The Unseen Impact of Substance Abuse on Mental Health

Brenna Manning and Emily Wang | Data Science 2016 | github.com/greenteawarrior/DataScience16CTW

A first look:

Depression & Drug Abuse

— All of the time

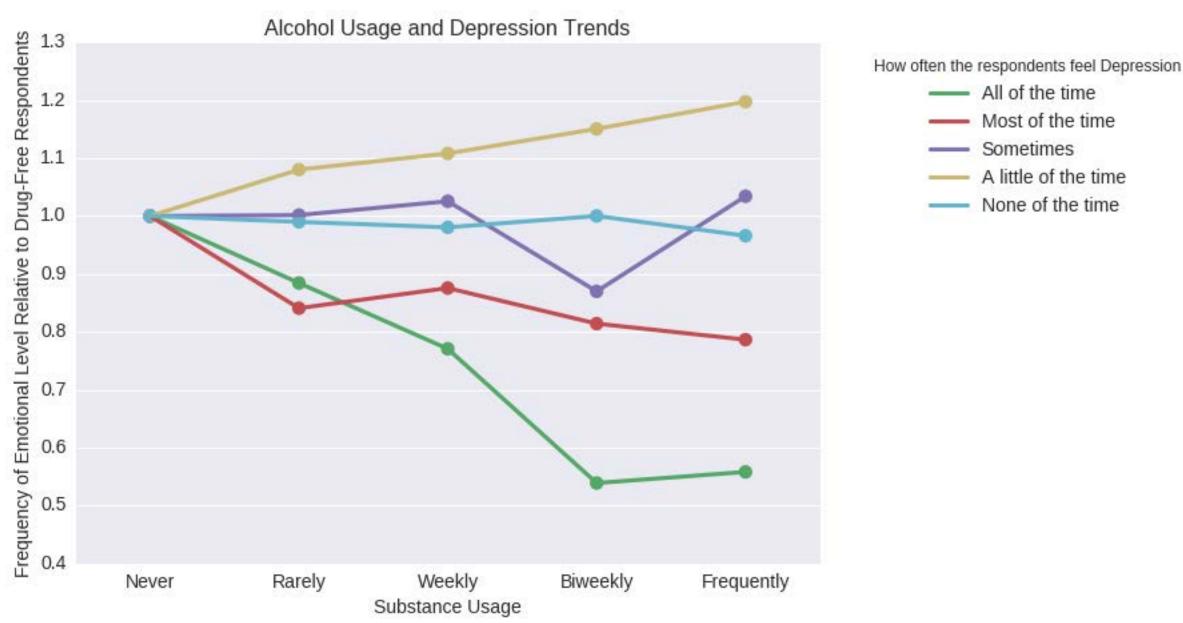
Most of the time

— A little of the time

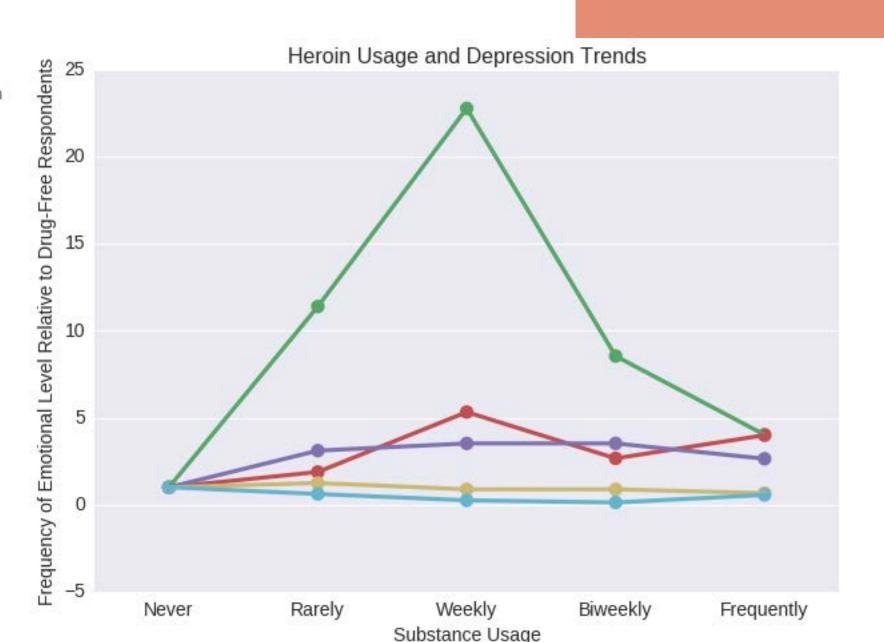
— None of the time

<< How does a long-term relationship with drug abuse impact emotional behaviors, and why? We investigated how often people with various levels of commitment to a drug felt depressed compared to those who did not use the drug. These visualizations are

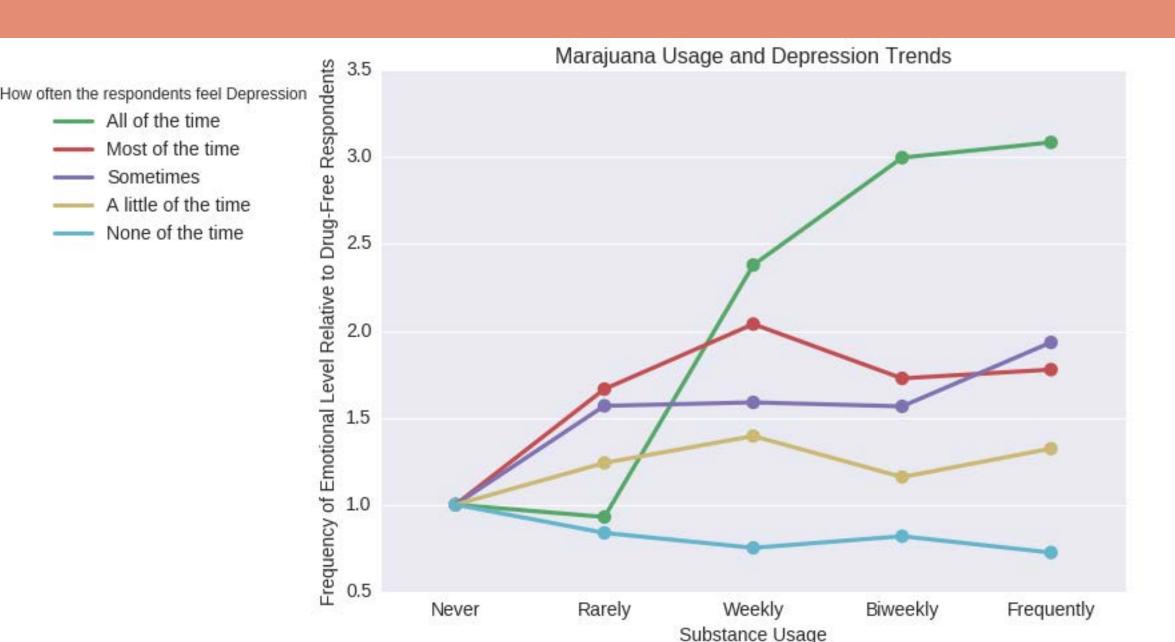
likely an artifact of many different stories throughout the dataset. A respondent who uses a drug every day may have emotional trends similar to those who do not use the drug at all. (This doesn't mean that the drug abuse is not affecting their personal and professional lives in other ways). These depression patterns can be drastically different from those who are facing withdrawal, use the substance to cope with other negative aspects of life, and so on. "Why?" We've only scratched the surface of what's going on with these respondents, and can only think of more questions to ask both the dataset and individuals to understand further. How does the existing culture and community around a particular drug affect these symptoms? Does the observation that alcohol app<mark>ears to be the most "socially acceptable" drug in the dataset</mark> explain the differences in its trends?



Surprisingly, respondents who consume alcohol the most often tend to be the least frequently depressed.



The overwhelming majority of always-depressed respondents who use Heroin are weekly users.



The frequency of depression tends to increase with frequency of marijuana use.

Getting HELP is different with mental health

<< What happens when when your illness is INVISIBLE?

— All of the time

Sometimes

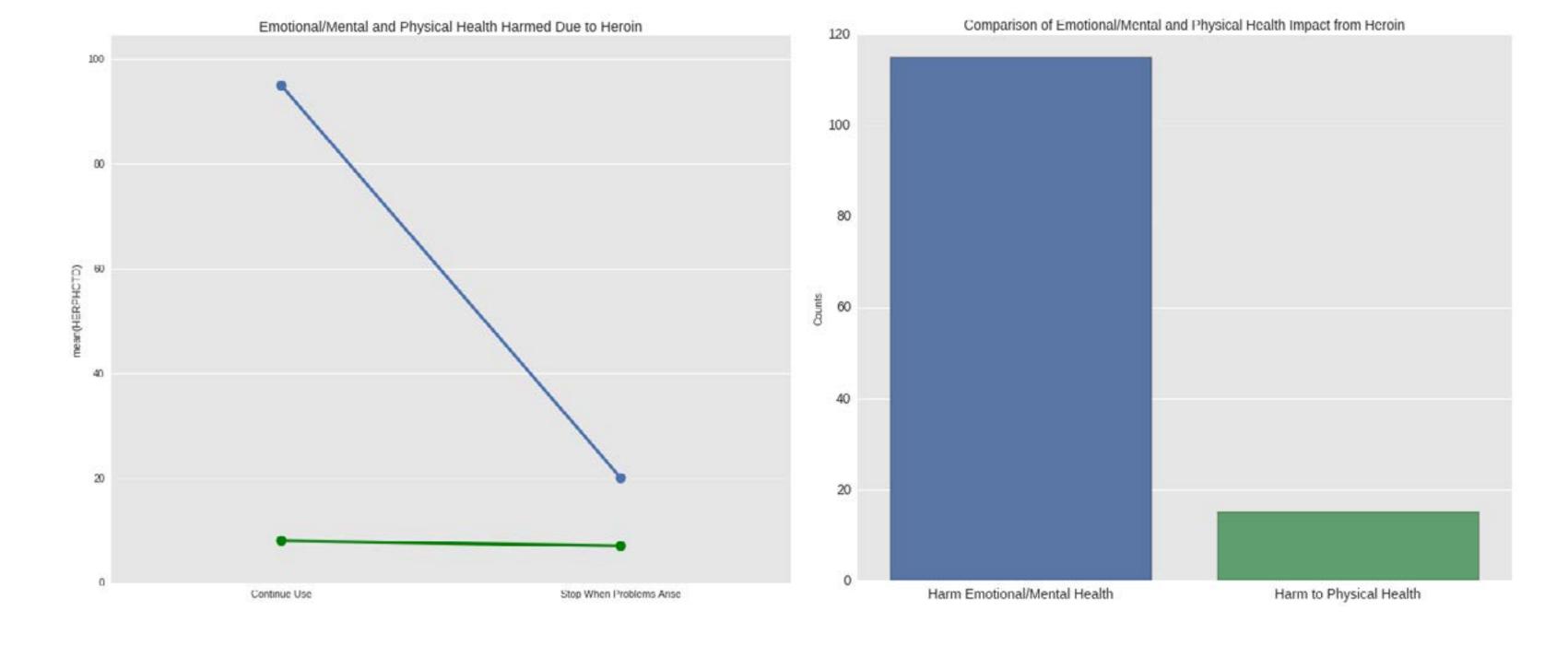
Most of the time

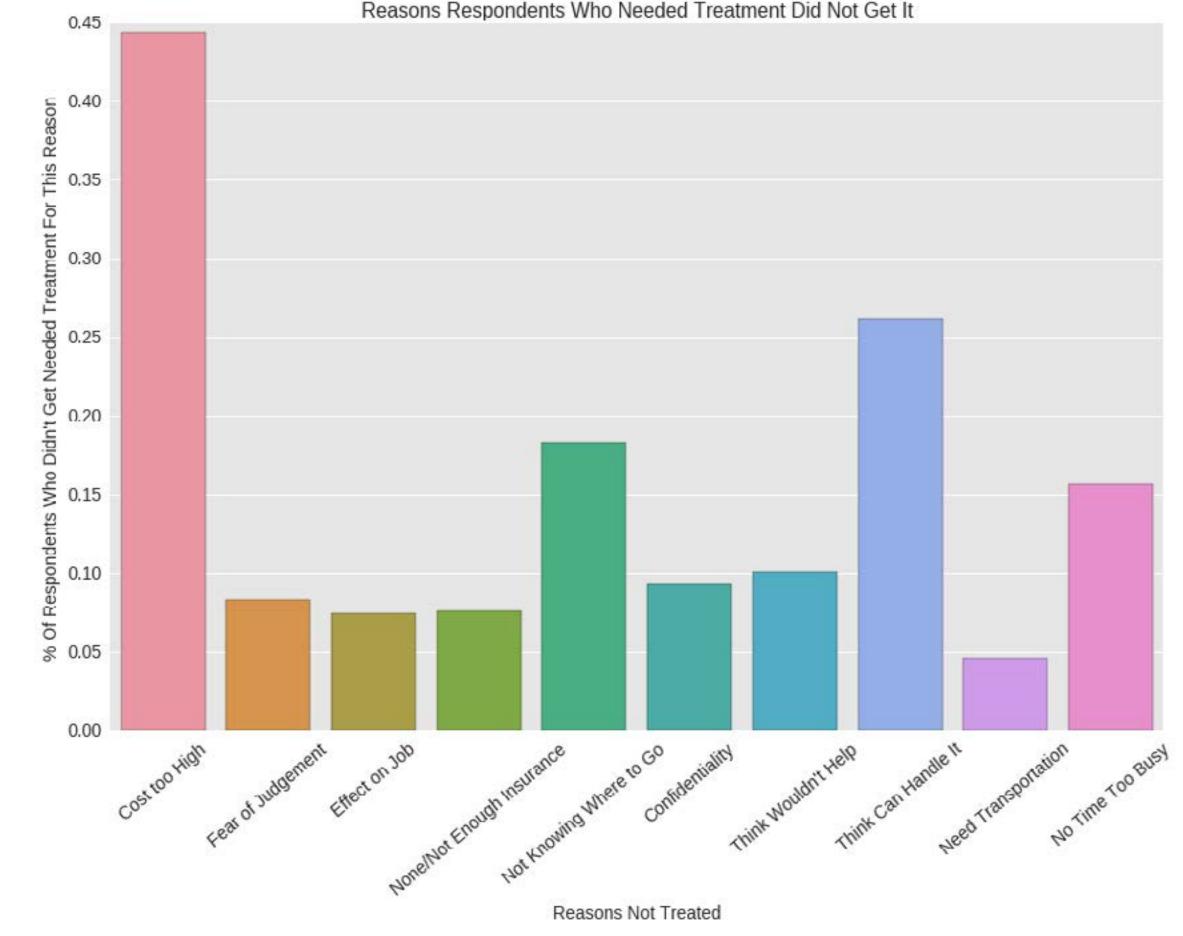
A little of the time

- None of the time

<<< What happens when your substance use or your struggle with substance abuse is hurting your mental health?

We found that mental health was more likely to be hurt by substance abuse than physical health, and that compared to those experiencing physical harm, far fewer people experiencng harm to their mental health changed their behavior.





The most common reasons people gave for not getting treatment for substance abuse problems were that they could not afford it, and that they believed they could "handle it".

How often the respondents feel Depression

— All of the time

— None of the time

Implications; call to ACTION

From the top down, policymakers need to prioritize the mental health of the population at large, and provide resources to build support to those who are already in complicated situations. New mental health facilities need to recognize these barriers to getting treatment, and reinvent programs to be more accessible to the groups we found in the

survey data. At the grassroots level, the population at large needs to dissolve the stigma around mental health, and participate in mental health outreach to provide support for positive change in an inclusive manner.

This project was done with public data from the 2012 National Survey on Drug Use and Health. The data, codebook, and additional resources can be found at www.icpsr.umich.edu/icpsrweb/ICPSR/studies/34933. We would like to thank Olin Professor Paul Ruvolo for his feedback during this project.