

Transitional Young Adults and Their Co-Experiences with Marijuana and Mental Health

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Abstract

Marijuana consumption in the United States has been a highly contested issue with criminalization, legalization, and growing concern on its impact on the youth. There is an increase in marijuana consumption and higher rates of self-reported depression and anxiety in U.S. young adults (Substance Abuse and Mental Health Association, 2020). This cross-sectional study examined the relationship between marijuana use and mental health (depression, anxiety, and psychological distress), using a National Survey on Drug Use and Health (2014). The final sample was 13,069 adults between 18 and 25 years of age. The result showed no significant relationship between marijuana use and any mental health variables used. The findings were not consistent with previous literature, which showed significant associations between marijuana consumption and decreased mental well-being, with increases in depression, anxiety, and psychological distress in young adults. Implications for this study findings are discussed.

Introduction

Significance of the study:

This study highlights the need to support young adults who consume cannabis to cope with mental health issues or have mental health concerns related to cannabis use.

Research Questions:

1. What is the relationship between cannabis use and depression in emerging adults aged 18-25?
2. What is the relationship between cannabis use and anxiety in emerging adults aged 18-25?
3. What is the relationship between cannabis use and psychological distress in emerging adults aged 18-25?

Hypothesis:

- Increased cannabis consumption in young adults (18 -25) experience higher rates of depression.
- Increased cannabis consumption in young adults (18 -25) experience higher rates of anxiety disorders.
- Increased cannabis consumption in young adults (18 -25) experience higher rates of psychological distress.

Literature Review

Marijuana Use

• Young adults ranging from 18-25, 1.2 million young adults began to consume marijuana in the past year (Substance Abuse and Mental Health Services Administration, 2020)

Depression

- An increase in young adults ranging from 18-25 in those who had a major depressive episode almost doubled from 8.8 % to 15.2% within the past 14 years (SAMSHA, 2020).
- Marijuana impacts the individual through symptoms including loss of motivation, irregular sleeping, feeling sluggish, or tired among other symptoms (Wright, Scerpella, & Lisdahl, 2016).

Anxiety

- Consistent marijuana use in young adults is associated with higher rates of anxiety as marijuana use can intensify symptoms, further social isolation, or inability to reach out to receive treatment (Patton, Coffey, Carlin, Degenhardt, Lynskey & Hall, 2002).

Psychological Distress

- In a study conducted 90% of respondents who reported a cannabis dependence also had a lifetime mental disorder, demonstrating the comorbidity of substance abuse along with mental health disorders (Agosti, Nunes, & Levin, 2002).

Gaps

- There is a limitation on longitudinal research by not analyzing how confounding variables may impact symptomology in emerging adults and ensuring measures are consistent and effective in measuring mental health as a construct.

Materials and Methods

Research Design and Data Collection

- Cross-Sectional Study
- Secondary Analysis of the National Survey on Drug Use and Health (Substance Abuse and Mental Health Service Administration, 2014)
- Participants were interviewed and surveyed individually either in person or using computer-assisted self-interview (CASI), computer-assisted personal interview (CAPI), and audio-computer-assisted self-interview (ACASI)
- Data were collected at the participant's home or place of the participant's choosing.

Sample and Sampling Method

- Participants were 13,069 adult age ranging from 18-25 years old.
- Sample includes 47.9% Male and 52.1% Female; Non-Hispanic White (54.9%), Hispanic (20.2%), Non-Hispanic Black or African American (13.5%), and others (11.5%).

Measures

- Marijuana use was measured using a single item, total number of days used in the past 12 months.
- Depression was measured using a single item, which asked if they had ever experienced depression in their lifetime.
- Anxiety was assessed with one item asking participants if they had ever had anxiety within their lifetime
- Psychological distress was measured with the 6-item Kessler Scale (K6). The possible score ranges from 0-24, with a higher score indicating a higher level of perceived psychological distress.

Mann-Whitney U Test table

- The results indicated that the total number of days used marijuana of participants who identified having depression in their lifetime (Mean rank = 2043.14) were not significantly different from the total number of days used marijuana in past 12 months of participants who did not identify having depression in their lifetime (Mean rank = 2000.30; $U = 1214143.500$, $p = .368$).
- The results indicated that the total number of days used marijuana of participants who identified having anxiety in the past year (mean rank = 2075.12) were not significantly different from the total number of days used marijuana in past 12 months of participants who did not identify having anxiety in the past year (Mean rank = 1995.83; $U = 894930.000$, $p = .155$).

Table 3

Cannabis Use Difference Between Individuals with Mental Health Issues

Variables	Mean rank	U	p
Depression in Lifetime		1214143.50	.37
Yes	2043.14		
No	2000.30		
Anxiety in Past Year		894930.00	.16
Yes	2075.12		
No	1995.83		

Correlation

- Total number of days used marijuana in past 12 months was not associated with having psychological distress among the current study participants ($r_s(1738) = .025$, $p = .291$).

Table 1

Sample Characteristics of Participants (N = 13,069)

Characteristics	f	%
Sex		
Male	6266	47.9
Female	6803	52.1
Race/Ethnicity		
Non-Hispanic White	7,169	54.9
Non-Hispanic Black or African American	1,765	13.5
Non-Hispanic Native American or Alaska Native	248	1.9
Non-Hispanic Native Hawaiian/Other Pacific Islander	79	.6
Non-Hispanic Asian	653	5.0
Non-Hispanic more than one race	519	4.0
Hispanic	2636	20.2

Table 2.

Description of Study Variables (N = 13,069)

Variables	f	%
Independent Variables		
Anxiety		
No	11768	90.0
Yes	1067	8.2
Depression		
No	11184	85.6
Yes	1662	12.7
Psychological Distress	M = 11.9	SD = 6.2
Dependent Variables		
Total number of days of marijuana use	M = 128.6	SD = 134.6

Results

Figure 1.

Depression among cannabis consumers and non-cannabis consumers

Independent-Samples Mann-Whitney U Test

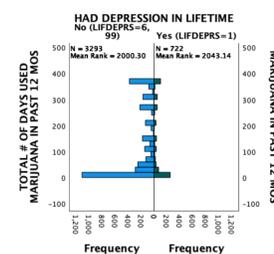
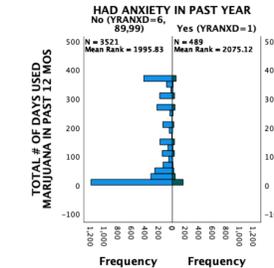


Figure 2.

Anxiety among cannabis consumers and non-cannabis consumers

Independent-Samples Mann-Whitney U Test



Discussion

Findings

- This study's hypotheses were not supported.
- The statistical test analysis conducted with the variable relationships of (marijuana and depression), (marijuana and anxiety), and (marijuana and psychological distress) were all found insignificant within this study.
- The findings were not consistent with previous literature discussed that demonstrated a pattern of significant relationships of marijuana consumption and decrease in mental well-being, with increases in depression, anxiety and other psychological distress in young adults (Volkow et. al, 2014).
- A possible explanation for the insignificant study findings is using a lifetime prevalence measure of depression and anxiety.

Strengths

- Large sample size
- Nationally representative sample

Limitations

- Use of single item measure for depression and anxiety that tend to lack validity and reliability
- Cross-Sectional analysis does not explain causation

Implications

- Conduct a longitudinal study using a valid and reliable measures
- Recommendations for practice include applying evidence-based practices to address both substance and mental health issues.

References

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