

Marijuana Use and the Independent Relationships Between Emotion Dysregulation and Anxiety



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Background

- In conjunction with the legalization of medical marijuana, research shows an increase in recreational marijuana use among youth, which in 2016 hit a peak of 64% for youth in the legal system (YLS).
- Youth who frequently or occasionally use marijuana are linked to adverse health problems (both physical and emotional), more susceptible to emotional dysregulation, report higher levels of anxiety, and poor school outcomes.
- Due to the risks associated with using marijuana, this study examined marijuana use among a sample of YLS in connection to both anxiety and emotion dysregulation.

Methods

- Data were used from a 3-year longitudinal study examining the implementation of an intervention across 12 juvenile justice facilities to prevent substance use.
- This study that examined correlations at three distinct time points, including baseline (N=250), 3-month follow-up (N=102), and 6-month follow-up (N=64). Baseline was collected while youth were still in facility and expected to be released in three months’ time. The 3-month follow-up was collected one-month after release. Similarly, 6-month follow-up was collected 6 months after baseline, but only 3 months after facility release.
- Participants included YLS ranging from ages 14 to 19 (M=16, SD=1.01), 83.2% male (15.6% female, 1.2% non-binary or gender fluid). Race and ethnicity were combined with 41.6% Hispanic, 28.8% Black, 18.0% White, 8.4% more than one race, 2% other, 0.4% American Indian/Alaska Native, 0.4% Asian, 0.4% Native Hawaiian/Pacific Islander.
- The measures included the 17-item TCU Drug Screen 5 (TCU-DS), the 7-item Generalized Anxiety Disorder Assessment (GAD-7; Anxiety), and the 21-item State Difficulties in Emotion Regulation Scale (S-DERS; emotion dysregulation). All the measures were self-report questionnaires.
- The current study utilized one question from the TCU-DS to assess marijuana use. This question asked how often marijuana was used within the past 12 months. The GAD-7, was used to assess general anxiety levels. S-DERS is broken into four subcategories (nonacceptance, modulate, awareness, and clarity) to measure emotion dysregulation.

Correlation Results

Baseline

	Marijuana Use	Anxiety	Emotion Dysregulation
Marijuana Use	1	0.030	-0.109
Anxiety	0.030	1	.402**
Emotion Dysregulation	-0.109	.402**	1

- At baseline, there was a significant negative relationship between marijuana use and nonacceptance of emotions. There was no significant relationship between marijuana use and anxiety and emotion dysregulation.

3-Month

	Marijuana Use	Anxiety	Emotion Dysregulation
Marijuana Use	1	0.296**	0.283**
Anxiety	0.296**	1	.402**
Emotion Dysregulation	0.283**	.402**	1

- At 3-month, there was a significant positive relationship between marijuana use and nonacceptance of emotions, marijuana use and emotion dysregulation, and marijuana use and anxiety.

6-Month

	Marijuana Use	Anxiety	Emotion Dysregulation
Marijuana Use	1	0.278**	0.147
Anxiety	0.278**	1	0.500**
Emotion Dysregulation	0.147	0.500**	1

- At 6-month, there was a significant positive relationship between marijuana use and anxiety. There was no significant relationship between marijuana use and emotion dysregulation.

* correlations were also analyzed at each time point for the subcategories of the S-DERS, but due to spacing, it was not included visually,

Conclusion/Discussion

- At the baseline evaluation, the participants had a structured daily routine in the facility. The TCU-DS assesses the drug use within the past twelve months before the facility, while the GAD-7 and S-DERS are based on the past two weeks in the facility. These factors could have contributed to the lack of a relationship between marijuana use and anxiety and emotion dysregulation.
- At the 3-months evaluation, the participants were adjusting to reentry. This could have led to the participants being more vulnerable and more susceptible to higher levels of marijuana use, anxiety, and emotion dysregulation.
- At the 6-months evaluation, there was no significant relationship between marijuana use and emotion dysregulation. This lack of relationship could be due to the implementation of the intervention while in the facility that focuses on improving self-regulation.
- These preliminary results suggest the connections between emotion dysregulation and anxiety on marijuana use are complicated and need further exploration. Future research should continue to examine these relationships to better inform intervention work.

Limitations/Future Research

- The findings may have limited generalizability due to the population being only YLS and mainly male. Sample size at follow-up also limits the generalizability of results.
- Marijuana use was assessed with one self-report question. Additionally, use at baseline was based on recall of use prior to entering the facility. Future research, should include multiple questions, biological measures, and drug tests to better reflect actual use.
- Relationships among variables were examined using a cross-sectional design, thus, causation cannot be determined. Future research should include examination of change over time across longitudinal data to determine causality.
- Future research should also examine how confounding variables (e.g., socioeconomic status, marijuana legalization in the individual's state, and family history) can affect the relationships.

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With the increased use of marijuana across the United States- particularly among youth in the legal system compared to the youth not involved in the legal system- it is crucial to examine the adverse health outcomes. The outcomes include, but are not limited to, physical and emotional problems, poorer school outcomes, more susceptibility to emotion dysregulation, and higher levels of anxiety. This preliminary study investigates the relationship between marijuana use and individual emotion dysregulation and anxiety among the youth in the legal system.