

Novel Substance Use and Support Themes on Reddit: Lessons for Researchers and Practitioners



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Introduction

- Digital recovery networks have become increasingly popular for substance use (SU) discussions, providing anonymous information and support for people who use substances (PWUS).¹
- Studies have identified a few themes using small samples of SU forums² or SU posts within general forums.³
- However, little is known about the range of SU experiences and peer support on Reddit.

Objectives

- Leverage big data on Reddit to discover SU and support themes in popular SU subreddits
- Assess discussion patterns and identify relevant subreddits to facilitate future research
- Apply new insight on unbiased individual experiences to inform targeted intervention

Methods

- Extracted subreddit names and descriptions: Pushshift Reddit Dataset⁴ (01/2006 - 04/2020)
- Used Drug Enforcement Administration (DEA) keywords to compile subreddits on SU and support topics
- Created a codebook and annotated subreddits by discussion type, SU, and support themes

Results

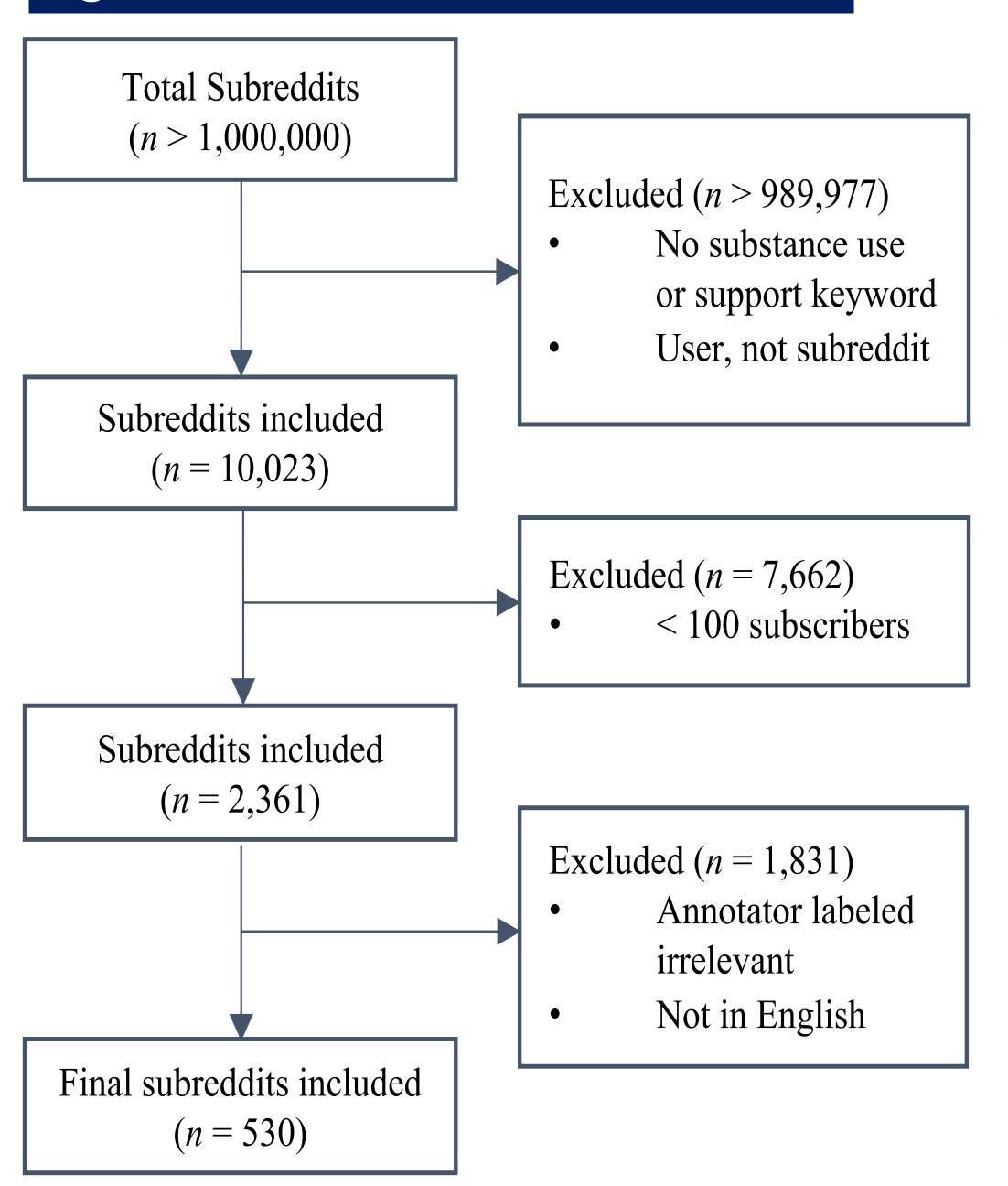


Fig. 1 Subreddit Inclusion Criteria

Subreddit descriptions also contained:

- Slang terms (n=207)
- Locations (n=50)
- Mental health themes (n=10)

Fig. 2 Word Cloud of Subreddit Types



Fig 3. Word Cloud of Substance Use Themes



Table 1. Support Themes

Recovery	45
Stories	36
Religiosity/Spirituality	4
SU Medications	3
Twelve-step	2
Narcotics/Alcoholics Anonymous	2
Harm-reduction	28
Overdose Prevention	7
Purity Testing/Identification	4
Abstinence	14
General Support	10
Families/Friends of PWUS	ϵ

Table 2. Cannabis Themes

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Vaporizer/Dab

CBD

Edibles

Smoking Synthetic Cannabinoids

Discussion/Conclusions

- Discovery of fast-evolving SU and harm-reduction patterns can improve practitioners' understanding of personal SU experiences.
- The annotated subreddit dataset will help researchers immediately identify relevant online communities.
- Future work should leverage these findings to monitor emerging substances and routes of administration, identify benefits of digital recovery networks, analyze SU and support language, and develop targeted secondary prevention strategies.

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