Is Gun Violence Distinctly an American Problem?

David Meiners
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https://github.com/dmonies/dsc680Portfolio

Domain Resources

The domain where the data is going to be leveraged as a main base is from the United Nations Office on Drugs and Crime (UNODC). According to *United Nations Office on Drugs and Crime,* the UNODC is the global leader on tracking crime throughout the world and is a well-recognized authority on the matters of global crime statistics. It also offers a superior global network of field offices to allow for better quality control and methods for collecting data associated with crime in various regions throughout the world.

To better understand the data and meanings of the gun violence I have identified the below resources to elaborate on some of the previous findings associated with gun related crime.

Reference 1

Cohn, D. V., Taylor, P., Lopez, M. H., Gallagher, C. A., Parker, K., & Maass, K. T. (2020, May 30). *Gun Homicide Rate Down 49% Since 1993 Peak; Public Unaware*. Pew Research Center's Social & Demographic Trends Project. https://www.pewresearch.org/social-trends/2013/05/07/gun-homicide-rate-down-49-since-1993-peak-public-unaware/.

Reference 2

Gun Violence Statistics. Giffords. (2021, May 29). https://giffords.org/lawcenter/gun-violence-statistics/.

Reference 3

Facts and Figures. (2018). https://health.ucdavis.edu/what-you-can-do/facts.html.

Reference 4

Aizenman, N. (2021, March 24). *Gun Violence Deaths: How The U.S. Compares With The Rest Of The World*. NPR. https://www.npr.org/sections/goatsandsoda/2021/03/24/980838151/gun-violence-deaths-how-the-u-s-compares-to-the-rest-of-the-world.

Reference 5

World Health Organization. (2020). *Estimates of rate of homicides (per 100 000 population)*. World Health Organization. https://www.who.int/data/gho/data/indicators/indicator-details/GHO/estimates-of-rates-of-homicides-per-100-000-population.

Reference 6

Bureau, U. S. C. (2021, April 20). *State Population by Characteristics: 2010-2019*. The United States Census Bureau. https://www.census.gov/data/tables/time-series/demo/popest/2010s-state-detail.html.

Reference 7

Howard Bauchner, M. D. (2017, December 1). *The Epidemic of Guns*. JAMA Psychiatry. https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2657419.

Reference 8

Gittins, W. (2021, March 24). *Which states have banned assault rifles in the US?* AS.com. https://en.as.com/en/2021/03/24/latest_news/1616614063_422035.html.

Reference 9

Knoema. (n.d.). *United Nations Office on Drugs and Crime - UNODC: Data and Statistics*. Knoema. https://knoema.com/atlas/sources/UNODC.

Reference 10

Xu, J., Murphy, S., Arias, E., & Kochanek, K. (2021). Deaths: Final Data for 2018, *69*(13). https://doi.org/10.15620/cdc:106058

Datasets

https://knoema.com/atlas/topics/Crime-Statistics/Homicide-by-Firearms/Homicides-by-firearm

https://knoema.com/atlas/topics/Crime-Statistics/Homicide-by-Firearms/Homicide-by-firearm-rate

The above datasets are derived from the United Nations Office on Drugs and Crime and provide statistics on homicides by gun violence throughout the world. The data is collected for both country and subregions in those countries to indicate the rate and raw values associated with homicides caused by gun violence. The data is compiled for 2005 to 2017.

https://en.wikipedia.org/wiki/Overview_of_gun_laws_by_nation

The table reflected in the above link contains a table that explores the various firearm controls which exist for each country. This includes the type of firearms which are legal and how they are allowed to be carried.

Research Purpose

The objective of this research is to understand if government oversight and regulation of firearms can decrease the number of homicides which occur.

The specific questions which are being analyzed are:

- Are there countries that have a higher rate of homicide while outlawing the use of firearms?
- What firearm regulations are associated with the lowest rate of homicides?
- Does banning assault weapons greatly decrease the rate of homicides which occur due to firearms?

Answering these questions will help in making a recommendation on how the United States can reform firearm policy to lower the overall rate of homicides which occur each year.

Methodology

The methodology which will be leveraged to understand the answers to the above questions will require constructing a dataset from multiple sources to conduct regression analysis. The dataset will then be evaluated for quality, missing data and outliers to ensure that there is not any countries in the dataset which may skew the results. The regression analysis will allow for the ability to see what firearm policies highly correlate with the number of homicides which occur in each country.

Potential Issues

For this project, I do not foresee seeing very many challenges are issues that may occur. One potential issue that may arise is that there is not any correlation to homicides and firearm policies. This would make it not possible to conduct regression analysis on the data which has been compiled. This could be caused by other factors which were not included within the dataset for analysis. I do not foresee this as occurring though, as the domain documentation hints at these items being highly correlated with one another.

Conclusion

The United States is observing a steady increase in the rate of homicides associated with the use of firearms over the last decade. Politicians are evaluating how to curb this trend with firearm reform being one of the most sought-after solutions. There is a wide mix of firearm policies throughout the world and the United States may be able to benefit from observing worldwide data trends to implement a firearm policy which lowers the rate of homicides. My analysis will discover what policies, if any, could be implemented to curb homicides in the United States through regression analysis to establish which factors correlate with the rate of homicides.