

Team Members

Brandon Zhao (zhao Brandon@yahoo.com)

Hinal Jajal (hinaljajal@g.ucla.edu)

Overarching Questions

With headlines outlining the opioid crisis and other drug issues, we wanted to ask: what types of actions can the US state governments take to help tackle health and drug related issues in their state?

To approach this question, we look

ed into the effects of different state government actions:

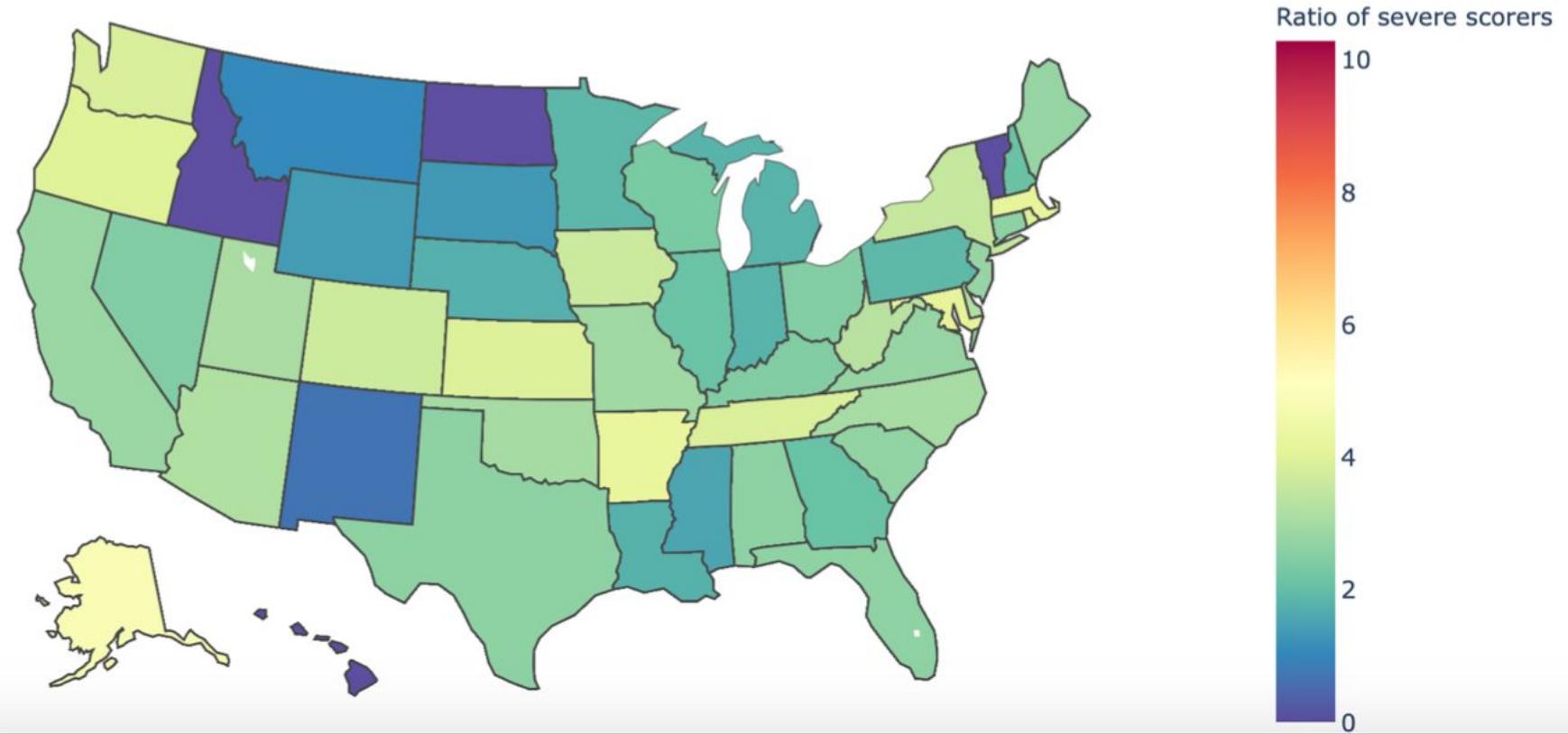
- How does the establishment of treatment centers affect drug abuse within the population?
- How does the legalization of marijuana affect its usage for medical and recreational purposes?

Some states do better than others...

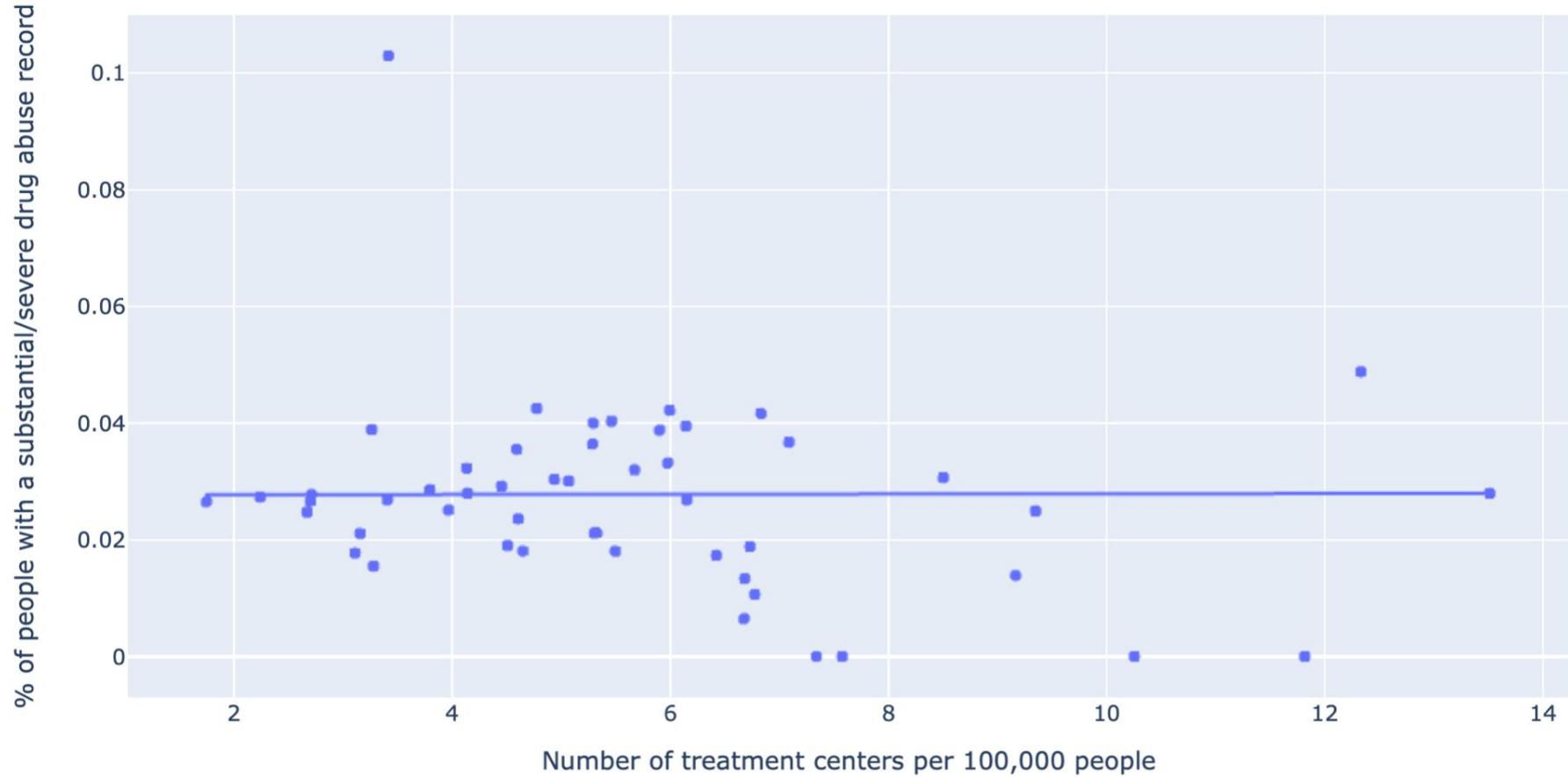
We see that some states have a smaller proportion of the population that has a severe or substantial drug abuse. So, we wanted to know: what were these states doing better (if anything)? There were various factors that came to our mind:

- They had more or better substance abuse treatment centers.
- The general demographic composition of the states is different.

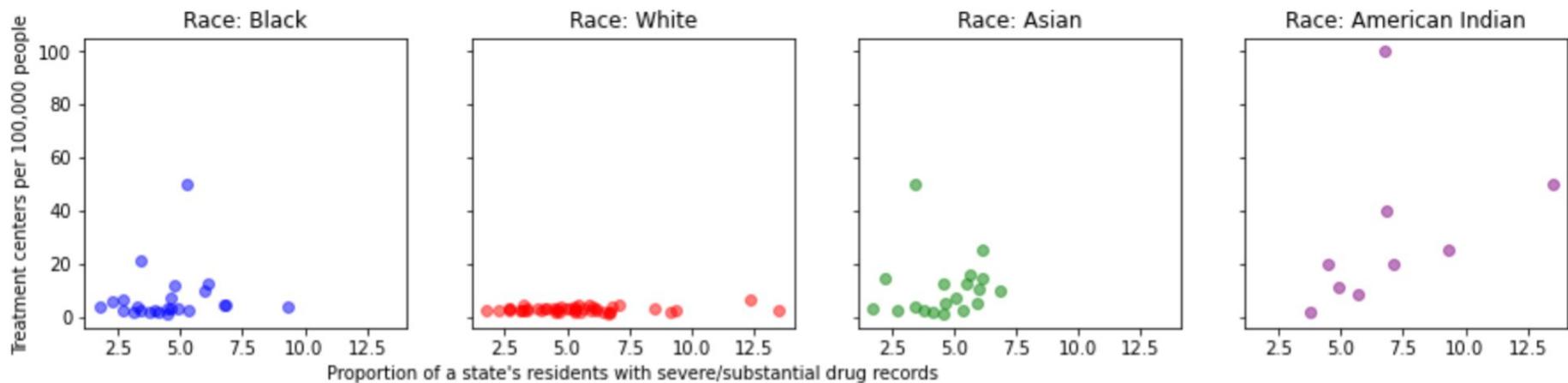
Some states do better than others...



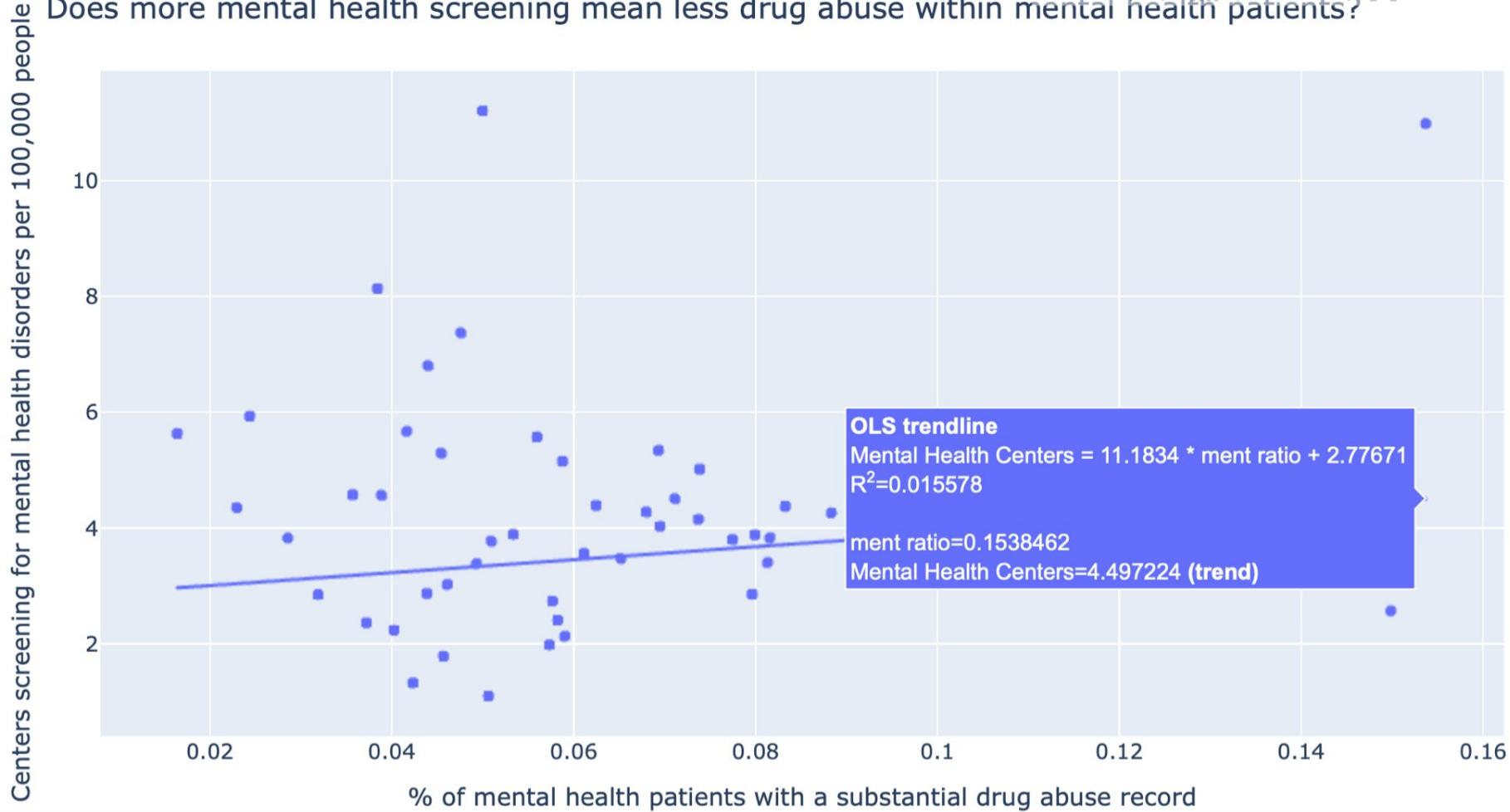
Do more substance abuse treatment centers mean less drug abuse?



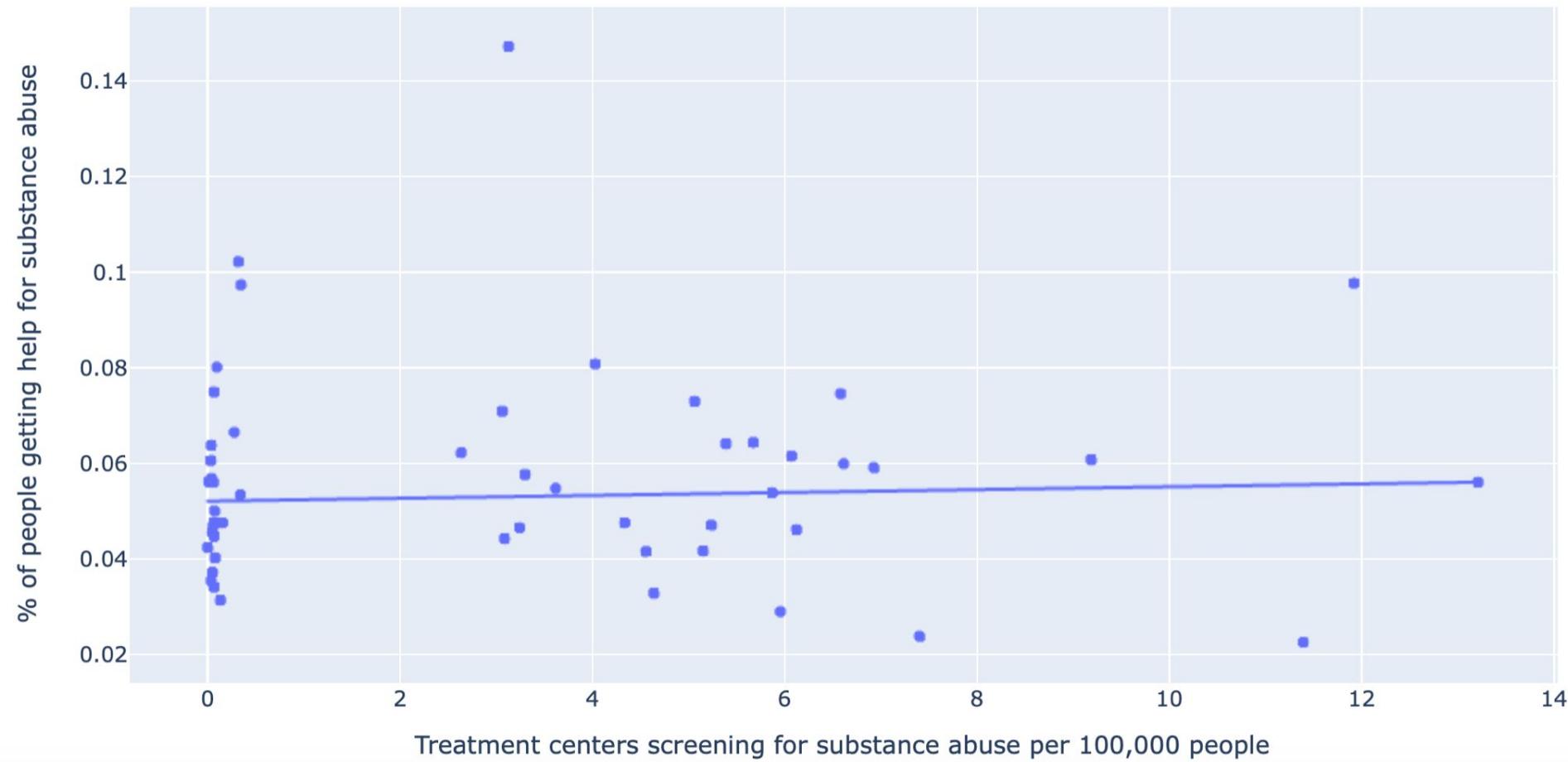
The number of treatment centers affects different races differently...



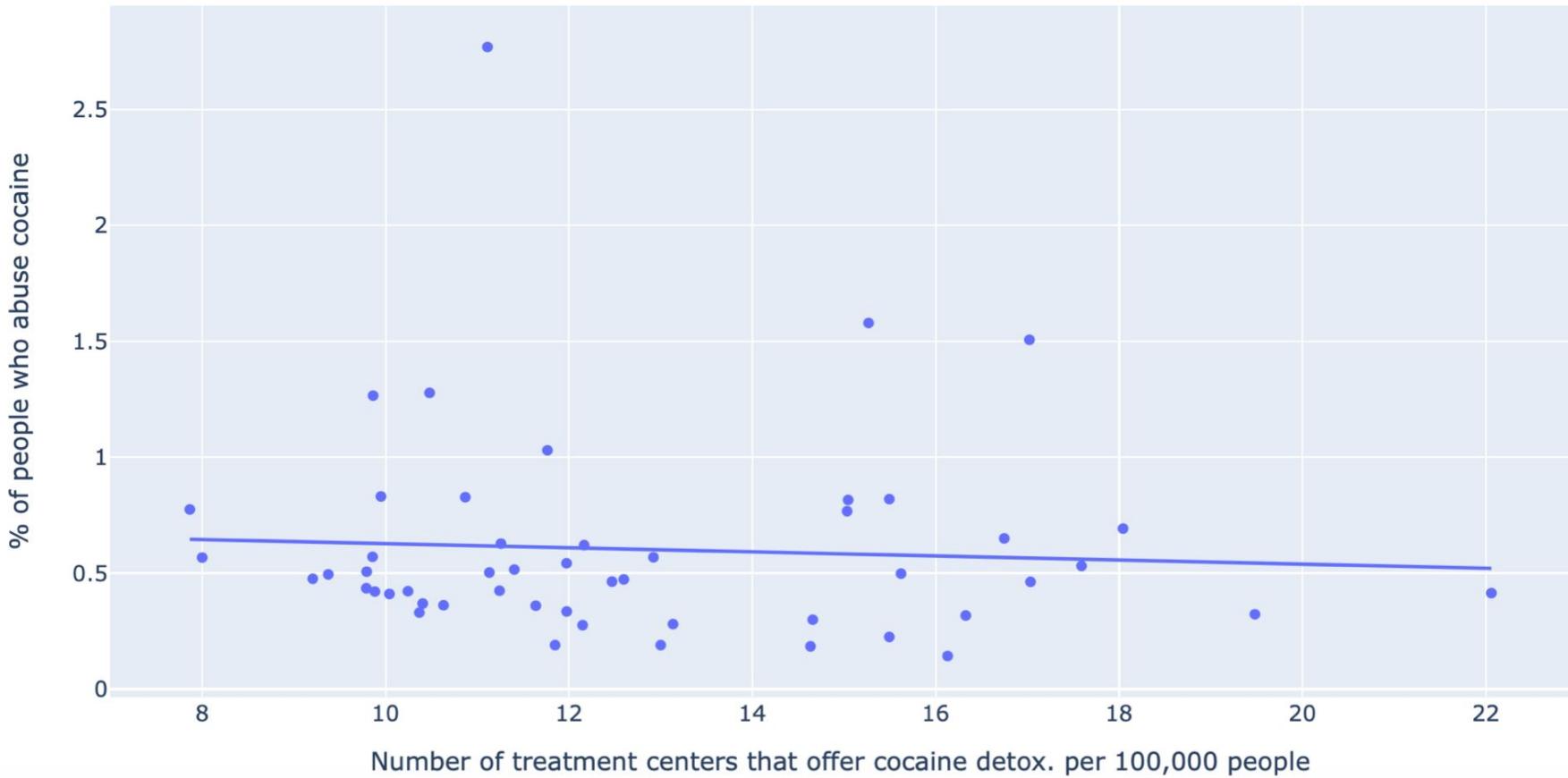
Does more mental health screening mean less drug abuse within mental health patients?



Does more screening for substance abuse mean more people get help?



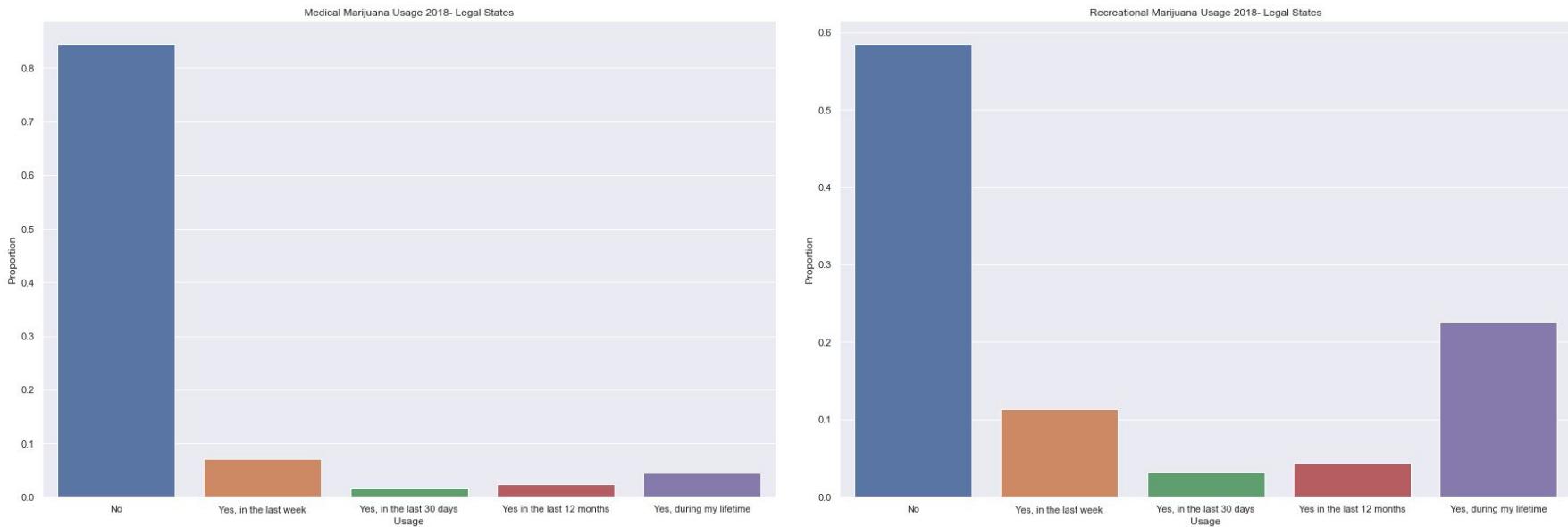
Does more treatment centers providing cocaine detoxification facilities relate to less cocaine usage?



These were not the results we expected (or hoped to be true), but...

1. We do not have data from previous years to compare the effect of the change in number of centers on substance abuse.
2. There is also the reasoning that states that have more problems related to substance abuse should be diverting more resources to this area. Hence, for example, if the percentage of people getting help in a state is more, it does have the demand and *need* for more treatment centers. So, the lack of a direct relationship shows that this is an end to which states should be working!
3. The real possibility that this data does not represent the whole state's substance abuse habits.

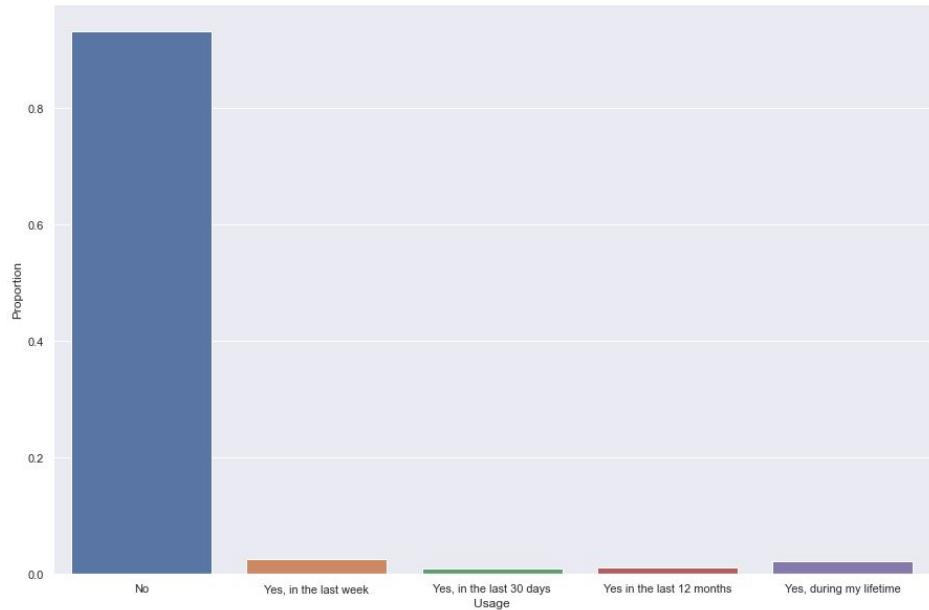
Legalization of Marijuana- Legalized



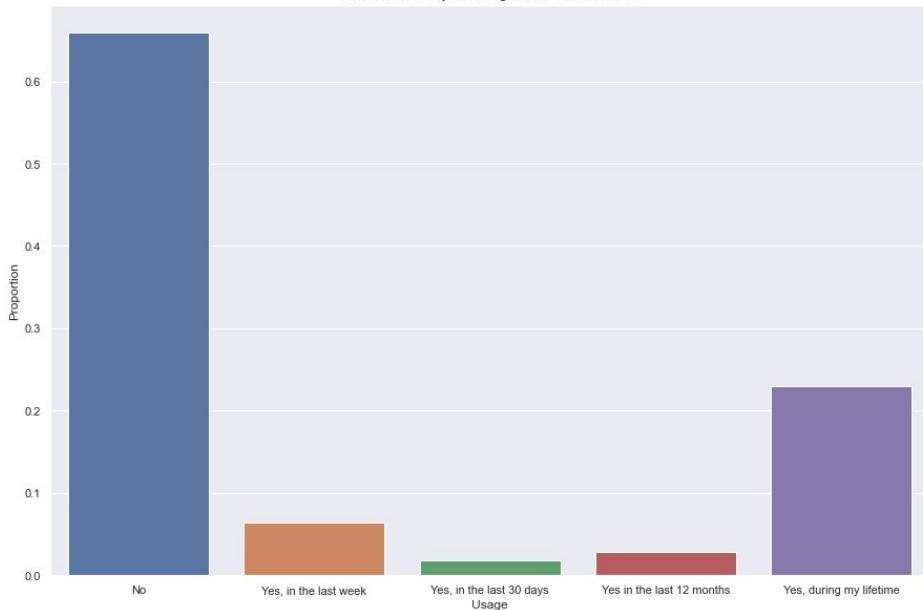
External data was used to obtain the legalization status of marijuana for different US States in 2018 and 2019. The proportion of each category was calculated by factoring in each individual's weight.

Legalization of Marijuana- Medical Use

Medical Marijuana Usage 2018- Medical States

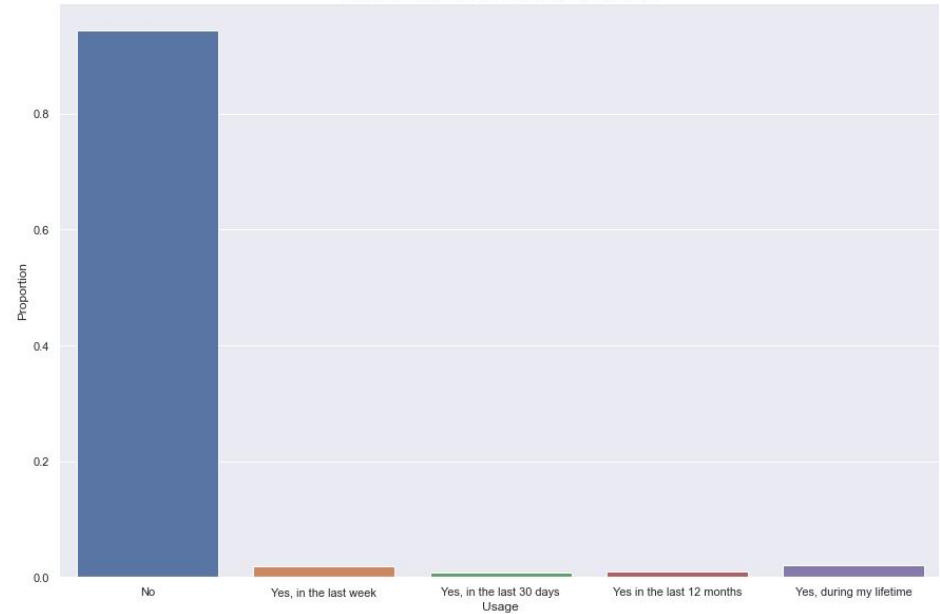


Recreational Marijuana Usage 2018- Medical States

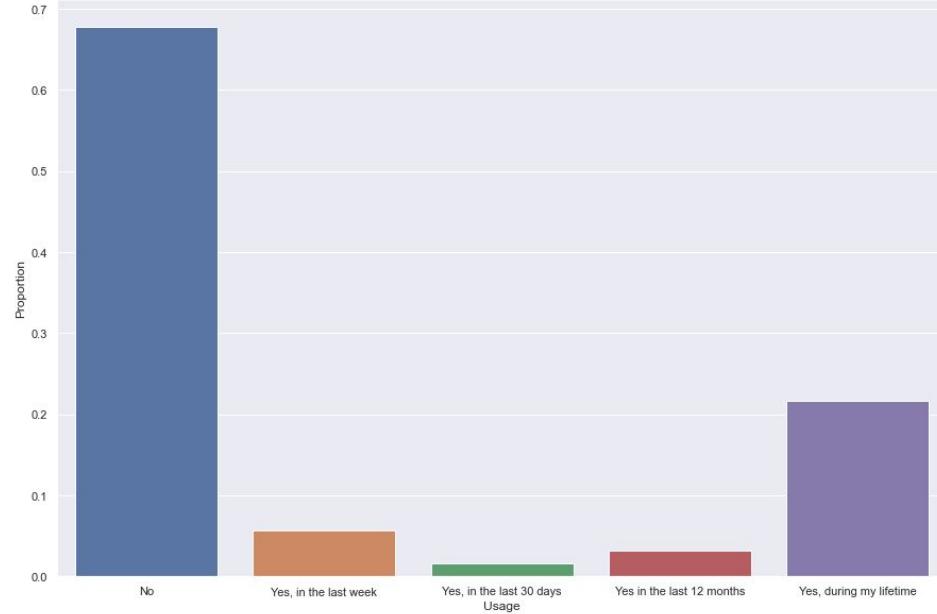


Legalization of Marijuana- Limited Medical Use

Medical Marijuana Usage 2018- Limited Medical States

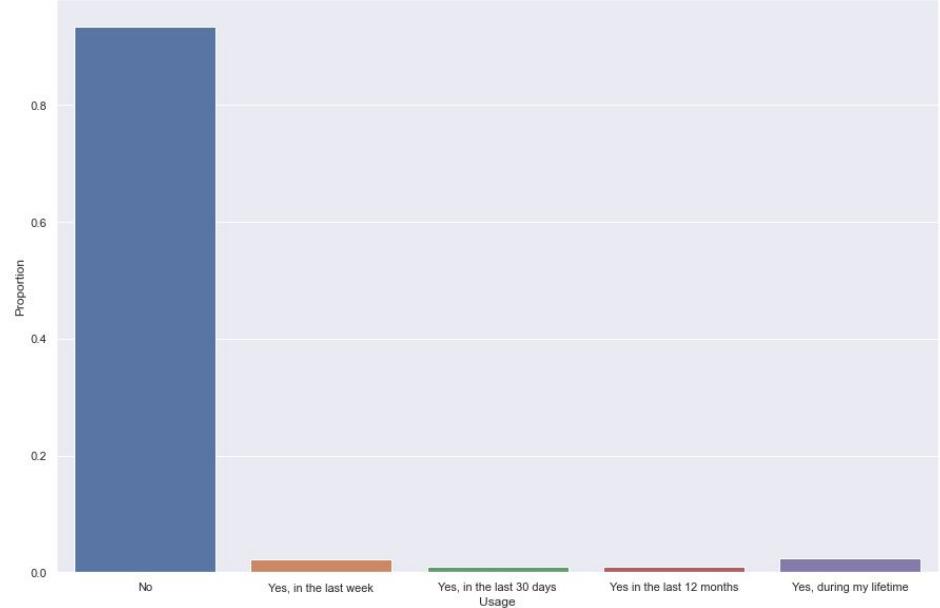


Recreational Marijuana Usage 2018- Limited Medical States

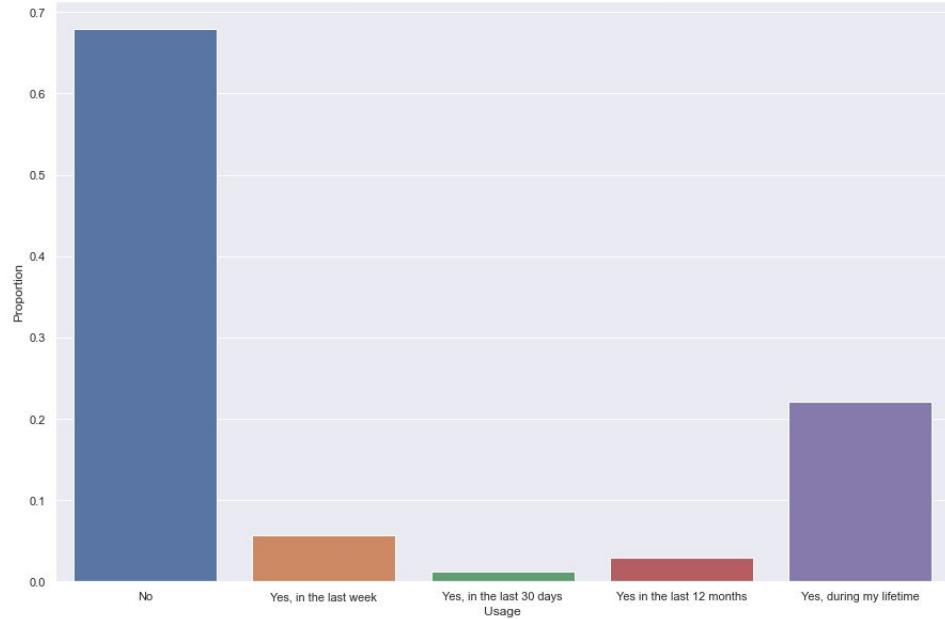


Legalization of Marijuana- Prohibited

Medical Marijuana Usage 2018- Prohibited States

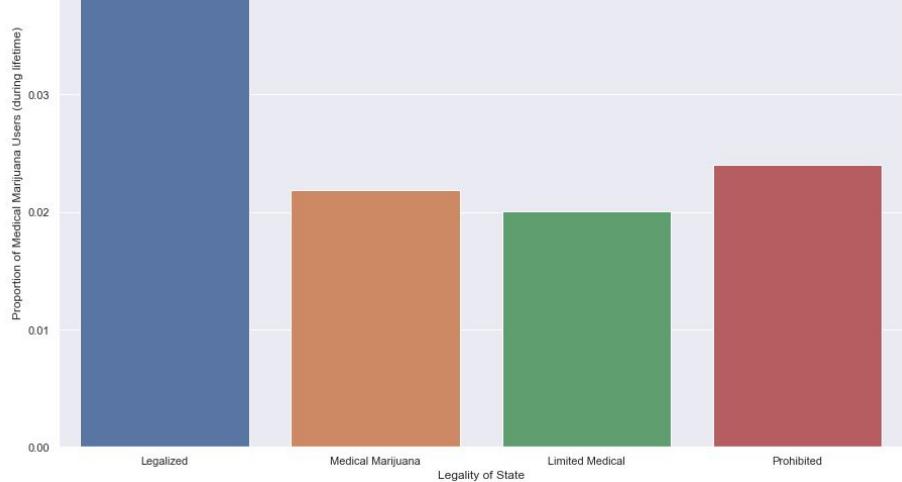


Recreational Marijuana Usage 2018- Prohibited States

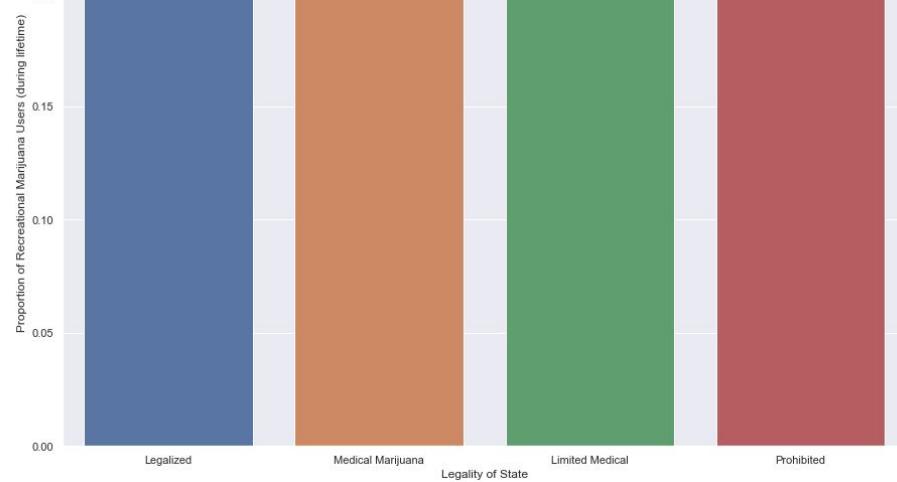


Marijuana Usage During Lifetime by Legality

Proportion of Medical Marijuana Users 2018 by Legality

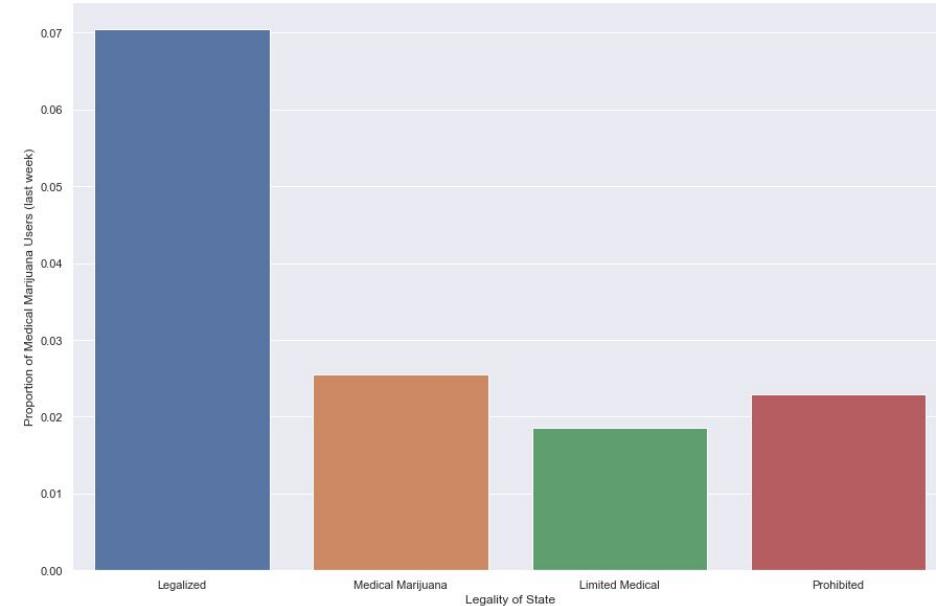


Proportion of Recreational Marijuana Users 2018 by Legality

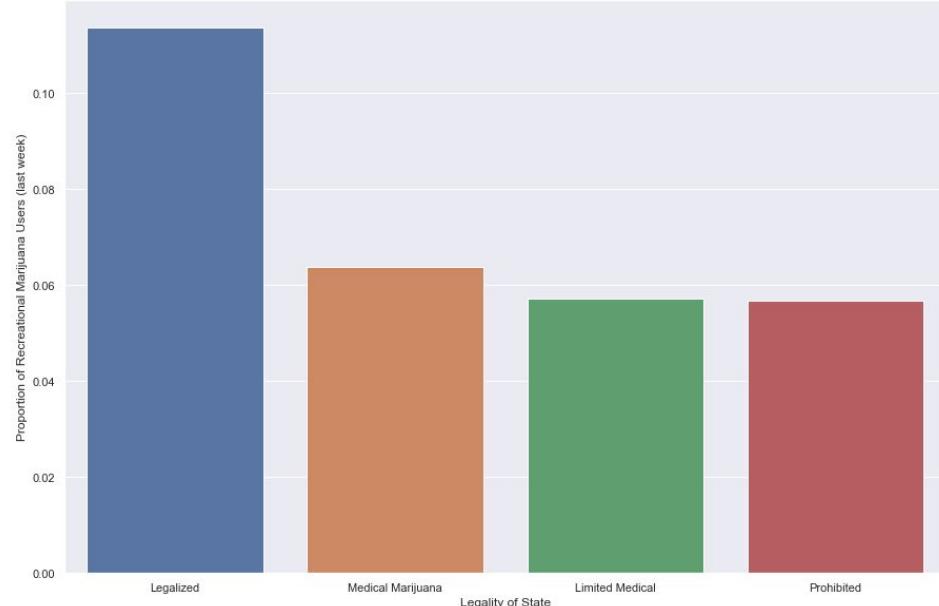


Marijuana Usage Within the Last Week by Legality

Proportion of Medical Marijuana Users 2018 by Legality

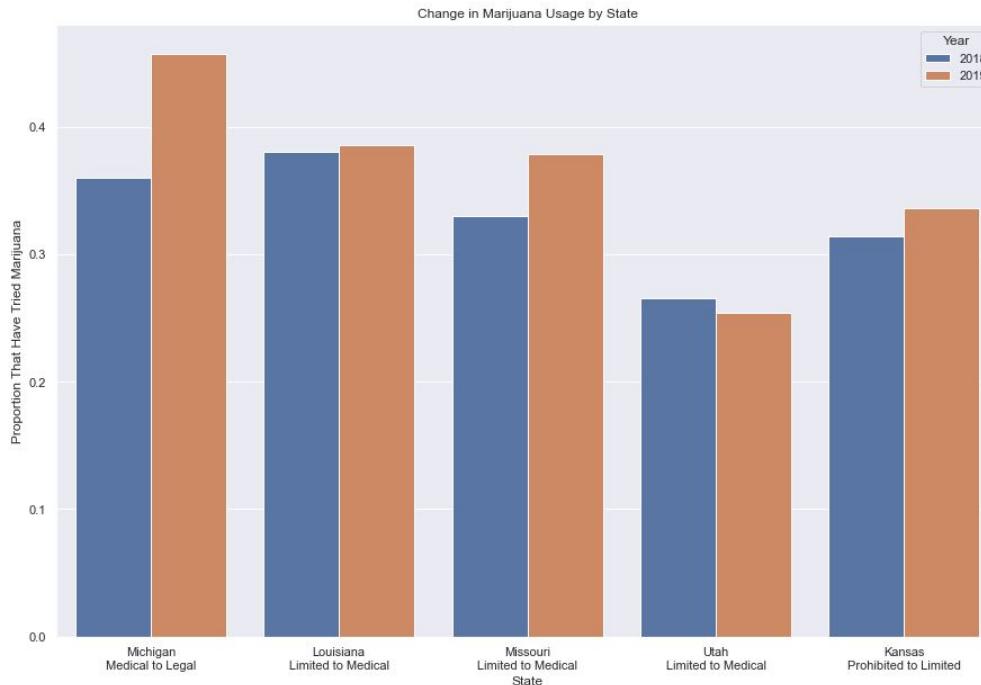


Proportion of Recreational Marijuana Users 2018 by Legality



Changes in Overall Marijuana Usage

The states that had law changes from 2018 to 2019 are Michigan from medical use to fully legalized; Louisiana, Missouri, and Utah from limited medical use to full medical use, and Kansas from prohibited to limited medical use.



Legalization of Marijuana- Summary of Findings

- Patterns within medical and recreational marijuana usage do not vary too greatly between different legalization statuses of marijuana
 - The proportion of people who use medical marijuana increases as it becomes more legalized, even if medical marijuana has already been fully legalized
 - Recreational marijuana usage does not change with its legalization status as much as medical marijuana usage does
- Overall marijuana usage changed from 2018 to 2019 greatest in Michigan where it became fully legalized, and less in states where it changed from limited medical to full medical use and prohibited to limited medical use

External Data Sources

-2018 Legalization of Marijuana:

https://web.archive.org/web/20180313205813/https://en.wikipedia.org/wiki/Legality_of_cannabis_by_U.S._jurisdiction

-2019 Legalization of Marijuana:

https://web.archive.org/web/20190406065735/https://en.wikipedia.org/wiki/Legality_of_cannabis_by_U.S._jurisdiction

- Substance Abuse and Mental Health Services Administration, *National Survey of Substance Abuse Treatment Services (N-SSATS): 2018. Data on Substance Abuse Treatment Facilities.* Rockville, MD: Substance Abuse and Mental Health Services Administration, 2019.

<https://www.census.gov/newsroom/press-kits/2018/pop-estimates-national-state.html>