

Digital Perspectives on Cannabis Use in Online Opioid and Opioid Recovery Community Discussion Forums



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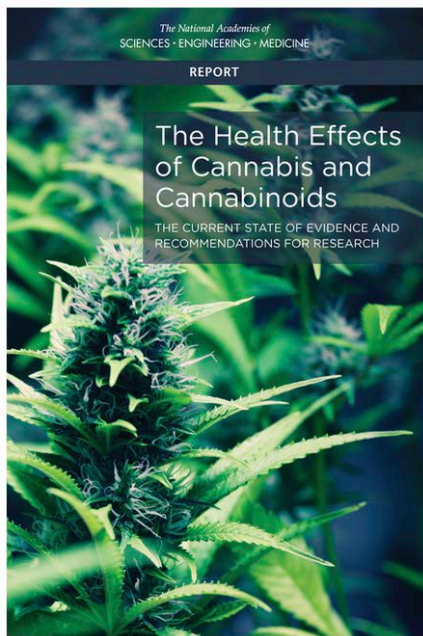
PRISM Symposium – December 2020

Acknowledgements

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 - Alicia Nobles, PhD, MS; University of California San Diego
 - Johannes Thrul, PhD; John Hopkins University
- Online community contributors and moderators
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Background: Opioids and Cannabis

- Growing research interest in potential of cannabis and cannabinoids to reduce opioid use and related harms
 - For pain management
 - Addressing opioid use disorder



CONCLUSION 4-1 There is substantial evidence that cannabis is an effective treatment for chronic pain in adults.

CONCLUSION 4-16 There is no evidence to support or refute the conclusion that cannabinoids are an effective treatment for achieving abstinence in the use of addictive substances.

CONCLUSION 15-1 There are specific regulatory barriers, including the classification of cannabis as a Schedule I substance, that impede the advancement of cannabis and cannabinoid research.¹⁵

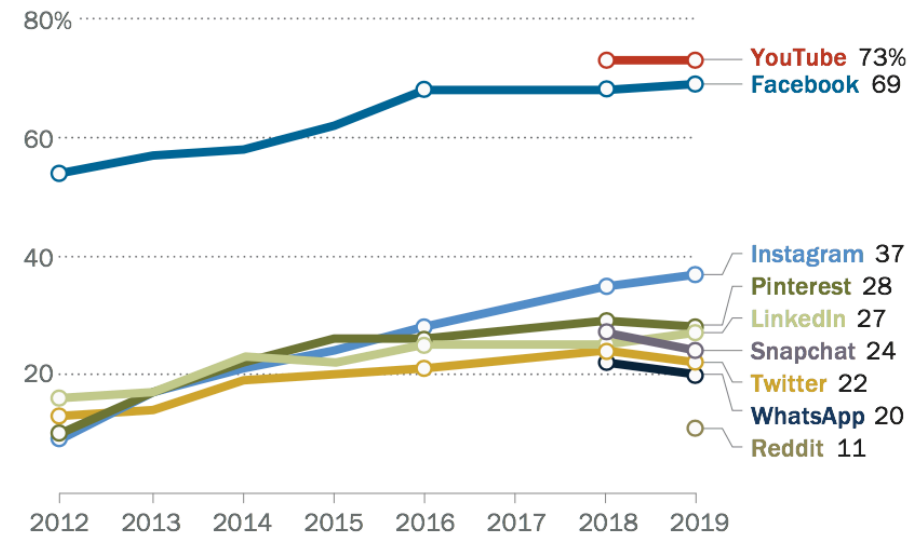
Background: Reddit



- Topic-specific “subreddit” community forums
- Pseudo-anonymous contributors
- Interaction via upvotes/downvotes (“karma points”) and commenting
- 7th most popular website in U.S. with 52 million daily users worldwide

Facebook, YouTube continue to be the most widely used online platforms among U.S. adults

% of U.S. adults who say they ever use the following online platforms or messaging apps online or on their cellphone



Note: Pre-2018 telephone poll data is not available for YouTube, Snapchat and WhatsApp. Comparable trend data is not available for Reddit.
Source: Survey conducted Jan. 8-Feb. 7, 2019.

PEW RESEARCH CENTER

Data source

45 months of posts: December 2015 to August 2019

❑ Opioid recovery subreddit: support community → ~16K posts

❑ Opioid subreddit: active opioid use discussions → ~163K posts

Cannabis keyword search terms: weed, cannabis, marijuana, _pot, reefer, ganja, _thc, cbd

1. What proportion of posts mention cannabis?

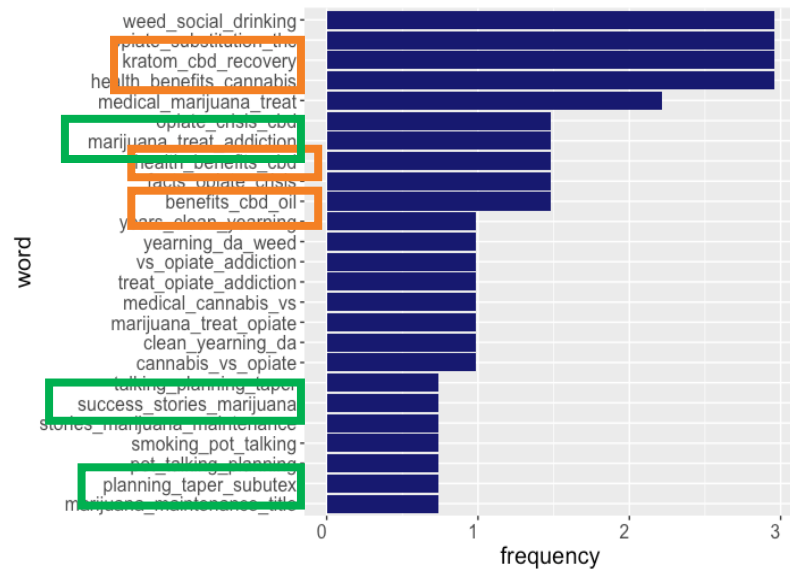
	recovery subreddit		opioid subreddit	
	N	Percent	N	Percent
Total posts	16K		163K	
Cannabis terms in post	908	5.4% of all posts	4224	2.6% of all posts

χ^2 p-value <.05

→ Cannabis terms were more prevalent in the recovery subreddit than in the opioid subreddit

2. What are the most common terms and phrases mentioned in cannabis-related posts?

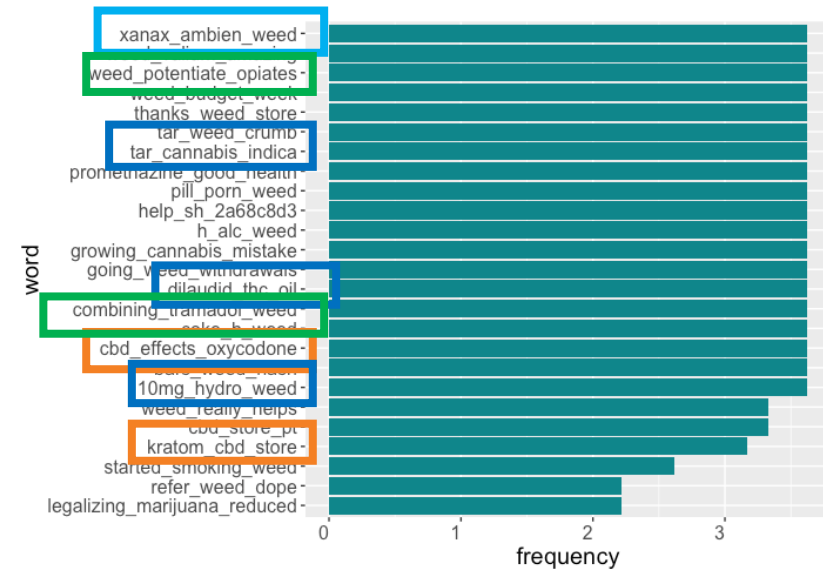
RECOVERY SUBREDDIT



kratom_cbd_recovery, health_benefits_cbd,
benefits_cbd_oil

marijuana_treat_addiction, success_stories_marijuana,
planning_taper_subutex

OPIOID SUBREDDIT



cbd_effects_oxycodone, kratom_cbd_store

xanax, ambien; oxy, hydro, dilaudid, tar, h

weed_potentiates_opiates, combining_tramadol_weed

3. *In Progress*: What is the context of cannabis mentions?

- 200 random posts to be coded by three investigators (100 from each subreddit)
- 50 posts triple-coded (25 from each subreddit) to refine codebook
 - Disclosure of personal cannabis and/or opioid use
 - Context and motivations for cannabis use in relation to opioid use

Recovery subreddit

Withdrawal symptom management (when quitting or cutting back intentionally)

48 hours in and I've been taking a few hits of weed every few hours or so for relief from the [withdrawal] symptoms and it's been making it tolerable.

Compatibility with recovery

“[What do you think about] marijuana use and recovery from opiates? What’s your idea of clean?”

Opioid subreddit

Withdrawal symptom management (during unplanned breaks in supply/access)

“I made it through [days of dope sickness] thanks to weed and Imodium”

Polysubstance use

“Can oxy be smoked ... on a bowl of weed?”

Preliminary Results

- Cannabis mentions are more common in the recovery subreddit than the opioid subreddit
- Cannabis is mentioned:
 - in the recovery subreddit as a substitution or opioid withdrawal management aid
 - in the opioid subreddit in the contexts of polypharmacy use

Feedback Sought

1. Statistical methods (in R) for comparing n-gram term frequencies across data sources
2. Publication venue and audience



Questions?