

Drug Link: Incarceration Insights

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Abstract—This paper will explore the relationship between drug epidemics and incarceration rates. A considerable amount of the prison population in the United States is strongly related to drug-related offenses with an estimated sixty-five percent having a substance use disorder (SUD) [4]. By proving that drug epidemics, such as the Opioid Epidemic, are a causation of increased incarceration rates, this paper will show a need for more substance treatment in the criminal justice system and SUD prevention strategies.

I. INTRODUCTION

This project will investigate the link between the various drug epidemics throughout the years and their impact on incarceration rates in the United States. The current epidemic impacting America is the Opioid and Fentanyl Epidemic which has skyrocketed drug overdose deaths to be the leading cause of death for Americans over fifty [5].

II. BACKGROUND

A. Objective

The objective of this project is to study the data from across the United States. It will investigate the incarceration rates in the United States, and then overlay those rates with the drug epidemics throughout time. It will also investigate how many people are in jail for drug related charges.

B. Brief Motivation

The motivation behind this project is an interest in true crime. One of our members has recently been interested in various true crime documentaries that revolve around the drug epidemics. There has been a lot of news recently about how the Opioid Epidemic has impacted incarceration rates. This raises the question about previous drug epidemics especially Crack Cocaine Epidemic in the 1980s according to the Foundation for the Drug Free World [1].

III. DATA

There is an abundance of data that exists on the internet. It will take time to parse through and figure out what information can and cannot be used.

During preliminary research, we have discovered a few different sources that we believe will have valuable information. The National Center for Drug Abuse Statistics has an entire data set dedicated to "Drug Related Crime Statistics" [2]. This data set has information about various drugs and their correlating incarceration rates. Additionally the Bureau of Justice Statistics has a National Prisoner Statistics Program that highlights incarceration data for at least the last four decades [3].

A. How it Will be Collected

The data will be collected by looking through different sources. Once we determine the best sources to use, we will then download the CSV files. We will utilize pandas in order to read in the data. Additionally, we may have to convert charts/tables to CSV data that we would be able to use. We may also investigate other ways that we can collect data.

B. How it Will be Used

We will use the data to create various charts and tables that will allow us to analyze and make conclusions. We will utilize pandas, numpy, and matplotlib to do this. We may decide to utilize other tools in the future.

We will also create a visual aid that will allow us to showcase our data and findings in an appropriate manner. As of now, we have not decided what method we will use to display the data.

IV. PROCESS

The first step will be conducting research and determining the appropriate sources that we will use. Next, we will collect the data in the correct manner and sort through it. After we have collected and sorted the data, we will then analyze it the data. Finally, we will create a visual interface where we will report our findings and create the final report.

A. Responsibilities

During the duration of this project, each person will have specific responsibilities.

1) *Arshita*: Arshita will be in charge of reading in the data.

2) *Juliana*: Juliana will be in charge of researching and determining the validity of the data.

3) *Sarah*: Sarah will be in charge of cleaning up the data after we have read it in.

4) *All Members*: All of the members will work on the proposal and final report. They will work together to analyze the data and create the site where the results can be viewed.

B. Timeline of Milestones

The following timeline highlights the key tasks that we wish to have completed by the final deadline. We have four major tasks that need to occur: research data, ingest data, analyze data, and display data.

- By Mid-October, we will have determined which sources and data that we will use. We will have confirmed the validity of the data. We will have the data in the appropriate file types.

- By the beginning of November, we will have begun the initial ingestion of the data. We will be able to see some of data visually. This will allow us to begin to analyze the data.
- By the middle of November, we will have our data sorted and analyzed in the appropriate visual aides. We will have begun developing a platform to layout our data and complete further analysis. We should have most of the graphs on the page.
- By the end of November, we will have finished our analysis and our data will be organized. We will have our report complete that highlights more in-depth our results.

C. Expected Outcome

We expect to see a clear correlation between incarceration rates across the United States overlapping with the different drug epidemics throughout the years. There will be spikes in incarceration rates during the peak times of the different drug epidemics. There will also more than likely be an increase in drug-related charges during these peak times as well. Unfortunately, we believe that a decent number of inmates will have prior drug charges if we are able to find more data that allows us to study return rates of inmates.

V. CONCLUSION

This project will demonstrate our ability to collect and analyze "good" data. We will have a physical website to display our analysis and graphs/tables in a visually appealing way. We will be able to draw conclusions from the data that we collected, and we will be able to discuss how there is a correlation between the drug epidemics and incarceration rates. We will evaluate if our hypothesis and expected outcome matches the outcome that we see. If there is a strong correlation between drug epidemics, such as the Opioid and Fentanyl Epidemic, and increased incarceration rates, this paper will highlight a need for more substance treatment in the criminal justice system and substance use disorder prevention strategies.

APPENDIX

REFERENCES

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