRC) and University of Arkansas at Little Rock MidSOUTH The purpose of the assessment was to collect self-reported information on college students' substance use, the behaviors and consequences related to use, and student perceptions of substance use on college campuses across the state of Arkansas.

Survey Instrument and Distribution

Survey items were adapted or borrowed from several sources, including the Core Institute Alcohol and Other Drug Database (Southern Illinois University, Carbondale), the Arkansas Prevention Needs Assessment Survey (Arkansas Department of Human Services Division of Behavioral Health Services), Texas College Survey of Substance Use (Texas Health and Human Services), and the National Survey on Drug Use and Health (NSDUH) (Substance Abuse and Mental Health Services Administration Center for Behavioral Health Statistics and Quality). This report represents the initial assessment of its kind for Arkansas so there are no historical comparisons to be included in the report. A complete list of higher education institutions was developed by the UALR SRC and included both public and private 2-year, 4-year, and postbaccalaureate institutions. All institutions were invited to participate in the assessment. The method of email distribution and time frame within the August 15th to October 15th period was determined by the individual institutions.

Student Selection

The selection of students was determined by participating schools – some schools chose random samples to survey, whereas others distributed the assessment to their entire student population. Physical materials (i.e., flyers with QR codes) were provided to institutions to print

and or distribute if desired. Participation in the survey was completely voluntary at the institutional and participant level. The survey protocol and instrument were approved through the University of Arkansas at Little Rock Institutional Review Board processes. Incentives were provided by the UALR SRC through a random gift-card drawing to improve participation rates.

Responses were only recorded upon completion of the assessment. Partial submissions were excluded from the assessment. In total, 3,659 students agreed to participate and completed the assessment which represents a margin of error of ± 1.6% at the 95% confidence interval. In total 35 institutions of higher education (representative of community colleges, 4-year institutions, and post-baccalaureate institutions) participated in the assessment and registered at least a single respondent. There were 18 academic institutions that fully distributed the assessment and represented 96.3% of total participants in the study. The response rate was tabulated from the institutions that indicated they had fully distributed the assessment to their students. From those 18 academic institutions there were 3,142 completed responses from a total student body of 52,823, which represents a **5.95% response rate**. Within those institutions that fully disseminated the assessment, individual institution response rates ranged from 1%-21% (Individual Institutional Response Rate Calculations: [Mean = 6.6, SD = 5.0). The other 17 institutions not included in the response rate calculation each had less than 10 respondents for participation or listed 'other' for their institution (n=56); and did not indicate that they would be fully distributing the assessment. Student responses from these institutions (the 17 not included) could have been Beta-testers for institutions, transfer students still on previous email lists, or recruited outside institutional formal email communications.

Respondent Ages

The age breakdowns for the assessment indicated that 38.12% of the assessment participants were 18-20 years of age while the other 61.88% were 21-years of age or older. The 18–25-year-old age range, which is the typical age of reporting for full time 2-year and 4-year college students in similar assessments, represented 67.01% of total respondents while 32.99% of the respondents indicated they were 26-years of age or older.

Alcohol Use

Alcohol and other substance use broadly, have become part of the normative tradition, and integrated into the 'fabric of the college experience' (Welsh, Shentu, & Sarvey, 2019). In fact, full-time college students tend to consume more alcohol than others in their respective age groups (Substance Abuse and Mental Health Services Administration, 2021) and alcohol contributes to an estimated 1,519 deaths annually for college students (Hingson, Zha, & Weitzman, 2009). The overlap between this statewide collegiate assessment and the statewide high school assessment is worth observing because there is an observed relationship where students bring established drinking habits from high school to the college level (Schulenberg et al., 2017). Additionally, as college students near the legal drinking age of 21 there is an increased risk for an alcohol use disorder (SAMHSA, 2021). The prevalence of such alcohol use disorders among college students rose from 104,000 students for 18-year-olds to more than double that number, 231,000 by the age of 21 (U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2020). Historically, drinking by college males has exceeded female alcohol consumption but this trend has reversed over time and the most recent 2019 data indicated that females are consuming more alcohol than male their counterparts – however males are still binge drinking and heavy drinking at higher rates (SAMHSA, 2021).

The Substance Abuse and Mental Health Services Administration (2021) reported that in 2019, 53% of full-time college students drank alcohol in the past month (33% of which reported binge drinking) and 8% reported heavy drinking in the past month. Impairment and elevated blood

alcohol concentrations associated with binge drinking place those individuals, and individuals around them, at a significantly elevated risk for negative consequences (e.g., injury-related deaths, traffic accidents, sexual assault, violent crimes, and poor academic performance) (U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2018), and increased illicit drug use (O'Grady, Arria, Fitzelle, & Wish, 2008). About one-in-four college students reported having negative consequences associated with drinking (including falling behind in coursework, missing classes, doing poorly on exams/reports, and overall receive lower grades) (White & Hinson, 2013).

The Arkansas Collegiate Substance Use Assessment included a question on binge drinking. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defined binge drinking as, "a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08 percent—or 0.08 grams of alcohol per deciliter—or higher" (NIAAA, 2021, What is Binge Drinking, para. 1). The NIAAA further explains that "[f]or a typical adult, this pattern of alcohol misuse corresponds to consuming 4 or more drinks (female), or 5 or more drinks (male) in about 2 hours" (NIAAA, 2021, What is Binge Drinking, para. 1).

For the Arkansas Collegiate Substance Use Assessment, the binge-related survey question asked: *Over the past 2 weeks, how many times have you had 5 or more drinks in a sitting?* Of the total responses, 8.19% indicated that they had participated in binge drinking once during the period under study, 4% had participated twice, and 2.6% had been binge drinking 3-5 times over the same period.

The ACSUA measured alcohol use by age of first use, lifetime occasions of use, past 30-day use, average number of drinks consumed in a week, questions for binge drinking, and risky behaviors associated with alcohol consumption. Response highlights are as follows:

- The average number of alcoholic beverages consumed per week is about 1.5 drinks.

- Over the past 30 days, 44% of total respondents noted consuming 1 or more alcoholic drinks (32.4% for 18–20-year-old & 55.7% for 21+ years).

- Nearly 40% of college students first try alcohol between ages of 16-20.

- 21% of respondents reported binge drinking over the past 30 days.

- Alcohol related behaviors and symptoms occurring at least once over the last 30 days included:

  - Hangover (16.1%)
  - Performed poorly on test/ project (15.7%)
  - Nauseated/ Vomited (14.8%)
  - Missed class (13.6%)
  - Thought about suicide (9.4%)
  - Memory loss (8.72%)
  - Injured/ Hurt (6.7%)

- 1.54% of respondents thought about suicide 10 or more times over the past 30 days.

Table 1. Age of First Alcohol Use

Substance	Do not use/ Never	Under 10	11-15	16-20	21-25	26+	Total
More than a sip or two of Alcohol (e.g., beer, wine, liquor)	29.98%	4.37%	14.91%	39.93%	10.32%	0.49%	3246

Table 2. Age of First Alcohol Use by Current Age (%)

Age of First Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Age*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Alcohol	*Never*	45.6	16.7	36.7	16.5
	Under 10	3.3	5.4	3.4	6.2
	11-15	12.2	17.8	12.4	20.2
	16-20	38.8	41.9	40.1	39.4
	21-25	N/A	17.3	7.4	16.2
	26+	N/A	1.0	N/A	1.5

Table 3. Age of First Alcohol Use by Gender (%)

Age of First Use		Gender		
Drug	*Age*	*Male*	*Female*	*Transgender/Non-Binary*
Alcohol	*Never*	35.4	28.3	21.9
	Under 10	4.7	4.2	7.8
	11-15	14.7	14.9	14.1
	16-20	36.7	40.8	50.0
	21-25	8.3	11.2	6.3
	26+	0.1	0.6	0.0

Table 4. Lifetime Occasions of Alcohol Use

Substance	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
More than a sip or two of Alcohol (e.g., beer, wine, liquor)	25.01%	8.64%	8.73%	5.71%	51.92%	3207

Table 5. Lifetime Occasions of Alcohol Use by Age (%)

Lifetime: Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	**Times Used**	**18-20**	**21 and Older**	**18-25**	**26 and Older**
Alcohol	*Never*	39.7	11.3	32.3	10.1
	1-2	11.2	6.1	9.8	6.0
	3-5	12.4	5.3	10.8	4.5
	6-9	6.7	4.8	6.6	4.0
	10+	29.9	72.4	40.5	75.4

Table 6. Lifetime Occasions of Alcohol Use by Gender (%)

Lifetime: Occasions of Use		Gender		
Drug	**Times Used**	**Male**	**Female**	**Transgender/Non-Binary**
Alcohol	*Never*	30.8	23.2	17.2
	1-2	9.2	8.5	9.4
	3-5	7.7	8.9	14.1
	6-9	4.9	6.1	0.0
	10+	47.3	53.3	59.4

Table 7. Alcohol Use in the Last 30 Days

Substance	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
Drunk one or more Alcoholic beverages (e.g., beer, wine, liquor)	55.48%	22.42%	11.21%	4.47%	6.42%	3176
Been drunk or very high from drinking alcoholic beverages	79.72%	12.74%	4.16%	1.14%	2.24%	3171

Table 8. Occasions of Alcohol Use in the Last 30 Days by Age (%)

Last 30 Days: Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	Times Used	18-20	21 and Older	18-25	26 and Older
Alcohol – 1 or More	Never	67.6	44.3	59.6	47.5
	1-2	17.6	26.8	20.7	25.7
	3-5	7.4	14.6	10.3	12.8
	6-9	3.0	5.8	4.0	5.4
	10+	4.2	8.5	5.3	8.6
Alcohol – Very Drunk	Never	81.9	77.9	78.9	81.7
	1-2	10.4	14.9	13.0	12.2
	3-5	4.1	4.1	4.4	3.5
	6-9	1.0	1.2	1.2	0.8
	10+	2.5	1.9	2.4	1.8

Table 9. Occasions of Alcohol Use in the Last 30 Days by Gender (%)

Last 30 Days: Occasions of Use		Gender		
Drug	Times Used	Male	Female	Transgender/Non-Binary
Alcohol – 1 or More	Never	57.8	54.6	56.3
	1-2	17.2	24.2	18.8
	3-5	10.9	11.5	9.4
	6-9	5.1	4.2	4.7
	10+	9.1	5.5	10.9
Alcohol – Very Drunk	Never	78.0	80.2	78.1
	1-2	11.7	13.3	7.8
	3-5	5.2	3.8	6.3
	6-9	1.5	1.0	1.6
	10+	3.6	1.7	6.3

Figure 1: Over the past 2 weeks, number of times having had 5+ drinks in a sitting?
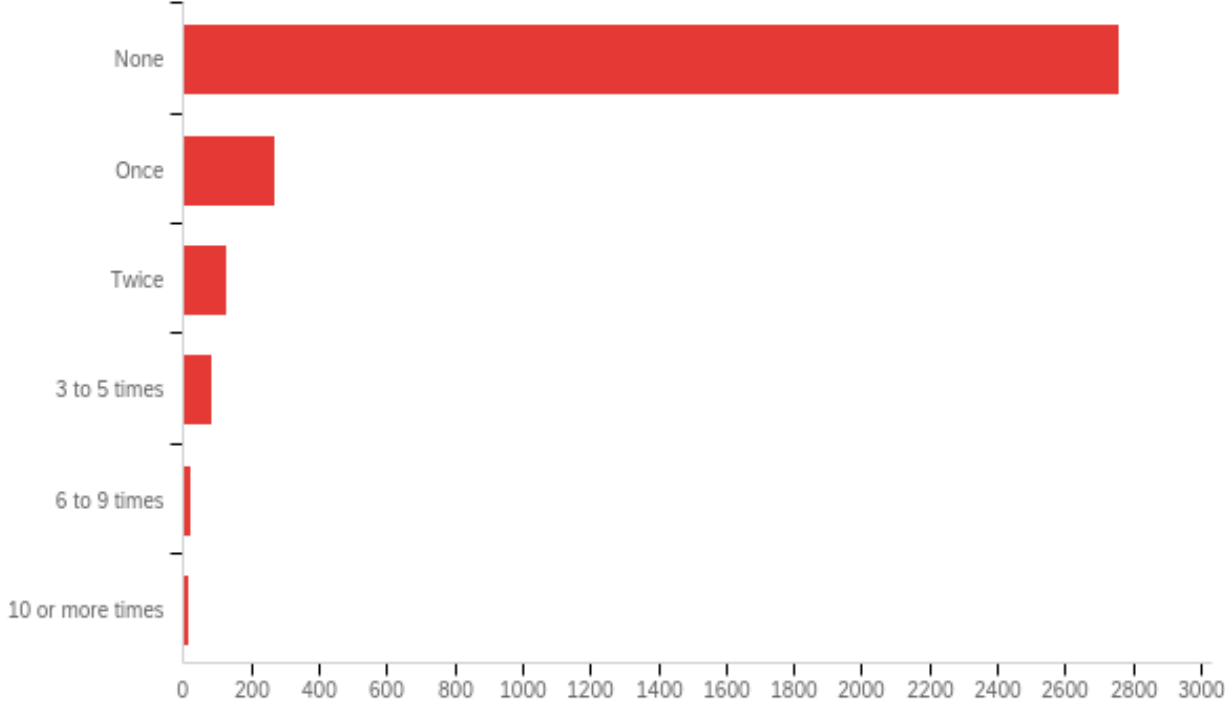
Answer	%	Count
None	84.32%	2759
Once	8.19%	268
Twice	3.79%	124
3 to 5 times	2.60%	85
6 to 9 times	0.64%	21
10 or more times	0.46%	15
Total	100%	3272

Table 10. Occasions of Behavioral Issues as a Result of Alcohol Use, last 30 Days

Question	Never	Once	Twice	3-5 times	6-9 times	10+ times
Had a hangover	83.89%	9.89%	3.00%	2.26%	0.45%	0.51%
Performed poorly on a test or important project	84.33%	8.47%	4.33%	2.20%	0.25%	0.41%
Been in trouble with police or campus authorities	98.72%	1.12%	0.06%	0.03%	0.00%	0.06%
Damage property	99.27%	0.54%	0.10%	0.00%	0.00%	0.10%
Got into a fight or argument	93.58%	3.35%	1.69%	0.99%	0.16%	0.22%
Got nauseated or vomited	85.23%	7.54%	3.84%	2.27%	0.32%	0.80%
Driven a car while under the influence	96.04%	2.05%	0.64%	0.74%	0.13%	0.42%
Missed a class	86.39%	6.68%	3.23%	2.94%	0.35%	0.42%
Criticized for alcohol and drug use	96.22%	1.60%	1.18%	0.54%	0.10%	0.35%
Thought I might have a drinking or drug problem	95.65%	1.76%	1.02%	0.67%	0.13%	0.77%
Experienced memory loss	91.28%	3.45%	1.88%	1.76%	0.48%	1.15%
Have been taken advantage of sexually	96.71%	2.01%	0.67%	0.51%	0.00%	0.10%
Have taken advantage of another sexually	99.58%	0.22%	0.06%	0.03%	0.00%	0.10%
Tried to stop using alcohol/ tobacco/ other drugs	94.28%	2.65%	1.31%	0.86%	0.35%	0.54%
Thought about suicide	90.57%	3.36%	2.01%	1.85%	0.67%	1.54%
Tried to commit suicide	98.18%	1.18%	0.32%	0.10%	0.06%	0.16%
Been hurt or injured	93.31%	3.58%	1.76%	0.70%	0.19%	0.45%

Tobacco usage

Cigarette smoking and tobacco usage reached the lowest levels in four decades in 2020 with 4% of college students reporting smoking in the past 30 days (Schulenberg, et al., 2020). The 4% nationally is lower than Arkansas' reported percentages; however, ACSUA includes all tobacco use into one category and is not broken down into cigarettes, smokeless tobacco, etc. Similarly, for this study, tobacco usage was found to be the fourth most used substance (behind alcohol, vaping, and marijuana). For the Arkansas Collegiate Substance Use Assessment, major takeaways were:

o   41.34% of respondents have used Tobacco at least once.

o   Usage, at least once, over the past 30 days:

- Total respondents (11.74%)
- 18-20-year-olds (7.5%)
- 21+ years old (15.6%)

o   Most frequent tobacco users (10+ instances over past 30 days) were the 26 and years old age category.

Table 11. Age of First Tobacco Use

Substance	Do not use/ Never	Under 10	11-15	16-20	21-25	26+	Total
Tobacco (e.g., smoke, chew, snuff)	66.15%	1.69%	11.64%	17.37%	2.51%	0.64%	3264

Table 12. Age of First Tobacco Use by Current Age (%):

Age of First Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Age*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Tobacco	*Never*	79.4	54.0	75.7	46.9
	Under 10	1.1	2.2	1.2	2.7
	11-15	7.2	15.8	7.3	20.5
	16-20	12.3	22.2	14.5	23.4
	21-25	N/A	4.6	1.4	4.5
	26+	N/A	1.3	N/A	2.0

Table 13. Age of First Tobacco Use by Gender

Age of First Use		Gender		
Drug	*Age*	*Male*	*Female*	*Transgender/Non-Binary*
Tobacco	*Never*	61.6	67.7	59.4
	Under 10	2.5	1.4	4.7
	11-15	12.0	11.3	15.6
	16-20	19.9	16.7	15.6
	21-25	3.3	2.2	4.7
	26+	0.5	0.7	0.0

Table 14. Lifetime Occasions of Tobacco Use

Substance	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
Tobacco (e.g., smoke, chew, snuff)	62.87%	8.57%	4.27%	1.90%	22.38%	3208

Table 15. Lifetime Occasions of Tobacco Use by Age (%)

Lifetime: Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Times Used*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Tobacco	*Never*	78.6	48.1	73.9	40.1
	1-2	7.3	9.8	8.0	9.6
	3-5	2.9	5.5	3.5	5.9
	6-9	1.0	2.6	1.7	2.1
	10+	10.2	34.0	12.8	42.3

Table 16. Lifetime Occasions of Tobacco Use by Gender (%)

Occasions of Use		Gender		
Drug	*Times Used*	*Male*	*Female*	*Transgender/Non-Binary*
Tobacco	*Never*	57.7	64.6	56.3
	1-2	8.3	8.5	14.1
	3-5	4.5	4.2	3.1
	6-9	3.0	1.6	0.0
	10+	26.6	21.0	26.6

Table 17. Occasions of Tobacco Use in the Past 30 Days

Substance	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
Used tobacco (e.g., smoke, chew, snuff)	88.26%	2.42%	0.98%	0.44%	7.90%	3176

Table 18. Occasions of Tobacco Use in the Past 30 Days by Current Age (%)

Last 30 Days: Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Times Used*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Tobacco	*Never*	92.5	84.4	91.7	81.3
	1-2	2.7	2.1	2.7	1.7
	3-5	0.8	1.1	0.8	1.3
	6-9	0.3	0.6	0.3	0.7
	10+	3.7	11.8	4.4	15.0

Table 19. Occasions of Tobacco Use in the Past 30 Days by Gender (%)

Last 30 Days: Occasions of Use		Gender		
Drug	*Times Used*	*Male*	*Female*	*Transgender/Non-Binary*
Tobacco	*Never*	85.3	89.4	79.7
	1-2	3.0	2.2	6.3
	3-5	1.7	0.8	1.6
	6-9	1.2	0.2	0.0
	10+	8.8	7.5	12.5

Vaping

While tobacco usage has been in continual decline and hit all-time low level recently, vaping with electronic cigarettes and vaporizer devices has proliferated in its place and has generally increased across the United States (Cullen et al., 2019; Miech, Miech, Johnston, O'Malley, Bachman, & Patrick, 2019; Patrick, O'Malley, & Johnston, 2017). These electronic cigarettes and vaporizers offer an ability to use more concentrated amounts of nicotine (Loukas, Batanova, Fernandez, & Agarwal, 2015) and cannabis oil. The emergence and increasing presence have been ascribed to quitting tobacco cigarettes and smoking, alternative to tobacco cigarettes, harm reduction, lack of regulation, sensation-seeking behaviors, and acceptability of public consumption (Trumbo, 2017; Tavollaci, et al., 2016; Franks, Hawes, McCain, & Payakachat, 2017). Vaping and electronic cigarettes have been linked to other factors, including regular tobacco usage (Auf, et al., 2019); concurrent usage for vaping tobacco and/or cannabis (Jones, Hill, Pardini, & Meier, 2016); drinking alcohol (Oh, et al., 2019); and associations with suicidal ideations (Lee & Lee, 2019). Within the academic literature there are other studies that shows linkages from vaping to other beliefs, social cues, and cognitive-risk perceptions (Trumbo, 2017); in addition to, residing in urban versus rural areas (Dai & Hao, 2017). Increases have been noted across middle school, high school [3], and college students (Trumbo, 2017). Trumbo estimates a rate of vaping usage as high as 25% of college students over the past 30 days. While there has been a leveling off in vaping marijuana and tobacco usage for 2020 (Schulenberg et al., 2020), vaping marijuana annual prevalence for college students in 2020 was 25%, and daily usage rose from 5% in 2017 to 12% in 2020. These trends are similar for vaping nicotine where 19% of college students reported

usage over the past 30 days (U.S. Department of Health & Human Services, National Institutes of Health, 2021). Similarly, vaping for the assessment represents the second 'most used' substance on Arkansas college campuses behind alcohol. Other notable findings included:

- o 31.75% of respondents reported Vaping within their lifetime.
- o Most users vape substances more than 10 times over the past 30 days.
- o Vaping at least once over past 30 days:
  - Vaped nicotine (15.65%)
  - Vaped marijuana (7.65%)
  - Vaped flavoring (3.99%)

Table 20: Age of First Vaping Use

Substance	Do not use/ Never	Under 10	11-15	16-20	21-25	26+	Total (N)
Vaping	70.78%	0.43%	4.50%	15.57%	4.50%	4.22%	3244

Table 21. Age of First Vaping Use by Current Age (%):

Age of First Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Age*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Vaping	*Never*	68.7	73.3	67.9	76.5
	Under 10	0.7	0.2	0.6	0.1
	11-15	8.3	1.0	6.5	0.3
	16-20	22.3	9.8	21.9	3.0
	21-25	N/A	7.7	3.1	7.5
	26+	N/A	8.0	N/A	12.6

Table 22. Age of First Vaping Use by Gender (%)

Age of First Use		Gender		
Drug	*Age*	*Male*	*Female*	*Transgender/Non-Binary*
Vaping	*Never*	66.0	72.5	56.3
	Under 10	0.5	0.4	1.6
	11-15	7.2	3.5	7.8
	16-20	18.9	14.6	15.6
	21-25	3.9	4.5	12.5
	26+	3.4	4.5	6.3

Table 23. Lifetime Occasions of Vaping Use

Substance	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total (N)
Vaping	68.25%	5.70%	3.85%	1.75%	20.43%	3191

Table 24. Lifetime Occasions of Vaping Use by Current Age (%)

Lifetime: Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Times Used*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Vaping	*Never*	65.3	71.1	65.4	74.1
	1-2	7.5	3.9	6.7	3.4
	3-5	4.6	3.1	4.5	2.3
	6-9	1.6	1.8	1.9	1.5
	10+	21.0	20.1	21.5	18.6

Table 25. Lifetime Occasions of Vaping Use by Gender (%)

Lifetime: Occasions of Use		Gender		
Drug	*Times Used*	*Male*	*Female*	*Transgender/Non-Binary*
Vaping	*Never*	64.7	69.7	51.6
	1-2	5.7	5.7	7.8
	3-5	2.6	4.2	4.7
	6-9	2.0	1.6	4.7
	10+	24.9	18.8	31.3

Table 26. Occasions of Vaping Use in the Last 30 Days

Substance	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total (N)
Vaped nicotine	84.35%	2.87%	1.23%	0.60%	10.95%	3170
Vaped marijuana	92.35%	2.18%	1.36%	0.51%	3.61%	3162
Vaped just flavoring	96.01%	1.61%	0.57%	0.32%	1.49%	3159

Tables 27: Occasions of Vaping Use in the Last 30 Days by Current Age (%)

Last 30 Days: Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	**Times Used**	**18-20**	**21 and Older**	**18-25**	**26 and Older**
Vaped Nicotine	Never	82.0	86.5	82.4	88.2
	1-2	3.4	2.3	3.1	2.3
	3-5	1.7	0.7	1.4	0.7
	6-9	0.5	0.7	0.8	0.2
	10+	12.4	9.8	12.2	8.6
Vaped Marijuana	Never	91.2	93.5	91.9	93.4
	1-2	2.5	2.0	2.3	2.0
	3-5	1.9	0.9	1.6	1.0
	6-9	0.5	0.4	0.5	0.4
	10+	4.0	3.1	3.7	3.2
Vaped Flavoring	Never	94.8	97.0	95.0	98.0
	1-2	2.5	0.8	2.3	0.3
	3-5	0.7	0.5	0.7	0.4
	6-9	0.1	0.5	0.3	0.3
	10+	1.9	1.2	1.7	1.1

Table 28. Occasions of Vaping Use in the Last 30 Days by Gender (%)

Last 30 Days: Occasions of Use		Gender		
Drug	**Times Used**	**Male**	**Female**	**Transgender/Non-Binary**
Vaped Nicotine	Never	81.2	85.3	81.3
	1-2	2.5	3.1	1.6
	3-5	1.7	1.1	1.6
	6-9	0.8	0.6	0.0
	10+	13.9	10.0	15.6
Vaped Marijuana	Never	89.3	93.6	78.1
	1-2	3.3	1.7	4.7
	3-5	1.2	1.4	1.6
	6-9	0.6	0.4	3.1
	10+	5.5	2.8	12.5
Vaped Flavoring	Never	96.3	95.9	95.3
	1-2	1.1	1.8	1.6
	3-5	0.6	0.6	1.6
	6-9	0.6	0.3	0.0
	10+	1.5	1.5	1.6

Marijuana

Marijuana Usage

The usage of Marijuana has been steadily increasing nationwide and is the third 'most used' substance among Arkansas college students. Schulenberg et al (2017) noted that daily cannabis usage among college students doubled between 2007 and 2014. Similarly, the most recent Monitoring the Future report (Schulenberg, et al., 2020), cited that this trend has continued into 2020 where 44% of college students reported using marijuana, 8% used marijuana on a daily/ near-daily basis, and the number of college students vaping marijuana over the past 30 days rose from 5% to 14%. For this assessment, over 12% of respondents aged 18-25 reported using marijuana within the last 30 days. Studies have noted that increased marijuana/cannabis usage is important for the college population since the likelihood of usage increases in prevalence with successive years in school (Arria, O'Grady, Caldeira, Vincent, & Wish, 2008) and that heavy marijuana usage has a short-term impact on learning and memory which can then impair collegiate academic and health outcomes (Arria, Caldeira, Bugbee, Vincent, & O'Grady, 2015; Arria, Caldeira, Bugbee, Vincent, & O'Grady, 2016).

Major findings for the Arkansas Collegiate Substance Use Assment included:

o 41.34% used at least once in their lifetime

o Respondent's age of first use highest categories:

- 16-20 (23.77%)
- 11-15 (8.23%)
- 21-25 (4.55%)

- Last 30 days usage:

    - Vaped marijuana (7.65%)
    - Used Marijuana (12.48%)

- Half of the respondents that reported using marijuana over the past month (12.48%) indicated using it 10+ times (6.22%)

Table 29: Age of First Marijuana Use

Substance	Do not use/ Never	Under 10	11-15	16-20	21-25	26+	Total
Marijuana (e.g., weed, pot, hash)	61.39%	0.64%	8.23%	23.77%	4.55%	1.41%	3256

Table 30: Age of First Marijuana Use by Current Age (%)

Age of First Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	Age	18-20	21 and Older	18-25	26 and Older
Marijuana	Never	71.6	52.5	67.6	48.9
	Under 10	0.6	0.7	0.5	0.9
	11-15	6.1	10.4	6.4	12.2
	16-20	21.8	25.7	22.8	25.6
	21-25	N/A	8.1	2.7	8.2
	26+	N/A	2.6	N/A	4.1

Table 31. Age of First Marijuana Use by Gender (%)

Age of First Use		Gender		
Drug	Age	Male	Female	Transgender/Non-Binary
Marijuana	Never	60.1	62.4	35.9
	Under 10	0.8	0.6	1.6
	11-15	8.4	8.1	10.9
	16-20	24.8	23.2	31.3
	21-25	4.8	4.1	18.8
	26+	1.1	1.5	1.6

Table 32. Lifetime Occasions of Marijuana Use

Question	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
Marijuana (e.g., weed, pot, hash)	58.66%	9.21%	5.84%	3.81%	22.48%	3203

Table 33. Lifetime Occasions of Marijuana Use by Current Age (%)

Lifetime: Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	**Times Used**	**18-20**	**21 and Older**	**18-25**	**26 and Older**
Marijuana	*Never*	69.2	48.8	65.5	44.7
	1-2	7.9	10.6	8.4	11.0
	3-5	4.3	7.0	5.1	6.9
	6-9	2.9	4.8	3.3	5.0
	10+	15.7	28.8	17.6	32.3

Table 34. Lifetime Occasions of Marijuana Use by Gender (%)

Lifetime: Occasions of Use		Gender		
Drug	**Times Used**	**Male**	**Female**	**Transgender/Non-Binary**
Marijuana	*Never*	57.7	59.6	34.4
	1-2	7.2	9.9	6.3
	3-5	6.7	5.6	7.8
	6-9	3.3	3.9	6.3
	10+	25.2	21.0	45.3

Table 35: Marijuana Use in Last 30 Days

Substance	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
Vaped marijuana	92.35%	2.18%	1.36%	0.51%	3.61%	3162
Used marijuana (e.g., weed, pot, hash)	87.52%	3.63%	1.83%	0.79%	6.22%	3165

Table 36. Marijuana Use in the Last 30 Days by Current Age (%):

Last 30 Days: Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Times Used*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Vaped Marijuana	*Never*	91.2	93.5	91.9	93.4
	1-2	2.5	2.0	2.3	2.0
	3-5	1.9	0.9	1.6	1.0
	6-9	0.5	0.4	0.5	0.4
	10+	4.0	3.1	3.7	3.2
Marijuana	*Never*	86.9	88.2	87.5	87.9
	1-2	4.1	3.1	4.0	2.8
	3-5	1.9	1.8	1.8	1.9
	6-9	1.1	0.6	0.9	0.6
	10+	6.0	6.3	5.8	6.8

Table 37. Marijuana Use in Last 30 Days by Gender (%):

Last 30 Days: Occasions of Use		Gender		
Drug	*Times Used*	*Male*	*Female*	*Transgender/Non-Binary*
Vaped Marijuana	*Never*	89.3	93.6	78.1
	1-2	3.3	1.7	4.7
	3-5	1.2	1.4	1.6
	6-9	0.6	0.4	3.1
	10+	5.5	2.8	12.5
Marijuana	*Never*	83.5	89.5	62.5
	1-2	5.0	3.0	9.4
	3-5	2.1	1.6	7.8
	6-9	1.0	0.7	1.6
	10+	8.5	5.2	18.8

Misuse of stimulant medicant among the college population is growing in prevalence (Benson, Flory, Humphreys, & Lee, 2015). Benson, Flory, Humphreys, & Lee (2015) meta-analysis and review of the literature noted the misuse of stimulants is primarily due to 'academic reasons' and is obtained through peers with prescriptions. For hallucinogens, there was a significant increase among college students – where 9% of college students reported using hallucinogens in 2020, nearly double the 2019 usage rate of 5% (Schulenberg, et al, 2020). For college students, prevalence of amphetamine usage without a prescription was 6.5%, annual usage of Adderall was 7.2%, and the nonmedical use of Ritalin was 1.4% (Schulenberg, et al, 2020). College respondents from the 2020 Monitoring the Future survey indicated annual sedative prevalence were 1.7%, tranquilizers were 2.6%, narcotics other than heroin (without medical supervision) were 1.3% (Vicodin was 1.2% and OxyContin were 1.5% in this category) and cocaine usage reached 3.8%. Cocaine usage is of note to clinicians, health care providers, and academic administrators since results from a longitudinal study at a large public-university (Kasperski, et al., 2011) found that by a student's fourth year of college 36% had been offered cocaine at least once in their lifetime; 13% had used cocaine; annual prevalence of cocaine usage increased over time from 4% in Year 1 of college to 10% in Year 4; and that females had more serious patterns of usage and a greater likelihood for cocaine dependence. Hallucinogens, MDMA, LSD, and other psychedelics have been increasing in usage and popularity primarily due to social pressures, curiosity, microdosing trends, and desires to escape/ achieve a novel experience (Levy,

O'Grady, Wish, & Arria, 2005; Hallock, Dean, Knecht, Spencer, & Taverna, 2013; Johnstad, 2018). Hallucinogens had a self-reported rise from 5% in 2019 to 9% in 2020 (Schulenberg et al., 2020).

For the 2021 Arkansas Collegiate Substance Use Assessment, the major findings included

- o Across nearly all substances the age of first use was between 16 and 20.

- o Lifetime Occasions of Use (at least once over lifetime):

  - Amphetamines (13.8%)
  - Hallucinogens/ Psychedelics (9.79%)
  - Cocaine (8.05%)
  - Sedatives (7.69%)
  - Designer Drugs (6.97%)
  - Methamphetamine (4.29%)
  - Inhalants (3.53%)
  - Steroids (3.32%)
  - Opiates (2.94%)

- o Past 30 days using substance at least once:

  - Amphetamines (3.39%)
  - Sedatives (1.33%)
  - Hallucinogens/ Psychedelics (1.04%)

- o When reviewing respondents' self-reported substance use over past 30 days, respondents, on average, were likely to report using 1-2 times or 10 or more times.

Table 38. Age of First Substance Use

Substance	Do not use/ Never	Under 10	11-15	16-20	21-25	26+	Total
Cocaine (e.g., crack, rock, freebase)	92.92%	0.12%	0.40%	4.03%	1.94%	0.59%	3247
Amphetamines (e.g., diet pills)	86.10%	0.62%	2.03%	6.29%	3.05%	1.91%	3244
Sedatives (e.g., ludes, downers)	92.30%	0.34%	1.33%	4.41%	1.11%	0.52%	3245
Hallucinogens/ psychedelics (e.g., PCP, LSD)	90.32%	0.40%	0.59%	5.77%	2.37%	0.56%	3243
Opiates (e.g., heroin, smack)	97.74%	0.25%	0.22%	1.08%	0.40%	0.31%	3236
Inhalants (e.g., solvents, glue, gas)	96.66%	0.49%	1.39%	1.11%	0.31%	0.03%	3236
Designer drugs (e.g., ecstasy, MDMA, molly)	92.94%	0.40%	0.18%	4.28%	1.91%	0.28%	3244
Steroids	97.13%	0.37%	0.83%	0.87%	0.46%	0.34%	3236
Methamphetamine (e.g., meth, ice, speed)	95.89%	0.15%	0.49%	2.04%	1.05%	0.37%	3235
Other illegal drugs	96.68%	0.06%	0.62%	1.77%	0.65%	0.22%	3221

Table 39. Age of First Substance Use by Current Age (%)

Drug	Age		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
			18-20	21 and Older	18-25	26 and Older
Cocaine		Never	97.8	88.5	96.3	86.1
		Under 10	0.2	0.1	0.2	0.0
		11-15	0.2	0.6	0.2	0.8
		16-20	1.8	6.1	2.4	7.3
		21-25	N/A	3.6	0.9	4.1
		26+	N/A	1.1	N/A	1.8
Amphetamines		Never	94.3	78.8	91.7	74.8
		Under 10	0.5	0.7	0.6	0.7
		11-15	1.9	2.2	2.0	2.3
		16-20	3.2	9.2	4.3	10.2
		21-25	N/A	5.6	1.4	6.4
		26+	N/A	3.6	N/A	5.7
Sedatives		Never	96.6	88.5	95.2	86.6
		Under 10	0.3	0.4	0.4	0.3
		11-15	0.9	1.6	0.9	2.0
		16-20	2.2	6.4	3.1	7.1
		21-25	N/A	2.1	0.5	2.5
		26+	N/A	1.0	N/A	1.5
Hallucinogens		Never	93.8	87.6	92.2	86.6
		Under 10	0.5	0.3	0.5	0.2
		11-15	0.6	0.6	0.5	0.8
		16-20	5.2	6.4	5.3	6.7
		21-25	N/A	4.1	1.5	4.2
		26+	N/A	1.0	N/A	1.6
Opiates		Never	99.2	96.6	98.8	95.5
		Under 10	0.5	0.1	0.3	0.1
		11-15	0.1	0.3	0.1	0.4
		16-20	0.3	1.8	0.6	2.1
		21-25	N/A	0.7	0.1	1.0
		26+	N/A	0.5	N/A	0.9
Inhalants		Never	98.2	95.3	97.7	94.6
		Under 10	0.5	0.4	0.5	0.5
		11-15	0.6	2.2	0.7	3.0
		16-20	0.7	1.5	0.9	1.5
		21-25	N/A	0.5	0.3	0.4
		26+	N/A	0.1	N/A	0.1
Designer Drugs		Never	96.5	89.8	95.5	87.8
		Under 10	0.3	0.5	0.4	0.4
		11-15	0.1	0.2	0.1	0.3
		16-20	3.0	5.5	3.1	6.6
		21-25	N/A	3.6	0.8	4.2
		26+	N/A	0.5	N/A	0.8
Steroids		Never	98.4	96.1	98.3	94.8
		Under 10	0.5	0.2	0.4	0.2
		11-15	0.5	1.1	0.5	1.6
		16-20	0.6	1.1	0.6	1.3
		21-25	N/A	0.7	0.2	1.0
		26+	N/A	0.7	N/A	1.1
Methamphetamine		Never	99.2	92.9	98.8	90.1
		Under 10	0.2	0.1	0.2	0.1
		11-15	0.1	0.8	0.1	1.2
		16-20	0.5	3.4	0.8	4.5
		21-25	N/A	2.0	0.1	3.0
		26+	N/A	0.7	N/A	1.1
Other Illegal Drugs		Never	97.9	95.6	97.5	94.9
		Under 10	0.1	0.0	0.1	0.0
		11-15	0.5	0.8	0.5	1.0
		16-20	1.4	2.1	1.6	2.1
		21-25	N/A	1.2	0.3	1.3
		26+	N/A	0.4	N/A	0.7

Table 40. Lifetime Occasions of Substance Use:

Question	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
Cocaine (e.g., crack, rock, freebase)	91.95%	2.50%	1.75%	1.06%	2.75%	3203
Amphetamines (e.g., diet pills)	86.20%	3.12%	2.09%	1.09%	7.50%	3202
Sedatives (e.g., ludes, downers)	92.31%	1.87%	1.28%	0.84%	3.69%	3201
Hallucinogens/ psychedelics (e.g., PCP, LSD)	90.21%	4.02%	2.71%	0.97%	2.09%	3206
Opiates (e.g., heroin, smack)	97.06%	0.75%	0.44%	0.28%	1.47%	3200
Inhalants (e.g., solvents, glue, gas)	96.47%	1.34%	1.03%	0.22%	0.94%	3198
Designer drugs (e.g., ecstasy, MDMA, molly)	93.03%	2.91%	1.78%	0.75%	1.53%	3198
Steroids	96.68%	1.41%	1.03%	0.16%	0.72%	3191
Methamphetamine (e.g., meth, ice, speed)	95.71%	1.00%	0.47%	0.34%	2.47%	3194
Other illegal drugs	96.83%	0.82%	0.57%	0.25%	1.54%	3183

Table 41. Lifetime Occasions of Substance Use by Current Age (%)

Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Times Used*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Cocaine	*Never*	97.4	86.9	95.9	83.8
	1-2	1.2	3.7	1.6	4.3
	3-5	0.6	2.8	1.0	3.2
	6-9	0.3	1.8	0.4	2.3
	10+	0.5	4.9	1.0	6.4
Amphetamines	*Never*	94.2	78.9	92.0	74.5
	1-2	1.8	4.2	2.1	5.0
	3-5	1.3	2.8	1.4	3.5
	6-9	0.2	2.0	0.5	2.3
	10+	2.4	12.2	4.0	14.7
Sedatives	*Never*	96.8	88.2	95.7	85.7
	1-2	0.9	2.8	1.1	3.4
	3-5	0.1	2.3	0.8	2.1
	6-9	0.7	1.0	0.7	1.2
	10+	1.4	5.7	1.7	7.6
Hallucinogens	*Never*	93.6	87.1	92.5	85.5
	1-2	3.0	4.9	3.4	5.2
	3-5	1.7	3.6	2.0	4.1
	6-9	0.7	1.3	0.8	1.4
	10+	1.1	3.1	1.3	3.8
Opiates	*Never*	98.9	95.3	98.5	94.0
	1-2	0.3	1.2	0.6	1.2
	3-5	0.3	0.5	0.3	0.7
	6-9	0.1	0.4	0.2	0.5
	10+	0.3	2.6	0.4	3.7
Inhalants	*Never*	98.2	94.8	97.8	93.8
	1-2	0.9	1.7	1.0	1.9
	3-5	0.5	1.5	0.6	1.9
	6-9	0.1	0.4	0.1	0.5
	10+	0.3	1.5	0.5	1.8
Designer Drugs	*Never*	96.6	89.8	95.8	87.6
	1-2	1.4	4.2	1.8	5.1
	3-5	1.2	2.3	1.3	2.9
	6-9	0.1	1.3	0.4	1.5
	10+	0.6	2.3	0.8	2.9
Steroids	*Never*	98.0	95.5	98.0	94.0
	1-2	1.2	1.7	1.2	1.8
	3-5	0.5	1.5	0.5	2.0
	6-9	0.1	0.2	0.1	0.3
	10+	0.1	1.2	0.1	1.8
Methamphetamine	*Never*	99.1	92.7	98.7	89.7
	1-2	0.3	1.5	0.3	2.2
	3-5	0.1	0.8	0.2	1.0
	6-9	0.0	0.7	0.1	0.8
	10+	0.5	4.3	0.6	6.3
Other Illegal Drugs	*Never*	98.2	95.5	97.8	94.7
	1-2	0.5	1.1	0.7	1.2
	3-5	0.4	0.7	0.4	0.9
	6-9	0.1	0.4	0.2	0.4
	10+	0.7	2.3	0.9	2.8

Table 42. Occasions of Substance Use in the Last 30 Days (%)

Substance	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
Used cocaine (e.g., crack, rock, freebase)	99.37%	0.28%	0.16%	0.00%	0.19%	3159
Used amphetamines (e.g., diet pills)	96.61%	0.70%	0.25%	0.51%	1.93%	3158
Sedatives (e.g., ludes, downers)	98.67%	0.60%	0.22%	0.10%	0.41%	3156
Used hallucinogens/ psychedelics (e.g., PCP, LSD)	98.96%	0.82%	0.09%	0.00%	0.13%	3160
Used opiates (e.g., heroin, smack)	99.52%	0.19%	0.06%	0.03%	0.19%	3155
Sniffed glue, breathed the contents of aerosol spray cans, or inhaled other gases or sprays to get high	99.49%	0.35%	0.00%	0.03%	0.13%	3158
Used designer drugs (e.g., ecstasy, MDMA, molly)	99.18%	0.66%	0.09%	0.00%	0.06%	3159
Used steroids (e.g., testosterone)	99.34%	0.38%	0.09%	0.03%	0.16%	3158
Used Meth (e.g., Ice, speed)	99.75%	0.16%	0.03%	0.00%	0.06%	3153
Other illegal drugs	99.74%	0.06%	0.03%	0.06%	0.10%	3137

Table 43. Occasions of Substance Use in Last 30 Days by Current Age (%)

Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Times Used*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Cocaine	*Never*	99.5	99.3	99.4	99.2
	1-2	0.3	0.2	0.3	0.2
	3-5	0.1	0.2	0.1	0.2
	6-9	0.0	0.0	0.0	0.0
	10+	0.1	0.3	0.1	0.4
Amphetamines	*Never*	98.7	94.7	97.5	94.8
	1-2	0.3	1.1	0.5	1.2
	3-5	0.1	0.4	0.1	0.5
	6-9	0.2	0.7	0.4	0.6
	10+	0.7	3.1	1.4	2.9
Sedatives	*Never*	98.9	98.5	99.0	98.1
	1-2	0.7	0.4	0.6	0.6
	3-5	0.1	0.2	0.1	0.4
	6-9	0.1	0.1	0.0	0.2
	10+	0.1	0.7	0.3	0.7
Hallucinogens	*Never*	98.7	99.2	98.8	99.2
	1-2	1.1	0.6	1.0	0.5
	3-5	0.1	0.1	0.1	0.1
	6-9	0.0	0.0	0.0	0.0
	10+	0.1	0.1	0.1	0.2
Opiates	*Never*	99.5	99.5	99.6	99.3
	1-2	0.1	0.2	0.1	0.3
	3-5	0.1	0.0	0.1	0.0
	6-9	0.1	0.0	0.0	0.0
	10+	0.1	0.2	0.1	0.4
Inhalants	*Never*	99.3	99.6	99.4	99.6
	1-2	0.4	0.3	0.3	0.4
	3-5	0.0	0.0	0.0	0.0
	6-9	0.1	0.0	0.1	0.0
	10+	0.2	0.1	0.2	0.0
Designer Drugs	*Never*	99.0	99.4	99.2	99.2
	1-2	0.8	0.5	0.7	0.6
	3-5	0.1	0.1	0.1	0.1
	6-9	0.0	0.0	0.0	0.0
	10+	0.1	0.1	0.0	0.1
Steroids	*Never*	99.4	99.3	99.4	99.2
	1-2	0.3	0.5	0.4	0.4
	3-5	0.2	0.0	0.1	0.0
	6-9	0.1	0.0	0.1	0.0
	10+	0.1	0.2	0.0	0.4
Methamphetamine	*Never*	99.7	99.8	99.2	99.6
	1-2	0.1	0.2	0.1	0.3
	3-5	0.0	0.1	0.0	0.1
	6-9	0.0	0.0	0.0	0.0
	10+	0.1	0.0	0.1	0.0
Other Illegal Drugs	*Never*	99.8	99.8	99.6	99.7
	1-2	0.1	0.1	0.1	0.1
	3-5	0.1	0.0	0.1	0.0
	6-9	0.0	0.1	0.1	0.0
	10+	0.1	0.1	0.1	0.2

Prescription Drugs

Even though college students were particularly vulnerable to opioid misuses during the opioid crisis - young adults reported the highest past-year opioid prevalence usage for all age groups (U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2017) - there has been a continual 5-year decline for prescription opioid misuses for college students. In 2020, 1% of college students reported non-medical usage of opioids within the past year (Schulenberg, et al, 2020). While declining, it is worth noting that opioid use disorders commonly begin during young adulthood and coincide with typical college years/ages (Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2016; Hadland, et al., 2017). Research has noted the opioid misuse in college students is associated with several demographic factors and concurring behaviors - such as off-campus living and low cumulative grade point averages (Harries, Lust, Christenson, Redden, & Grant, 2018).

For prescription drugs the major findings of this assessment were:

- Most common age of first use for prescription opioids is 16-20 (8.41% of respondents)

- Over last 30 days 1.65% of respondents used prescription opioids and 1.84% of respondents used another person's prescription drugs at least once.

Table 44. Age of First Prescription Drug Use

Substance	Do not use/ Never	Under 10	11-15	16-20	21-25	26+	Total
Prescription Opioids	83.57%	0.46%	2.96%	8.41%	2.90%	1.69%	3245
Another person's prescription drugs	89.53%	0.49%	2.28%	5.56%	1.61%	0.52%	3239

Table 45. Age of First Prescription Drug Use by Current Age (%)

Age of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Age*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Prescription Opioids	*Never*	92.4	75.7	90.1	70.5
	Under 10	0.5	0.4	0.5	0.4
	11-15	1.9	3.7	2.2	4.3
	16-20	5.2	11.4	6.5	12.2
	21-25	N/A	5.5	0.7	7.5
	26+	N/A	3.3	N/A	5.1
Other Person's Prescriptions	*Never*	94.0	85.3	92.7	83.0
	Under 10	0.4	0.5	0.5	0.5
	11-15	2.0	2.4	1.7	3.2
	16-20	3.6	7.5	4.4	8.2
	21-25	N/A	3.1	0.7	3.5
	26+	N/A	1.0	N/A	1.6

Table 46. Lifetime Occasions of Prescription Drug Use

Question	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
Another person's prescription drugs	88.28%	3.76%	3.10%	1.03%	3.82%	3191

Table 47. Lifetime Occasions of Prescription Drug Use by Current Age (%)

Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Times Used*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Other Person's Prescriptions	*Never*	93.0	83.9	91.6	81.4
	1-2	2.8	4.6	3.1	5.0
	3-5	1.8	4.3	2.4	4.7
	6-9	0.3	1.7	0.7	1.7
	10+	2.0	5.5	2.2	7.2

Table 48. Occasions of Prescription Drug Use in the Last 30 Days

Substance	0 times	1-2 times	3-5 times	6-9 times	10+ times	Total
Used another person's prescription drugs	98.16%	1.11%	0.38%	0.10%	0.25%	3151
Used prescription opioids	98.35%	0.76%	0.35%	0.22%	0.32%	3142

Table 49. Occasions of Prescription Drug Use in the Last 30 Days by Current Age (%)

Occasions of Use		Age Group (18-20, 21+)		Age Group (18-25, 26+)	
Drug	*Times Used*	*18-20*	*21 and Older*	*18-25*	*26 and Older*
Other Person's Prescriptions	*Never*	98.2	98.3	98.2	98.2
	1-2	1.1	1.0	1.1	1.0
	3-5	0.5	0.3	0.4	0.3
	6-9	0.1	0.1	0.1	0.1
	10+	0.2	0.3	0.2	0.4
Prescription Opioids	*Never*	99.0	97.7	99.0	97.0
	1-2	0.6	0.9	0.6	1.1
	3-5	0.1	0.6	0.1	0.8
	6-9	0.2	0.2	0.1	0.4
	10+	0.1	0.5	0.1	0.8

Campus Perceptions

A common finding within the assessment of campus perceptions and peer usage on college campuses is that there is a profound overestimation, for nearly all categories, for substance use (Welsh, Shentu, & Sarvey, 2019). The campus perceptions and peer influences on college play a substantial role when deciding to participate in substance use on college campuses – more so within the first year of enrollment (Turrisi, Padilla, & Wiersma, 2000). When there is a perception that substance usage is normative among peers then there is an elevated risk of developing a substance use disorder (Borsari & Carey, 2001) which is then compounded by the overall perceptions and overestimation of peer substance use for the college population (Borsari & Carey, 2001; American College Health Association, 2018; Sanders, Stogner, & Miller, 2013).

Awareness of students on Campus 'policy and program on alcohol, tobacco and substance use':

- 97.6% of respondents have a knowledge of campus alcohol, tobacco and drug policy.

- 94.1% of respondents know about campus' policy enforcement.

- 88.3% of respondents have a knowledge of a campus' alcohol, tobacco, and drug prevention program.

- 90.8% of respondents think campus is concerned about alcohol, tobacco, and drug prevention.

- 88.1% of respondents **do not** feel that they are actively involved in prevention efforts on the campus.

On the question on how often respondents think the average student on the campus uses tobacco, alcohol, marijuana, and substances:

- One-fifth of respondents (21.42%) think the average student smokes tobacco every day.

- 26.5% of respondents consider that the average student consumes alcohol once a week.

- 24.7% of respondents think the average student never consumed marijuana. 16.98% think the average student uses it once a week.

- 34.34% think the average student uses vaping every day, and 27.07% think it has never happened.

*Table 50. Student Perceptions of Campus Substance Use*

Substance	Did not use	Once a year	Once/ month	Twice/ month	Once/ week	3 times/ week	5 times/ week	Every day	Total (N)
Tobacco	24.29%	5.47%	8.75%	6.39%	13.51%	13.95%	6.22%	21.42%	2960
Alcohol	13.41%	3.09%	6.28%	8.15%	26.51%	23.83%	9.30%	9.44%	2946
Marijuana	24.87%	5.59%	9.42%	8.23%	16.98%	15.45%	7.08%	12.37%	2951
Prescription Opioids	58.00%	9.84%	9.70%	7.42%	6.94%	4.42%	0.88%	2.79%	2938
Cocaine	70.06%	10.36%	8.19%	4.28%	3.19%	1.90%	0.37%	1.63%	2943
Amphetamines	68.61%	8.53%	7.30%	4.52%	3.77%	2.72%	1.80%	2.75%	2944
Sedatives	69.69%	9.27%	7.47%	5.13%	3.97%	2.07%	0.58%	1.83%	2946
Hallucinogens/ Psychedelics	65.19%	14.34%	9.04%	4.93%	3.13%	1.33%	0.54%	1.50%	2942
Opiates	71.01%	9.42%	7.44%	3.70%	3.33%	2.48%	0.75%	1.87%	2942
Inhalants	74.25%	9.04%	6.66%	3.13%	3.02%	1.49%	0.61%	1.80%	2944
Designer Drugs	69.92%	11.47%	7.21%	4.39%	3.33%	1.57%	0.37%	1.74%	2939
Steroids	69.36%	9.30%	7.32%	4.87%	4.29%	2.11%	0.61%	2.15%	2937
Methamphetamines	75.16%	8.64%	5.43%	3.66%	2.70%	1.81%	0.72%	1.88%	2927
Someone else's prescription drugs	58.42%	10.91%	10.40%	6.78%	5.45%	3.75%	1.84%	2.45%	2934
Vaping	27.07%	2.69%	4.01%	3.88%	7.62%	10.98%	9.42%	34.34%	2941
Other illegal drugs	69.25%	10.13%	6.11%	4.19%	3.88%	2.65%	0.55%	3.23%	2911

Alcohol Use

Participants in the survey were asked to describe the extent to which their alcohol use had changed within the last 12 months. Approximately 42% of the total participants indicated their alcohol use had remained the same during this time. Another 42% stated that their alcohol use decreased, while about 15% stated that their alcohol use increased. While most of the participants indicated that their alcohol consumption either decreased or remained the same, nearly 1 out of every 7 individuals stated that their alcohol consumption increased over the past 12 months.

Figure 2: Extent alcohol use changed within the last 12 months?
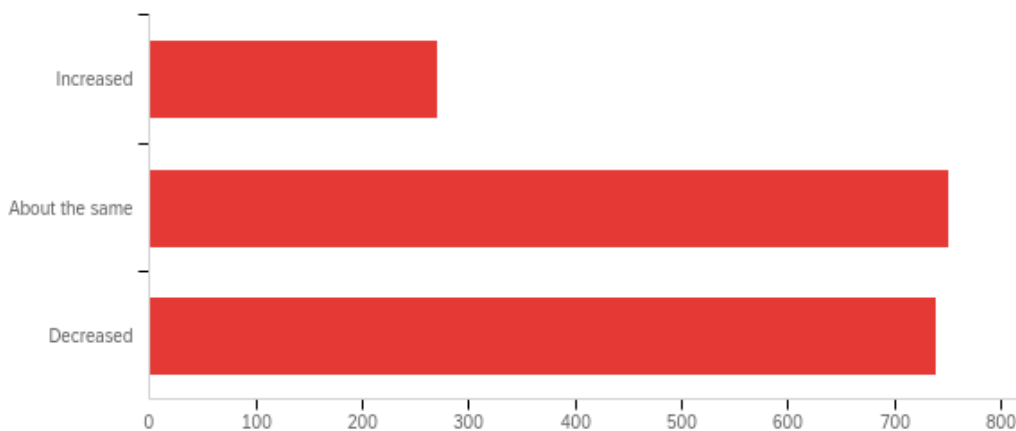
Answer	%	Count
Increased	15.38%	271
About the same	42.62%	751
Decreased	42.00%	740
Total	100%	1762

Illegal Drug Use

For illegal drug use, most of the participants (81.94%) indicated that they abstained from using illegal substances in the past 12 months. Close to seven percent (6.8 %) of participants noted that their use of illegal drugs remained the same while 8.01% indicated their illegal drug use decreased and 3.25% indicated their use increased. As noted, very few participants indicated that they had engaged in any illegal drug use, which may indicate that individuals are more comfortable with reporting their usage of legally permissible substances like alcohol and less comfortable with reporting their use of illegal substances, like illicit drugs. Of the remaining individuals that reported on their use of illegal drugs, the majority again indicated that their drug use either remained the same or decreased.

*Figure 3: Extent illegal drug use changed within the last 12 months?*
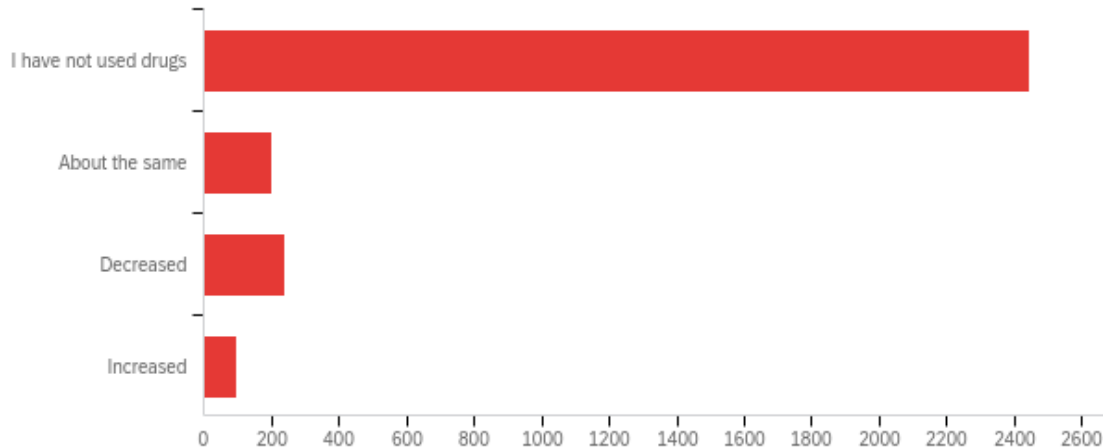
Answer	%	Count
I have not used drugs	81.94%	2445
About the same	6.80%	203
Decreased	8.01%	239
Increased	3.25%	97
Total	100%	2984

Covid-19 Impact on Alcohol, Tobacco, and Drug Use

The participants were also asked to describe how the Covid-19 pandemic affected their use of alcohol, tobacco, and drugs. Again, most participants (61.16%) indicated that they had not used these substances. Approximately, 14% of participants stated that their substance use increased. About 1 in 5 of the participants stated that their substance use remained about the same, while 6.63% stated that their substance use decreased during this time.

Figure 4: COVID-19 pandemic effect on alcohol, tobacco, and/or drug use?
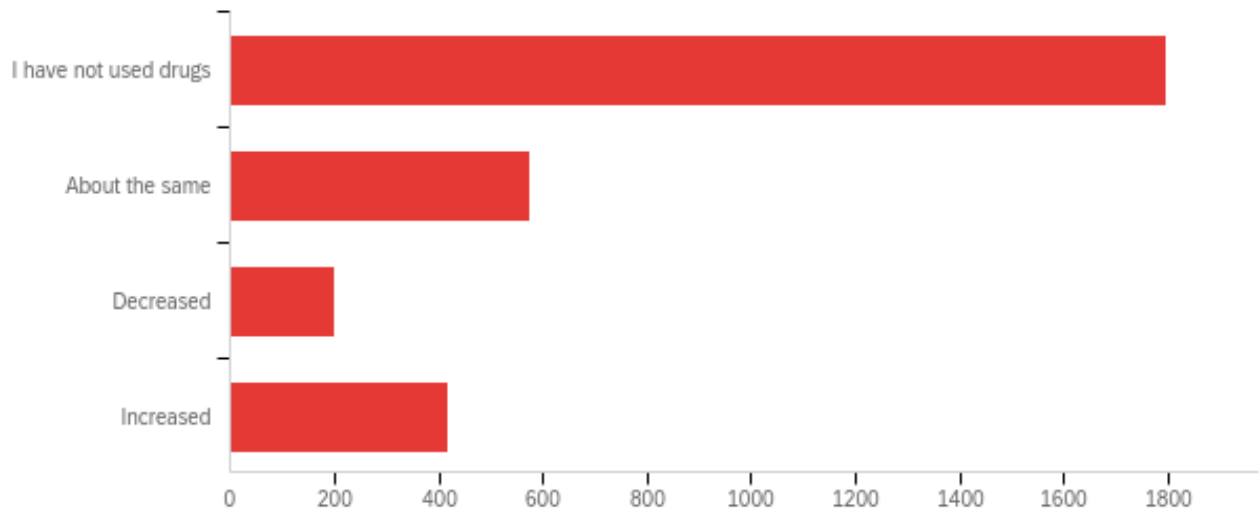
Answer	%	Count
I have not used drugs	60.16%	1797
About the same	19.25%	575
Decreased	6.63%	198
Increased	13.96%	417
Total	100%	2987

Participant Demographics

Historically, college students are defined in similar assessments as full-time students at two- or four-year institutions (Schulenberg et al., 2017). The participants for this assessment are largely two- and four-year students but we did not exclude part-time students which is common practice. Post-baccalaureate institutions for the state were also included in the assessment. Responses are presented in aggregate and with age and gender breakdowns for substance usage responses. Given the changing landscape of higher education, and the shifting context of whom constitutes as a college student, this assessment aimed at capturing perceptions and behaviors of as many types of college students as possible – even if they are nontraditional for similar collegiate level assessments. Subsequent reports and articles will be conducted highlighting the different demographic groups and substance usage. For this assessment the demographic variables included: (1) Gender; (2) Race; (3) Ethnicity; (4) Marital Status; (5) Work Status; (6) Permanent Residence; (7) Student Status; (8) Degree Type; (9) Undergraduate level; (10) Graduate level; (11) Current residence; (12) Class Modality; and (13) Cumulative Grade Point Average.

Table 51a: Participant demographics

Demographic Criteria	Demographic Category	Percentage	Count (N)
Gender	Male	23.02%	763
	Female	74.93%	2484
	Transgender/ Gender Non-conforming	2.05%	68
Race	Black or African American	13.84%	460
	Asian	2.95%	98
	Native American	1.44%	48
	Alaska Native	0.06%	2
	Native Hawaiian or Other Pacific Islander	0.15%	5
	White	77.16%	2564
	Other (Please explain)	4.39%	146
Ethnicity	Yes (Spanish/ Hispanic/ Latinx)	8.59%	286
	No (Spanish/ Hispanic/ Latinx)	91.41%	3042

Table 51b: Participant demographics

Demographic Criteria	Demographic Category	Percentage	Count (N)
Marital Status	Single, divorced	7.08%	236
	Living with domestic partner	3.66%	122
	Widowed	0.12%	4
	Single, never married	68.28%	2277
	Married, and living with spouse	19.37%	646
	Married, and living separately from spouse	1.50%	50
Work Status	Yes, part-time	37.27%	1244
	Yes, full-time	24.93%	832
	No	37.81%	1262
Permanent Residence	In-state (Arkansas)	84.40%	2819
	Out of State	14.22%	475
	Outside the United States	1.38%	46
Student Status	Full-time (e.g., 12+credits)	78.69%	2622
	Part-time (e.g., 1-11 credits)	21.31%	710
Degree	Non-degree seeking	2.55%	85
	Undergraduate	52.49%	1750
	Associate	23.67%	789
	Graduate	17.01%	567
	Other (please specify)	4.29%	143
Undergraduate	Freshman (undergraduate)	32.78%	572
	Sophomore (undergraduate)	22.35%	390
	Junior (undergraduate)	21.03%	367
	Senior (undergraduate)	23.84%	416

Table 51c: Participant demographics

Demographic Criteria	Demographic Category	Percentage	Count (N)
Graduate	*Masters*	55.16%	310
	Doctorate	29.54%	166
	Professional Degree	11.92%	67
	Other (please specify)	3.38%	19
Current Residence	*On-campus*	29.43%	982
	Off-campus	70.57%	2355
Class Modality	*Fully online courses*	20.59%	687
	Hybrid (both online and in-person courses)	38.10%	1271
	Fully in-person courses	41.31%	1378
Cumulative Grade Point Average	*A*	53.41%	1700
	B	36.00%	1146
	C	9.68%	308
	D	0.75%	24
	F	0.16%	5

Family Background

When examining risk factors associated with substance use on college campuses there are general risk factors related to specific psychiatric conditions which are relevant and risk factors that are associated with family history of substance use disorders (Blanco, Florez-Salamanca, Secades-Villa, Wang, & Hasin, 2018; Hawkins, Catalano, & Miller, 1992). For this assessment, respondents were asked to indicate all family members with alcohol and/or drug problems. While none was the highest frequency response, those indicating family members with alcohol and/or drug problems were Aunts/ Uncles, Fathers, and Siblings.

Table 52: *Family Members with Alcohol or other Drug Problems*

Family Member	Frequency (n)
Mother	443
Father	776
Stepmother	83
Stepfather	171
Siblings	537
Grandparents (Mother's Side)	466
Grandparents (Father's Side)	400
Aunts/Uncles	886
Spouse	94
Partner	89
Children	34
None	1269

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