MARIJUANA AND CBD:
BENEFIT OR HARM FOR ANXIETY?

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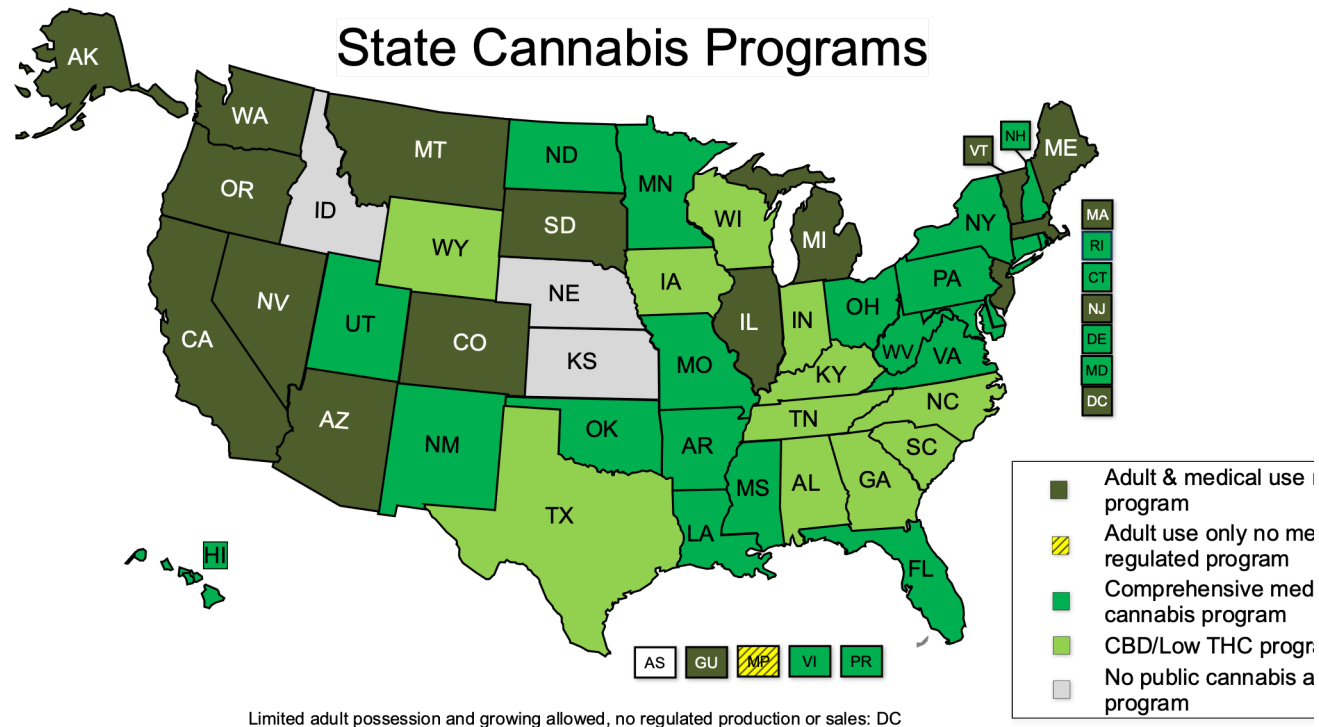
Anxiety and Depression Center

Newport Beach, CA

Anxiety Disorder Prevalence

- An estimated 284 million people worldwide have an anxiety disorder.

- An estimated 31.1% of U.S. adults experience any anxiety disorder at some time in their lives.

- An estimated 19.1% of U.S. adults had any anxiety disorder in the past year.

STATE OF THE UNION

State Cannabis Programs

November 2020

Limited adult possession and growing allowed, no regulated production or sales: DC

Legend:
- Adult & medical use program (dark green)
- Adult use only no medical regulated program (yellow hatched)
- Comprehensive medical cannabis program (green)
- CBD/Low THC program (light green)
- No public cannabis program (gray)

- 36 States and 4 territories have passed laws legalizing marijuana in some form.

- 15 States and 3 territories have adopted laws legalizing marijuana for recreational adult use since 2012. (NCSL, 2020)

Marijuana: Some Vocabulary

- The Cannabis Plant
  - *Cannabis Sattiva*
  - *Cannabis Indica*
- Cannabinoid: a group of chemical compounds found in the cannabis plant:
  - Tetrahydrocannabinol (THC): psycho-active compound that leads to intoxication.
  - Cannabidiol (CBD): most abundant cannabinoid in hemp, non psycho-active, anti-oxidant and anti-inflammatory properties.

# Cannabis use numbers on the rise

- Prevalence of cannabis use has seen steady increases each year since 2007 (45% increase from 2007-2014).

- "Heavy users" (daily/near daily) grown from 1 in 9 (1992) to over 1 in 3 (2014).

- "Self-medication" with MJ higher in states with legalization among those with anxiety and mood disorders (Sarvet et. al, 2018).
  - Proliferation of medical and recreational legalization
  - Rise in brick and mortar dispensaries, delivery
  - Shifting public perceptions
  - Growing social and commercial focus on therapeutic value

Is Marijuana The Secret To Ending Anxiety and Panic Attacks?

Anxiety focused marketing
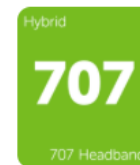
Many people are using marijuana (THC) or CBD (which is derived from cannabis or hemp) to help with their anxiety symptoms.

- Anxiety ranks among the top 5 medical symptoms for which North Americans report using medical marijuana.

- Data from a 2019 national survey (McFadden, 2021) indicates more than half of U.S. adults perceive cannabis (THC and CBD) as having a medical use.

- The results show that approximately 29% to 31% of THC consumption was to reduce stress or anxiety.

- Participants reported using CBD to replace medications to reduce pain, stress, and anxiety and for better sleep. THC was used most to reduce stress and anxiety.

What does the research show? Should I be using marijuana for my anxiety?

- **Cannabis (THC)**

  - Scientific data indicate the potential therapeutic value of cannabinoid drugs, primarily THC, for pain relief, control of nausea and vomiting, and appetite stimulation.

  - Recent comprehensive review (National Academies of Sciences, Engineering, Medicine) did not identify any good quality literature that reported cannabis as an effective treatment for anxiety symptoms.

  - Frequency of use associated with increased anxiety symptoms and future incidence of Social Anxiety Disorder.

- Despite state of research, public clearly reports using cannabis to reduce anxiety, increasingly viewed as an adaptive way to cope…why?

- Low doses of THC reported to engender anxiolytic effects, though higher doses increase anxiety, panic.

- Heavy use can lead to withdrawal symptoms (anxiety), exacerbating urges for further use.

- Individuals with SAD more likely to use cannabis to self-medicate vs. other anxiety disorders.

Numerous cannabis strains, potency, frequency, mode of delivery, user characteristics.

9:02

Tweet

Zach
@Puon...

Honestly it's helped me face anxiety because I know exactly what it's from and how to cope with it and it translate to when I have a real anxiety attack.

9:05

Tweet

Replying

Sativa dominants tend to calm my anxiety. I have more energy and get overwhelmed less easily. Indicas can give me heavy anxiety and paranoia bc I feel overwhelmed by everything happening

9:02

Tweet

yamint
@showmethevan...

Replying to @itsmariannnna

i prefer sativas so i can blame my anxiety on the weed instead of myself

11:51 AM · 2/2/21 · Twitter Web App

10:11

Tweet

Replying to @itsmariannnna

Indica makes me so tired that I don't get anything done and that gives me more anxiety.

9:07

Tweet

Replying

sativa is the only thing that gets me out of bed and allows me to talk to people without fear 😅😅

9:12

Tweet

Replying to

Sativa helped me turn my anxiety into creativity when I smoked lol. Sativa was always my favorite despite my anxiety because of that reason. I'd only smoke indica if I needed to get sleep because I have issues sleeping but I don't prefer it.

9:09

Tweet

Replying

Oddly enough I have an anxiety disorder but indicas make me more paranoid so i perfer sativas....is that weird?

BioPsychosocial model of substance use in SAD
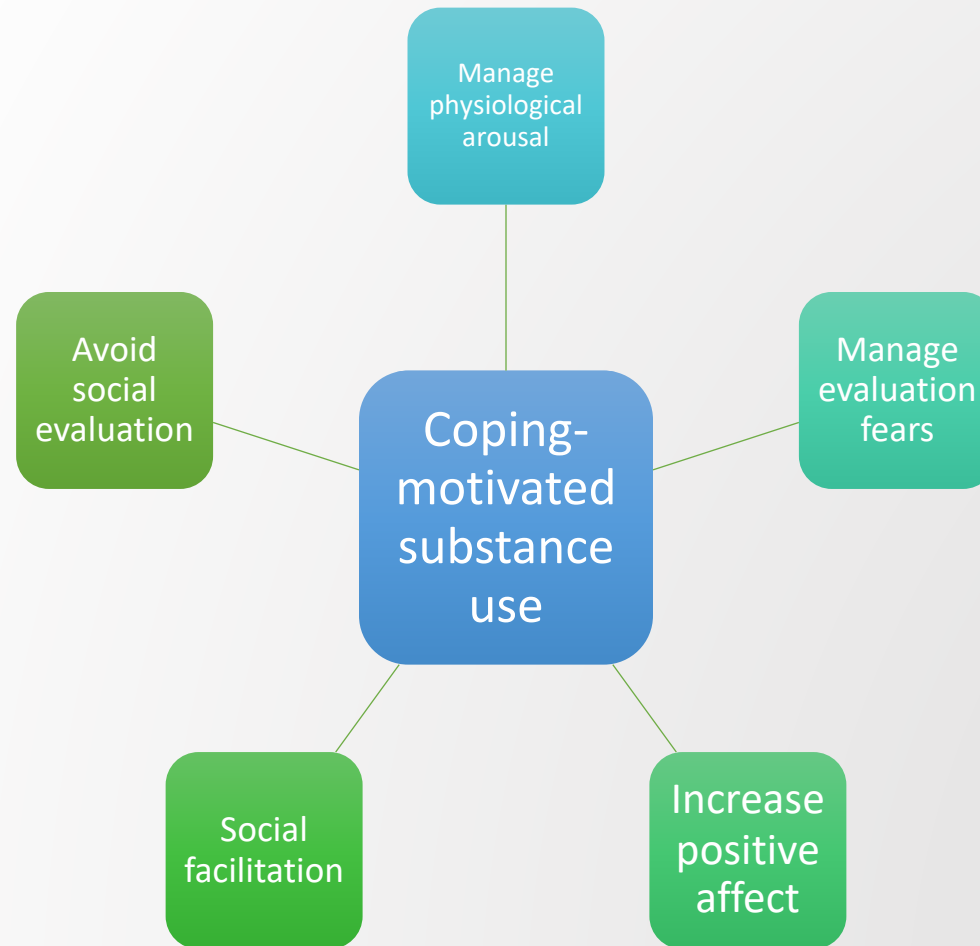
Dangers of over-utilization of coping-motivated cannabis use for anxiety:

- Psychological dependence

- Learning interference / symptom maintenance

- Exacerbation of symptoms over time

- Barrier to progress even if in treatment

- Can lead to reliance on substance

- Substance Use Disorder

- High risk of chronic users in adolescence

What does the research show? Should I be using CBD for my anxiety?

- **Cannabidiol (CBD)**

  - Recent comprehensive review (National Academies of Sciences, Engineering, Medicine) found limited evidence that CBD is effective for anxiety symptoms.

  - Research still in its infancy

Initial Studies

- CBD shown to reduce acute anxiety assessed by a public speaking test in patients with social anxiety disorder (Bergamashchi et. al (2011).

- Acute administration of CBD can reduce reported subjective anticipatory anxiety in individuals with an anxiety disorder (Crippa et. Al (2010).

- Acute anxiety vs. the course of a disorder.

- Be careful with drawing conclusions.

CBD study: adolescents with social anxiety in Japan
(Masataka, 2019)
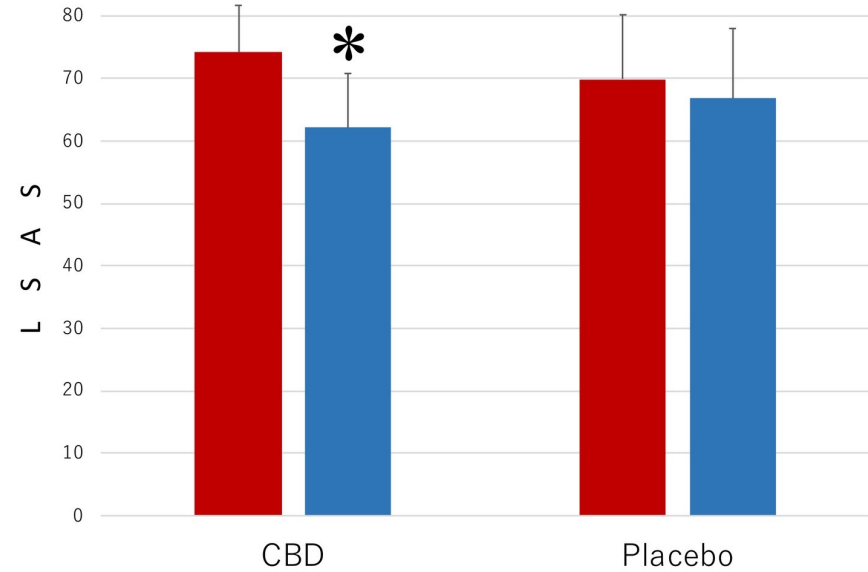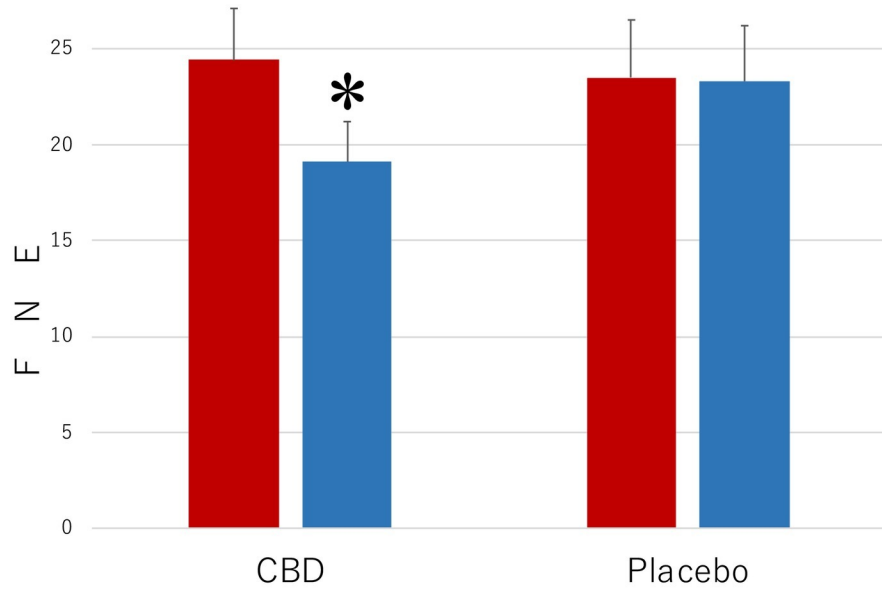
- Some initial evidence that CBD can enhance "extinction learning," may serve as potential adjunct to behavioral therapies such as Cognitive-Behavioral Therapy (CBT) for anxiety disorders (Das et. al, 2013).

- CBD may help produce an enduring reduction in learned fear expression when given strategically along with behavioral treatment (Lee et. al, 2017).
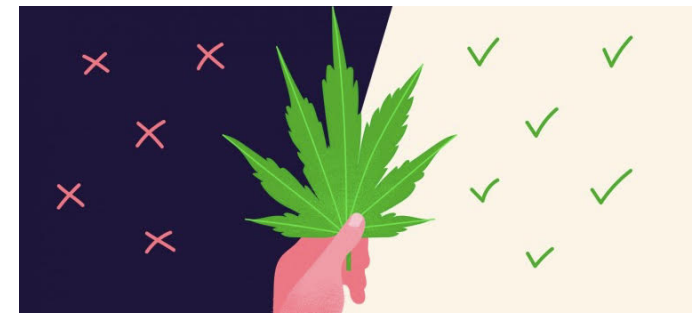
CBD Summary

- Most current studies examine acute, single CBD dosing in healthy subjects, so further studies are required to establish whether chronic dosing of CBD has similar effects.

- Overall, a summary review emphasizes the potential value of CBD in treating anxiety disorders, but need for further study of CBD in the treatment of anxiety disorders (Blessing et. al, 2015).

- Need to develop and standardize dosing to inform dosing strategy, and ensure purity to determine CBD's place as an alternative or supplemental therapy to other evidence-based approaches.

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