

THE LEGALIZATION OF MARIJUANA STATES COMPARED TO NON-LEGALIZED STATES IN THE U.S. AGAINST VIOLENT CRIME RATES

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Introduction

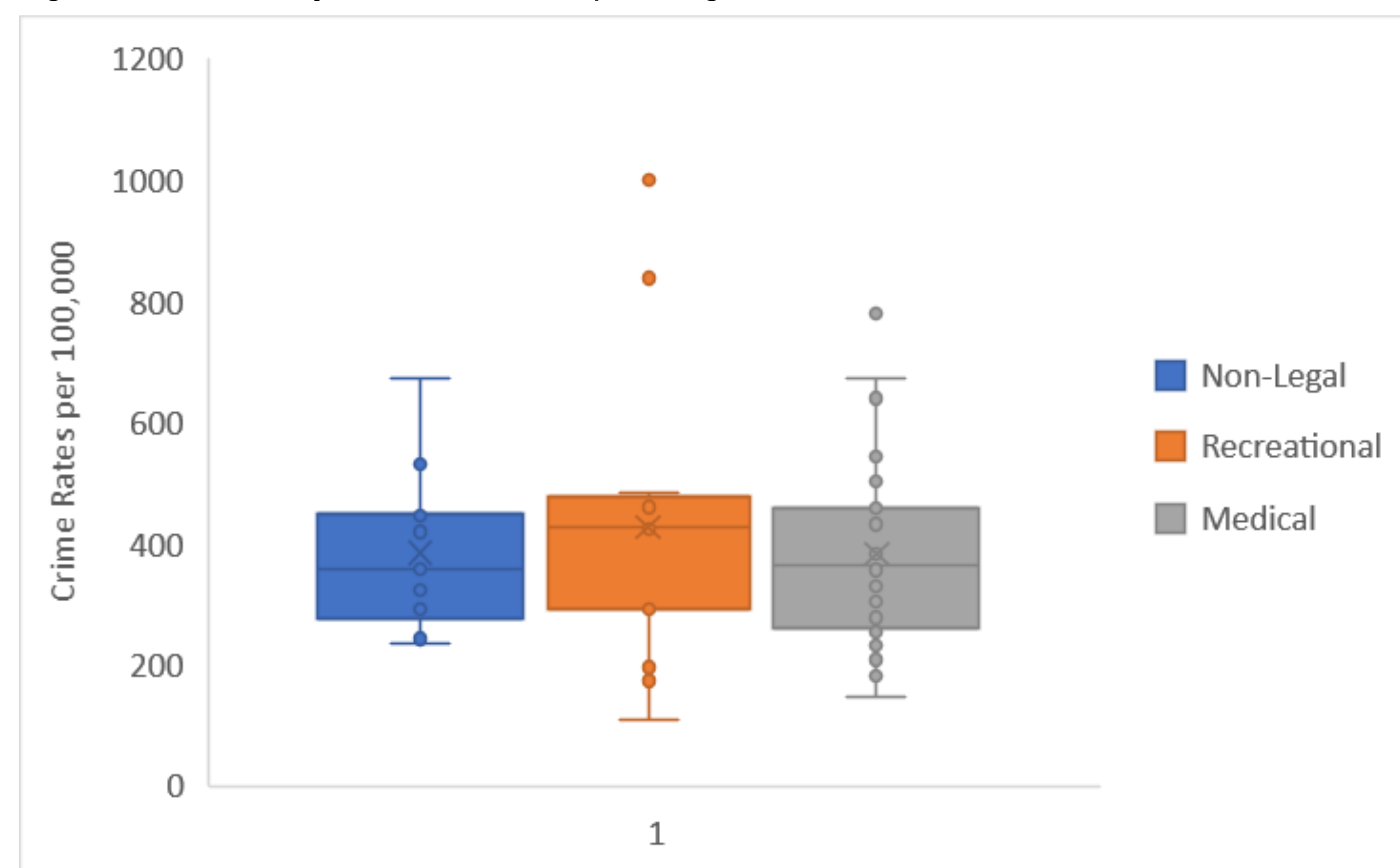
- Marijuana has been around for thousands of years for religious or medical purposes. Today, it is still used for medicine and for hemp products like rope (History Editors, 2017).
- However, there is still a large stigmatization against this plant. This tactic is mainly used in political parties against people of color, in the beginning, many were against Hispanic individuals for prosecution. Now, there are multiple concerns about the widespread legalization of marijuana and how it will affect our society.
- In the study, *The Effect of Medical Marijuana Laws on Crime*, they looked at U.S. state panel data on the legalization of medical marijuana and their corresponding crime rates. They found that it does not have a danger to public health which includes property and violent crimes (Morris, 2014). This shows that the scare tactics about how marijuana will negatively impact society are disproven.
- The hypothesis for this poster is that the states that have not legalized marijuana will have a higher crime rate than the states that have.
- Marijuana is known to have calming effects on individuals and to help with pain. When people start to take care of their physical and mental health they are less likely to engage in violent interactions. When individuals manage their pain instead of turning that pain into violence.
- Over the years there have been multiple studies done on the effects of mental and physical health associated with violence. One study that points this out is *How Better Access to Mental Health Care can Reduce Crime*. The study explains how having access to mental health care and reduce the involvement in criminal activities (Jácome, 2021).

Methods

- Categorized states by marijuana legalization status: Non-legal, Recreational, and Medical
- Found the crime rates for each state and grouped them by state legalization status
- Conducted an ANOVA on crime rates to see there was a significant difference in crime rates across the legalization statuses

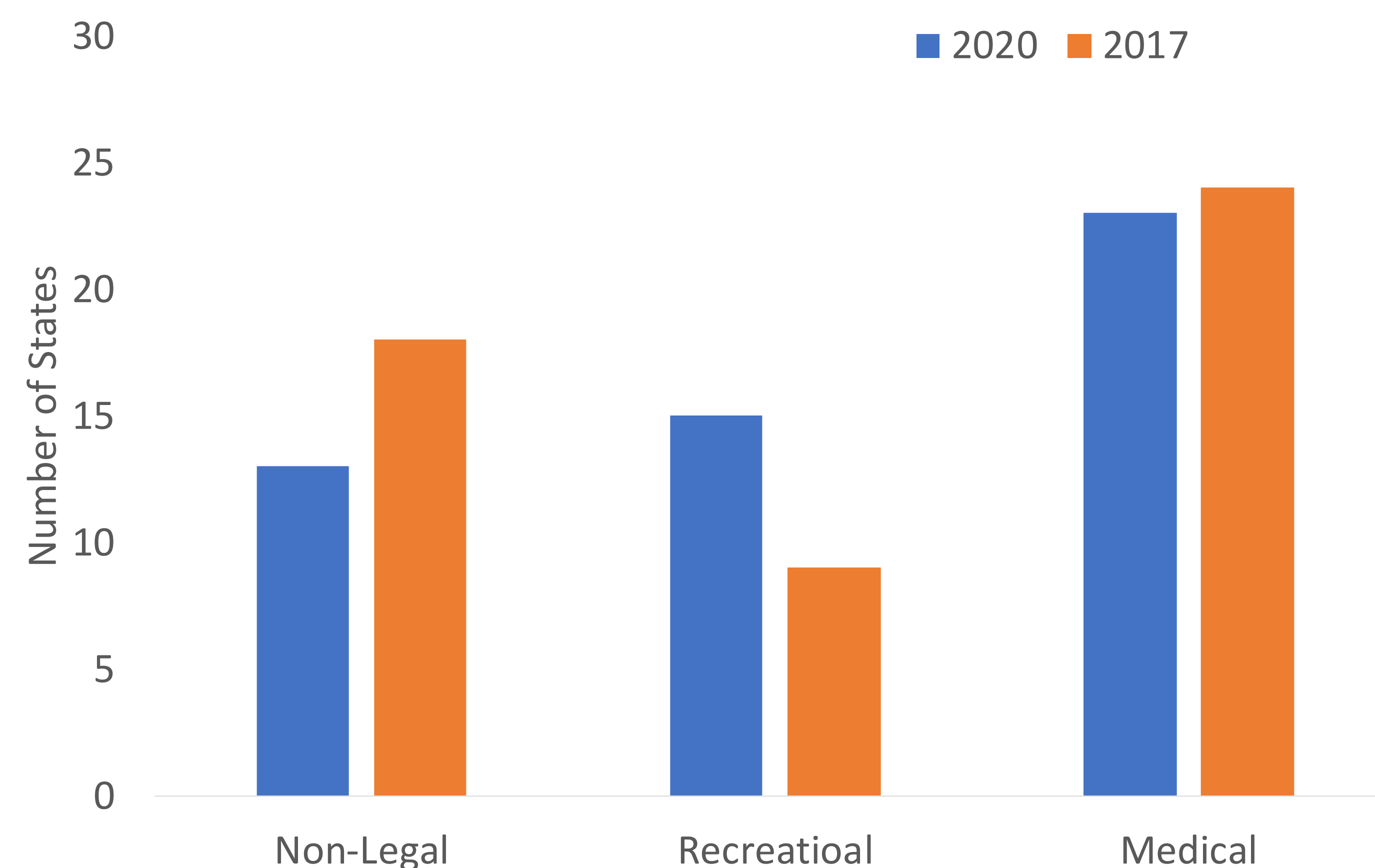
Results

Figure 1
Legalization of Marijuana and Corresponding Violent Crime Rates



Note: The crime rates and legislation data are from 2020. The p-value in ANOVA of the data is 0.74, indicating there was no significant difference in crime rates across the groupings. Legalization status of states was determined from "Where marijuana is legal in the United States" by Matt Lamers, Chris Roberts, and Chris Casacchia <https://mjbizdaily.com/map-of-us-marijuana-legalization-by-state/>. Crime rate data was collected from "Reported Violent Crime Rate in the U.S. 2020, by state" by Statista Research Department <https://www.statista.com/statistics/200445/reported-violent-crime-rate-in-the-us-states/?locale=en#statisticContainer>

Figure 2
The Legalization of States in Various Years



Note: The number of states where marijuana was legal or not legal. The number of states where marijuana is either medically or recreationally legal is increasing. Data was collected from "Where marijuana is legal in the United States" by Matt Lamers, Chris Roberts, and Chris Casacchia <https://mjbizdaily.com/map-of-us-marijuana-legalization-by-state/>.

Discussion

- Looking at the data from Figure 1, the p-value is 0.74. This means that there is no significant statistical difference between the three different legalization groups (non-legal, recreational, and medical).
- The hypothesis is disproven for this type of data analysis
- The different legalization groups have similar rates of violent crime. This could be from the uneven amount of states for each group.
- For the future, I would take the same amount of states from each legalization status to make it more accurate and then run the ANOVA.
- Another thing, is looking at other factors like demographics, gun control, and mental and physical health in each state that could cause more crime rates.
- From the data that was collected, marijuana does not have a negative affect on violent crime rates in the United States.

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