

Serial Killers: Murders, Motives, And Maps

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Introduction

This poster investigates the different variables that serial killers and their victims possess. The data being used includes statistics on killers and victims based in the United States and internationally, see [1, 2].



The data displays some of the factors that can play into someone being or becoming a serial killer. There are also statistics that show the elements that could possibly make someone a victim.

Materials and Methods

★ Data Collection

- We collected our sources from Kaggle and Radford University Serial Killer Statistics
- Chose data that gave detailed info on victims, location, race, and education, etc.
- Focused on both U.S. and International data for consistency and depth

★ Data Preparation

- Installed various packages including tidyverse, us_map, and map
- Copied raw statistics into excel spreadsheets, then exported as .csv files
- Removed special characters (e.g. commas, questions marks) that caused processing errors
- Standardized columns and cleaned incomplete or mislabeled entries

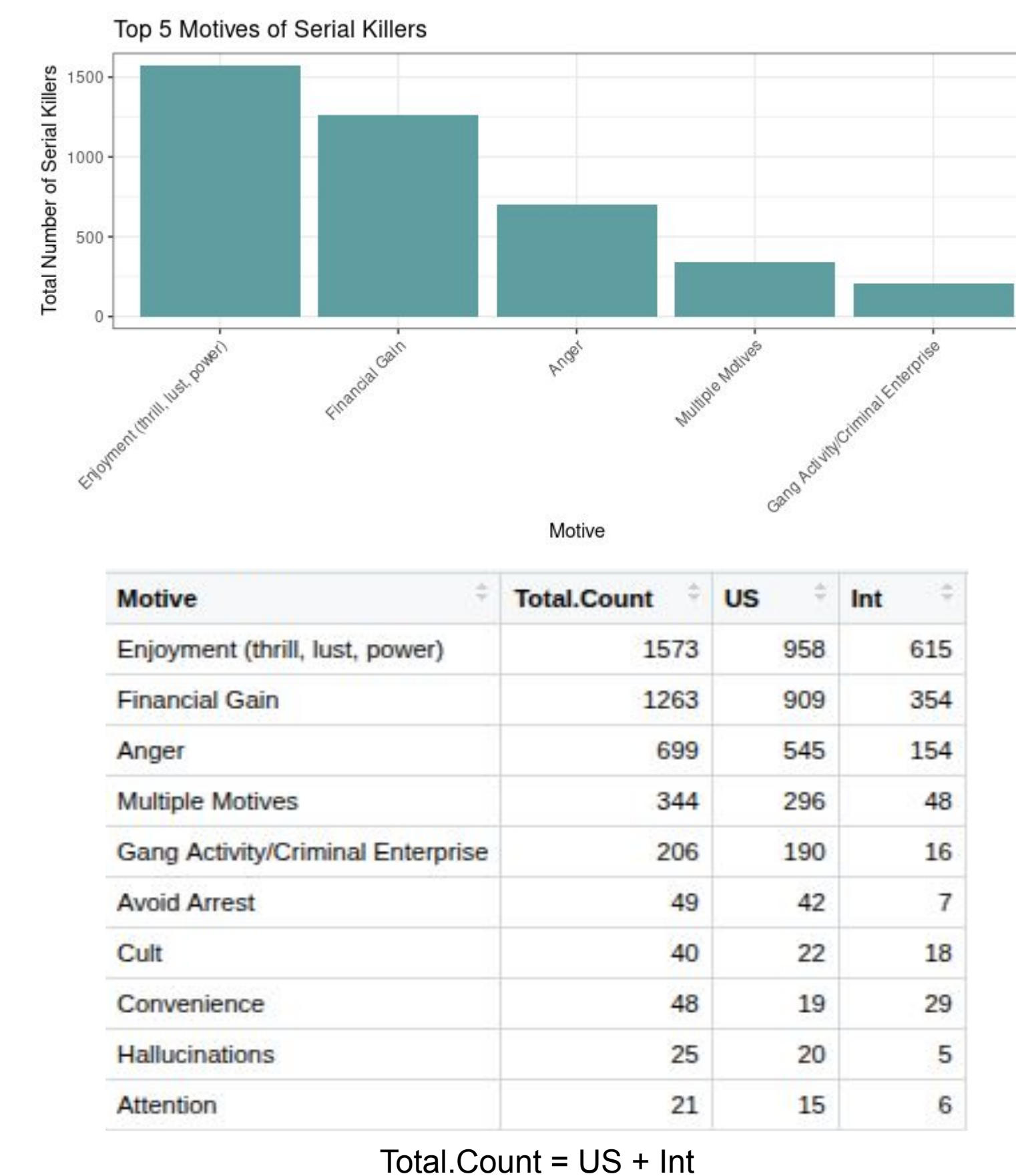
★ Visual & Analysis

- Created various geographical maps to observe trends
- Graphed killing methods, race, and gender across decades

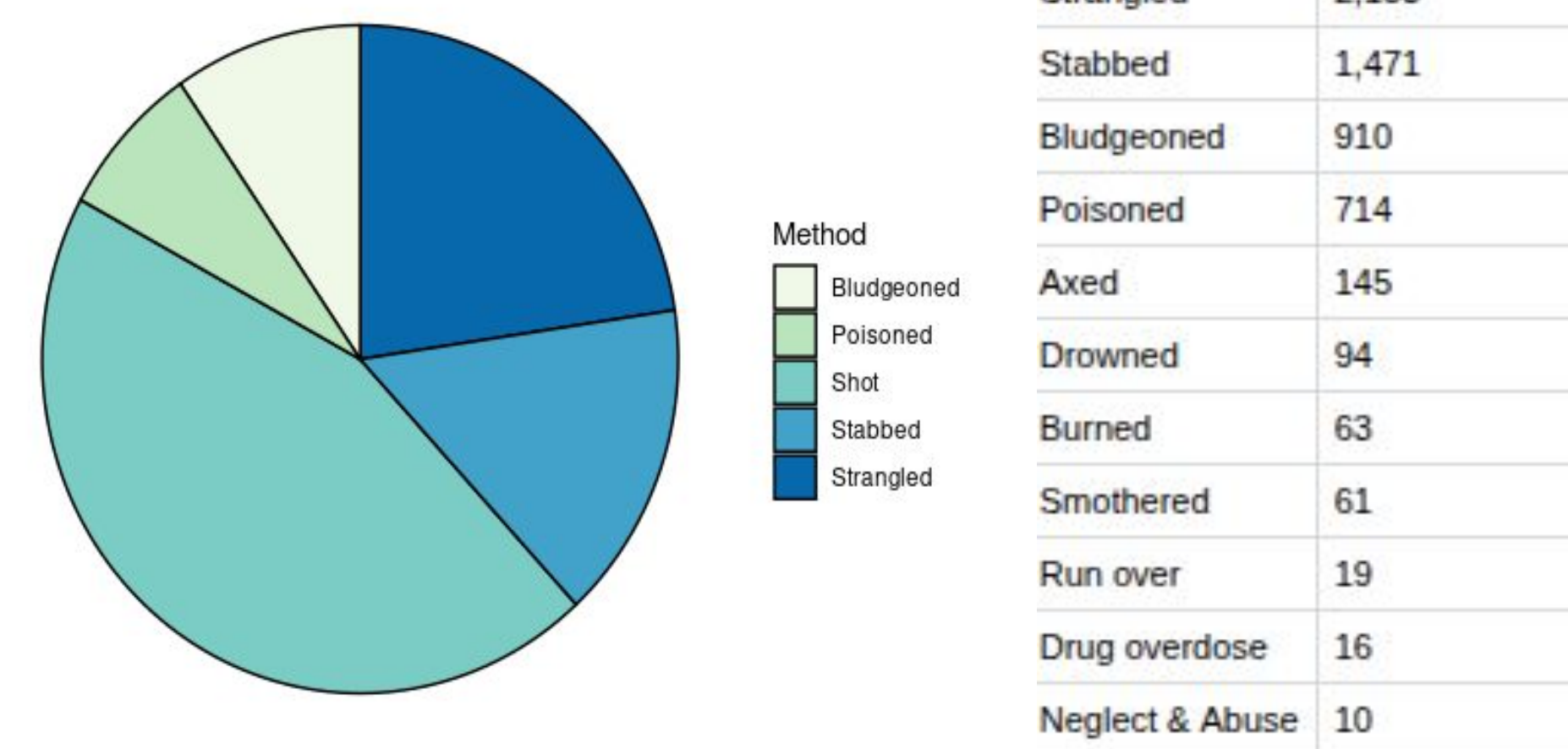
★ Challenges & Adjustments

- Data collected from the worldwide serial count had inconsistent labels and some missing entries from database
- Cleaned and restructured data multiple times for proper plotting
- Adjusted our visuals (theme, color, border) to keep it clear and consistent

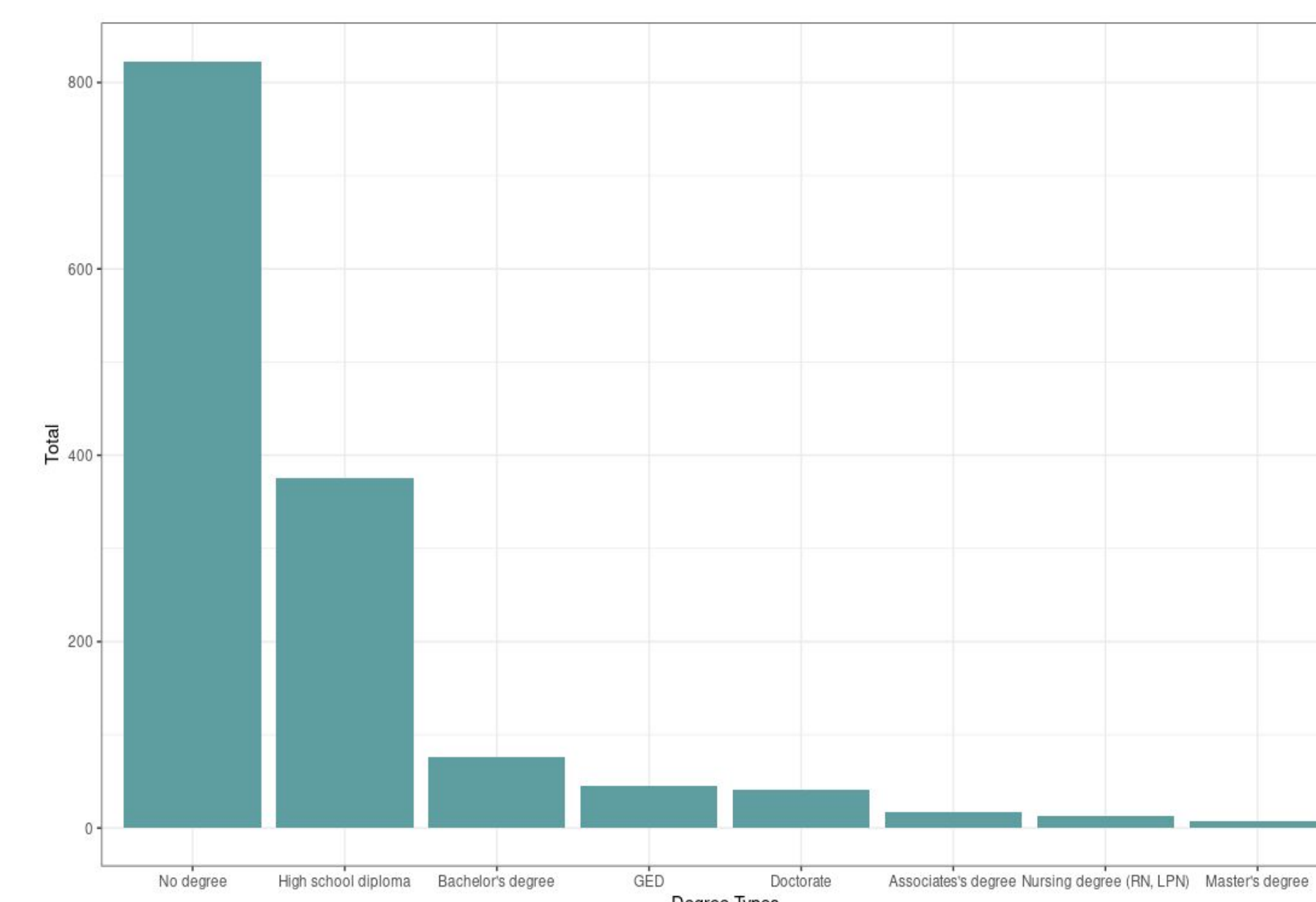
Results



Top 5 Methods of Killing in the US

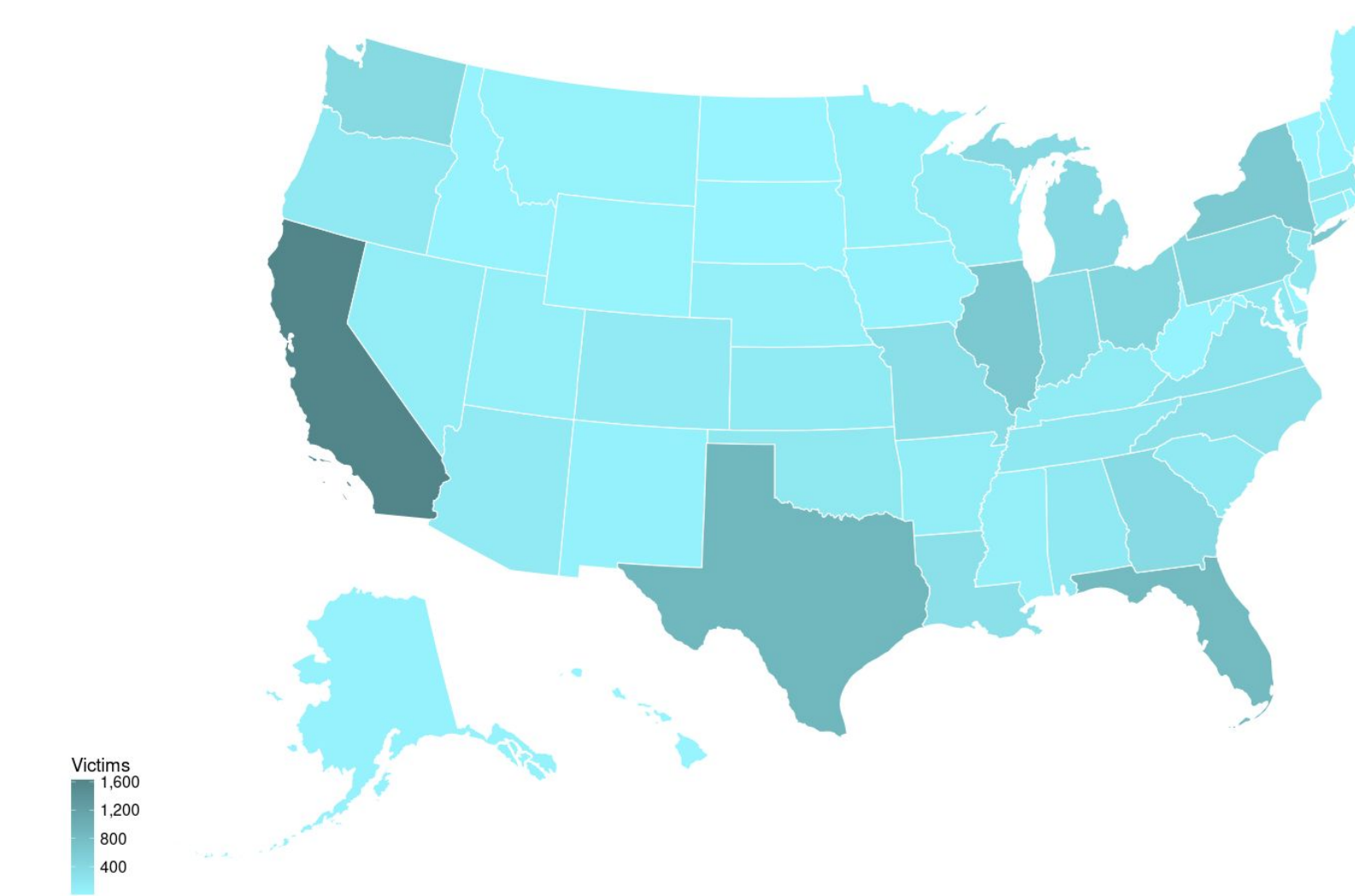


Education Obtained by Serial Killers

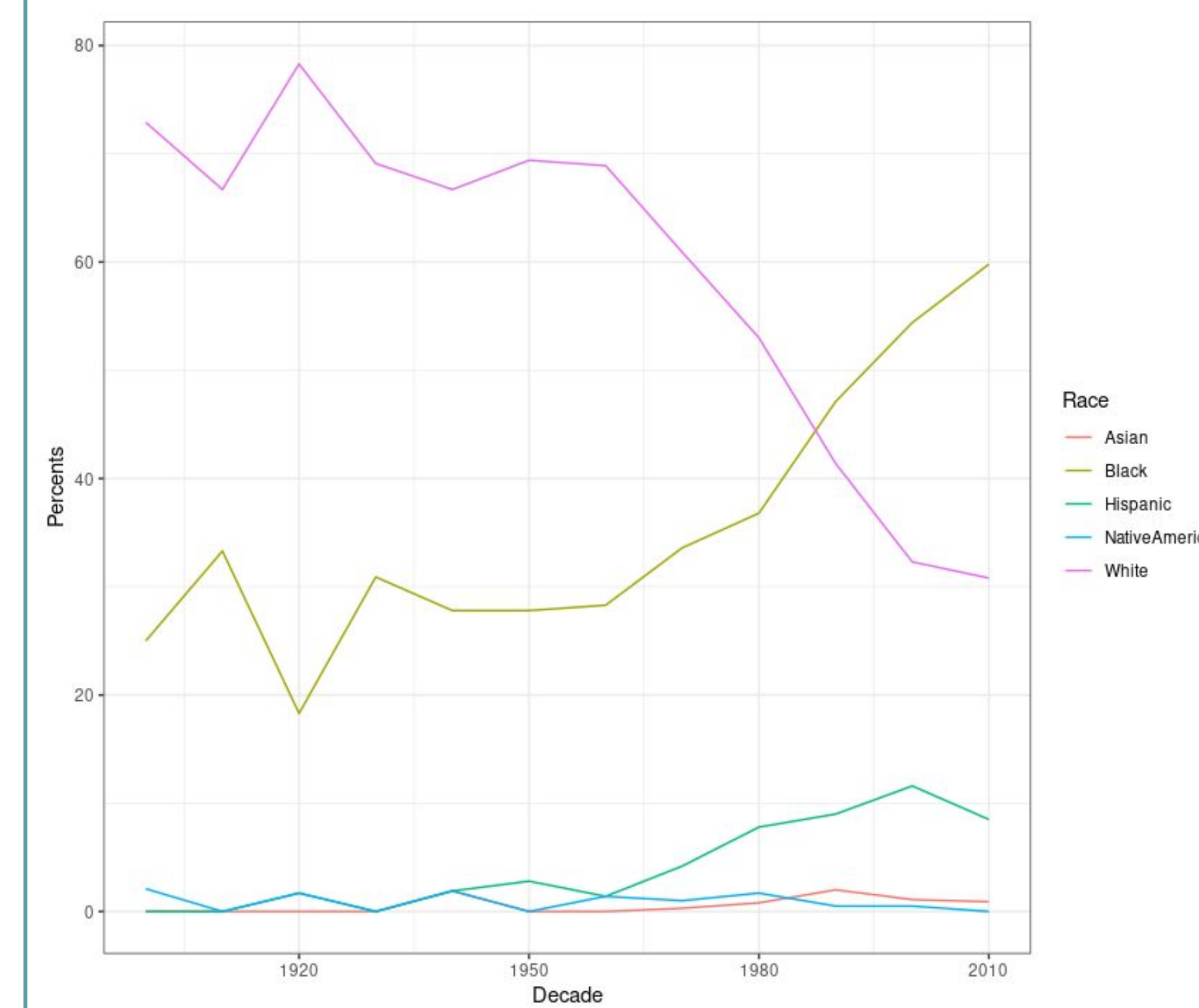


More Visuals

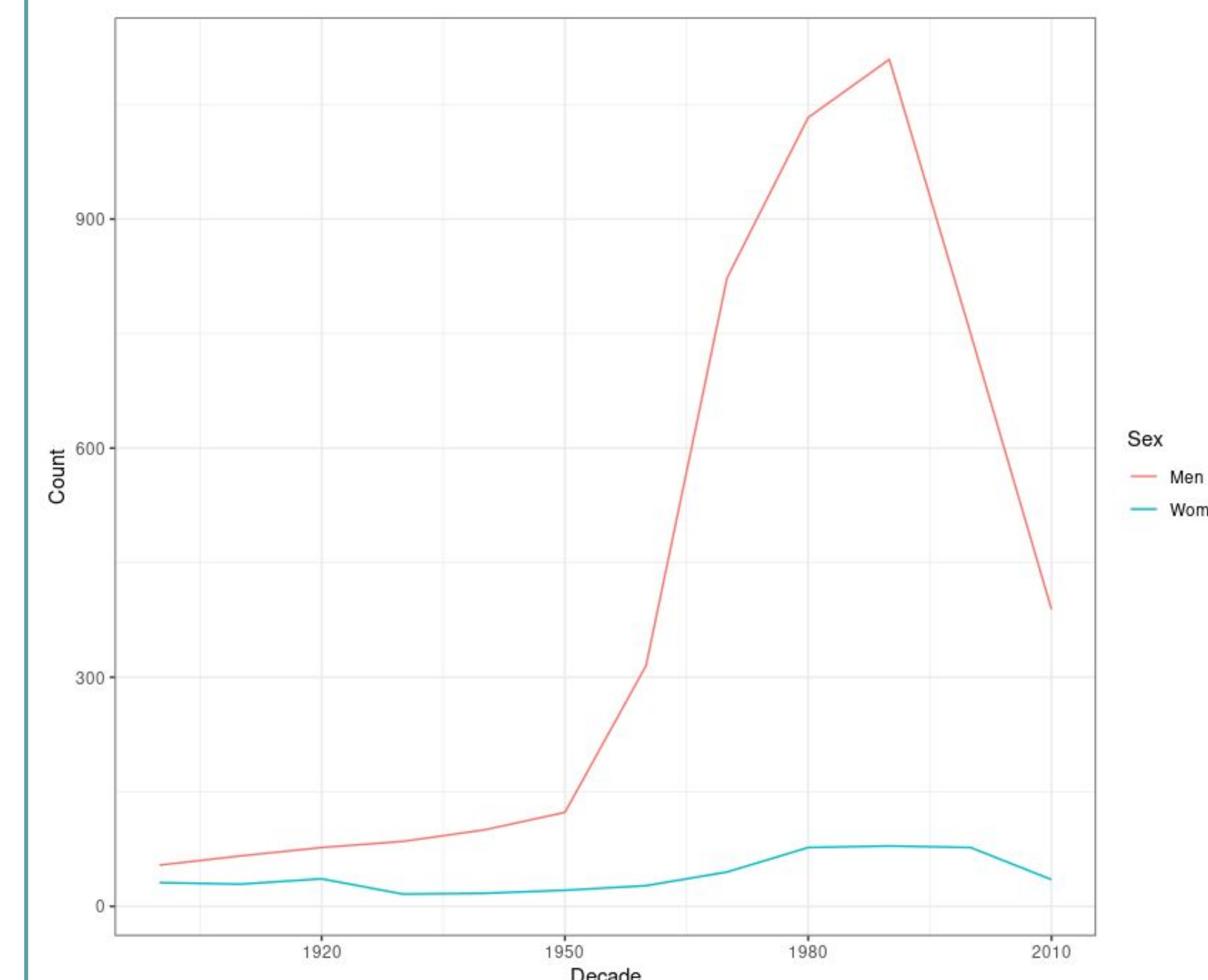
State-by-State Breakdown of Victims



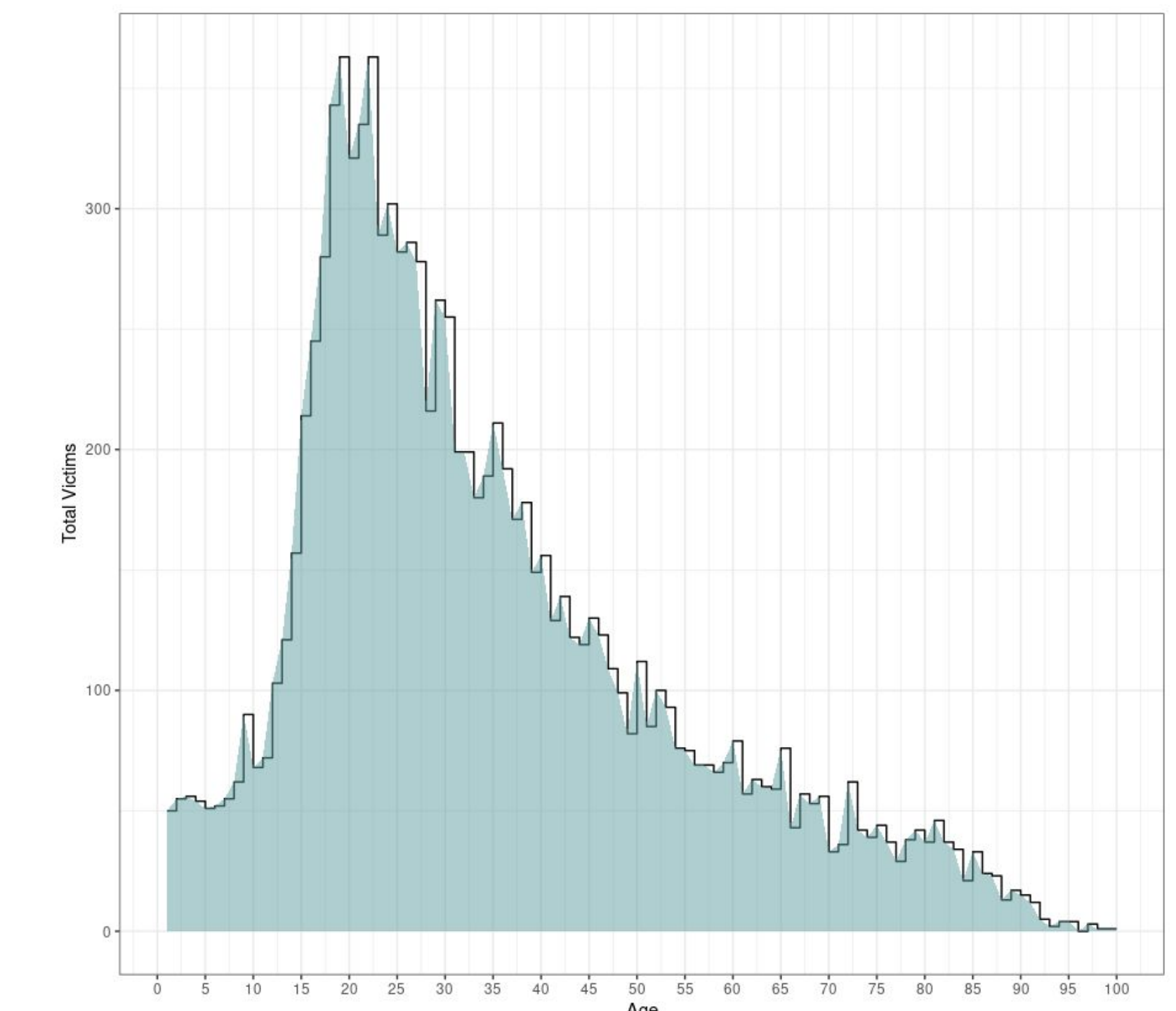
Serial Killers by Race Over the Decades



Serial Killers by Sex Over the Decades



Total Victims by Age



Conclusion

What did we learn?

- Geographical and personal serial killer characteristics
- Characteristics of victims

What does this reveal?

- We should be more aware of dangerous individuals with extreme mental health cases, as well as dangerous locations/ environments.
- There should be an increase in awareness about extreme mental health cases in order to reduce them.

What do we wish to research in the future?

- Correlation between serial killers and victims across U.S states and internationally.
- Correlation between government policies and legal systems that may influence the distribution of serial killers across the U.S and internationally.

References

- Aamodt, M. G., Leary, T., & Senthil Girimurugan. (2023, August 21). *Radford/FGCU Annual Report on Serial Killer Statistics: 2023*. ResearchGate; unknown. https://www.researchgate.net/publication/373258117_RadfordFGCU_Annual_Report_on_Serial_Killer_Statistics_2023
- World Population Review. (2023). *Countries with the Most Serial Killers 2022*. Worldpopulationreview.com. <https://worldpopulationreview.com/country-rankings/countries-with-the-most-serial-killers>

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