

Introduction & Background

With the rise of cannabis use among young adults showing no sign of decreasing, concern of how it may be affecting mental health is growing as well. Rates of marijuana usage have increased within this population 6% from 2017 to 2020 (Miech, 2024). Cannabis use has been linked to worsening symptoms of self reported severity of anxiety, along with other substance abuse issues (Keith et. all, 2015). Social anxiety disorder (SAD) is defined by the American Psychiatric Association as the fear or anxiety of being judged or negatively evaluated across a variety of different situations (American Psychiatric Association, 2022). The percentage of young adults affected with SAD is estimated to be around 9-14 percent (Aderka et. al, 2022). One study conducted by Viviane Kovess-Masfety and her peers found rates of anxiety is higher among college students compared to their non-college-attending peers (Kovess-Masfety, 2016).

Since the legalization of cannabis in California in 2016 the number of young adults that use cannabis and the rate at which they use this substance may have increased (Paschall et. al, 2021). Compared to alcohol, there is much less research examining the daily effects of cannabis use in younger persons (Patrick et. al, 2015). In young adults especially, frequent cannabis use and abuse have been linked to a number of psychiatric and personality traits, however there has been limited research focused on the college environment in states where cannabis use has been legalized for recreational purposes (Phillips et. al, 2017). Future research can assist in creating public health policies and treatments targeted at reducing the detrimental effects of cannabis use on anxiety of young people by identifying possible risk factors and repercussions.

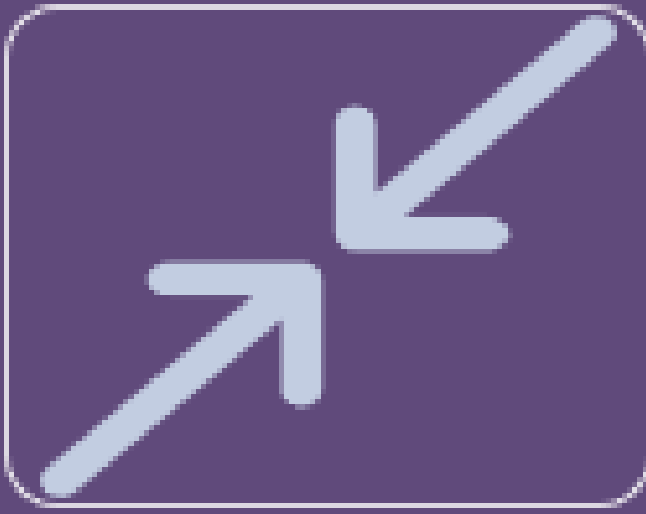
Table 1. Demographics (N = 227)

Characteristic	Category	Count	Percentage
Age	Mean	20.6	NA
	SD	2.2	NA
	Median	21.0	NA
	IQR	2.0	NA
Sex	Male	87	38.3%
	Female	140	61.7%
Grade Level	Freshman	47	20.7%
	Sophomore	38	16.7%
	Junior	74	32.6%
	Senior	64	28.2%
	Graduate	2	0.9%
	Other	2	0.9%
Cannabis Use (Past 6 mo.)	No	154	67.8%
	Yes	73	32.2%
Cannabis Use Frequency (Q12)	Never	154	67.8%
	1-5 times	25	11.0%
	6-20 times	19	8.4%
	21-40 times	14	6.2%
	>40 times	15	6.6%
CUDIT-R Category	Non-Hazardous	194	85.5%
	Hazardous	28	12.3%
	Possible CUD	5	2.2%
GAD-7 Category	Minimal	59	26.0%
	Mild	98	43.2%
	Moderate	42	18.5%
	Severe	28	12.3%

Methodology

- Study design
  - Cross-sectional observational study design
- A total of 227 UCSD students recruited from...
  - Anonymous Qualtrics survey created to record responses
- Exposure (marijuana use)
  - Measurement tool
    - Modified Cannabis Use Disorders Identification Test- Revised (CUDIT-R)
  - Categorizes of use severity
    - Non-Hazardous, Hazardous, and Possible Cannabis Use Disorder (CUD)
- Outcome (anxiety)
  - Measurement tool
    - Generalized Anxiety Disorder 7-item scale (GAD-7)
  - Categorizes of anxiety severity
    - Minimal, Mild, Moderate, and Severe

Results



There was a statistically significant association between the severity of cannabis use and the severity of anxiety



This association was found to be stronger in females and not significant in males



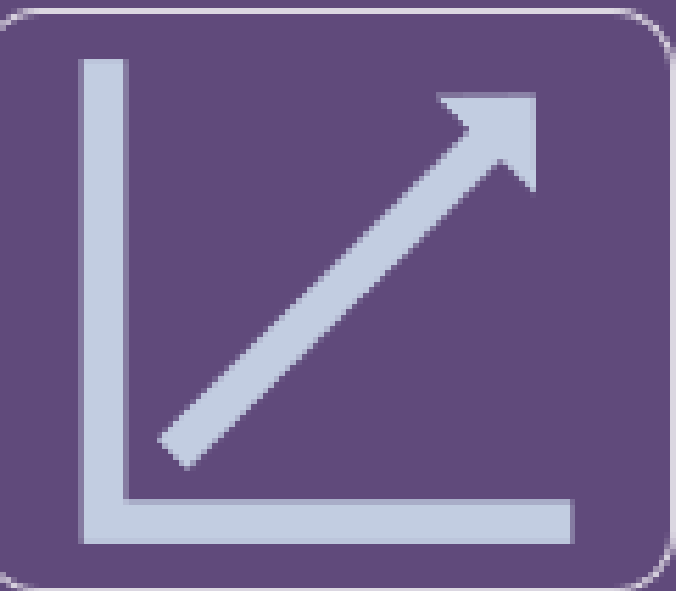
Anxiety severity was common, with the largest group falling into the mild category (43.2%)



The majority of students reported non-hazardous cannabis use whereas only 2.2% met the criteria for (CUD)



Differences in anxiety and cannabis use severity were consistent across grade level, showing little to change



The association between frequency of cannabis use and anxiety was non-linear, suggesting that other factors contribute to the association between cannabis and anxiety

Conclusion

- Most UCSD students reported:
  - Low-risk cannabis use
  - Mild anxiety levels
- Students at higher risk for cannabis use problems experienced:
  - Greater anxiety
  - Especially prevalent among female students
- **Key Findings:**
  - Female students disproportionately affected by higher anxiety/ cannabis use
  - Highlights need for targeted mental health and substance use interventions on campuses
- **Broader Implications:**
  - Patterns at UCSD may reflect trends at other U.S. and international universities
  - Increased screenings by university health services and student associations can help identify at-risk populations

Policy Implications

- **Study Limitations & Future Recommendations:**
  - Frequency of use alone may not indicate risk level
  - Future studies should include dosage/amount of cannabis used, as well as more comprehensive usage patterns
  - These insights can help develop more effective, targeted campus health strategies and interventions

References

