

Cannabis as a facilitator of **mindfulness**: Implications for the treatment of addiction.

Amanda Reiman, PhD MSW

Policy Manager, CA

areiman@drugpolicy.org

**We are
the Drug
Policy
Alliance.**

Mindfulness practice and behavior change.

Definition: an awareness of the relationship between thoughts and bodily sensations.

Goal: quiet outside noise and focus on enhancing that connection, often through breathing exercises and other meditations.

And substance use:

1.used to control cravings, help participants focus on the relationship between their addictive voice and their physical self, and aid in relapse prevention.^{i,ii}

2.act of stress reduction associated with mindfulness practice can reduce the likelihood of straying outside one's self-imposed drug use boundaries.ⁱⁱⁱ



Cannabis, mindfulness and substitution

- Cannabis may have the ability to facilitate mindfulness through enhancing the mind-body connection and increasing an awareness of self.
- At the same time, many cannabis consumers report using the herb to reduce their use of other, more harmful substances.
- Research question: Is mindfulness practice and cannabis use associated with a reduction in craving for methamphetamine?

The SPARC study

- SPARC is a medical cannabis dispensary in the SOMA neighborhood of San Francisco.
- Open since 2010, SPARC provides a range of alternative health care treatments in addition to cannabis.
- One such service is a meditation class, led by Jana Drakka, a Buddhist monk who provides services to the drug consuming and indigent populations of San Francisco.
- Rationale for the study....

Methods

- Participants were recruited from a local harm reduction center in San Francisco. To be eligible, participants had to be currently trying to stay within set boundaries regarding methamphetamine use, and be medical cannabis patients in the state of CA.
- Sample: 10 participants, all engaging in harm reduction around their methamphetamine use were enrolled in the study. Participants were compensated with 2 grams of cannabis per week, with a choice of indica, sativa, or both.
- 2 participants did not complete the study

Participant	Gender	Age	Substances Used at Intake	Meditate as of Intake?
1	Male	49	Methamphetamine Cannabis Alcohol	Yes
2	Male	53	Nicotine Cannabis Mushrooms Cocaine	Sometimes
3	Male	43	Methamphetamine Cocaine Alcohol Cannabis	No
4	Male	54	Methamphetamine Cannabis	No
5	Male	43	Methamphetamine Cannabis Alcohol	Yes
6	Female	44	Methamphetamine Cannabis	Yes
7	Male	43	Nicotine Methamphetamine Cannabis Alcohol	Yes
8	Female	43	Nicotine Cannabis	Yes
9*	Male	43	Methamphetamine Cannabis	Yes
10*	Male	49	Nicotine Cannabis	Yes

Study Design

- 8 single case studies
- 6 weeks of weekly, one hour meditation session
- Pre study interviews
- Measures completed before and after each meditation session
- Measures:
 - Mindfulness scale (0-195)
 - Craving scale (0-84)
 - Daily meditation logs
 - Daily report of alcohol, and other drug use



Results: Interviews

- Similar reports regarding cannabis and the addictive voice.
- Long history of using cannabis as a substitute for other substances.
- Desire for “tools” to help manage use.
- Range of current meditation practices.

Results: Overall Changes

- Craving Scale Pre=28.75; Post=20.83, a nearly eight point reduction. Mean reductions in craving before and after individual sessions ranged from .5 to 7, but overall cravings were reduced among the group as a whole after every session.
- Mindfulness Scale Pre=121.38; Post=127.5, and increase of over six points. Mean changes in mindfulness before and after individual sessions were all positive except for session one, where the mean score dropped 6.38 points. For the other sessions, gains in mindfulness ranged from 1.5 to 7.17.
- Overall drug/meditation use: Days meditating per week, number of drinking days and number of days using cannabis remained fairly stable throughout the study.

Results: Relationship between cannabis, meditation and craving

Model		t	Sig.
	(Constant)	-2.41	.07
	Mindfulness differences total	-1.49	.21
	Meditation days total	2.83	.05
	Cannabis use days total	2.08	.11

As can be seen above, total days spent meditating throughout the six weeks significantly predicted lower craving scores ($p < .05$).

Results: Relationship between cannabis, meditation and mindfulness

Model		t	Sig.
1	(Constant)	-3.07	.04
	Craving differences total	-1.49	.21
	Meditation days total	2.90	.04
	Cannabis use days total	2.67	.06

As can be seen above, total meditation days also significantly predicted overall increases in mindfulness, even after controlling for cannabis use and craving changes ($p < .05$). It should also be noted that cannabis use was close to being a significant predictor of mindfulness as well.

Results: Individual changes

- Variability in changes on the individual level. Some “got it” some did not.
- One participant enjoyed a steady reduction in craving and a steady increase in mindfulness, while maintaining abstinence from alcohol and methamphetamine.
- All participants enjoyed at least modest reductions in cravings and increases in mindfulness.
- Meditation practice remained regular across the board.

Implications

- Participants were using cannabis regularly, while reducing or eliminating their use of alcohol and/or methamphetamine.
- Those participating in harm reduction might be open to the management that mindfulness brings them.
- Mindfulness might be facilitated through the use of cannabis.
- Cannabis might have the ability to quiet the addictive voice to help drug consumers stay within their desired boundaries of use.



Thank you!

- SPARC
- The study participants
- Jana Drakka

Endnotes

- i Appel, J. & Kim-Appel, D. (2009). Mindfulness: Implications for Substance Abuse and Addiction. *International Journal of Mental Health Addiction*, 7, 506–512.
- ii Witkiewitz, K., Marlatt, G., and Walker, D. (2005). Mindfulness-Based Relapse Prevention for Alcohol and Substance Use Disorders. *Journal of Cognitive Psychotherapy: An International Quarterly*, 19, 212-228.
- iii Marcus, M. & Zgierska, A. (2009). Mindfulness-Based Therapies for Substance Use Disorders: Part 1. *Substance Abuse*, 30:263–265.