Gavin Lam

Professor McCabe

Data Science 01:790:391:01

18 December 2024

Gendered Opinions on Background Checks and its Implications on Public Policy

Gun control is one of the most pressing topics in contemporary American society. As the Second Amendment confers the right for private citizens to own a firearm, there is much debate surrounding the extent to which firearms should be regulated. Following what seems to be a rising trend of mass shootings plaguing the United States, the media has become increasingly critical of the Second Amendment to the detriment of private gun owners. One such shooting occurred in Parkland, Florida on February 14, 2018, when a gunman opened fire at Marjory Stoneman Douglass High School, killing seventeen (BBC 2022). Following the tragedy came a deluge of anti-firearm rhetoric and a national conversation about the future of firearm regulations.

A poll conducted by the Marist College Institute for Public Opinion collected data from a sample size of 880 individuals from around the country and asked questions regarding their opinions on gun control policy as well as sentiments regarding the Parkland shooting. Using this study, I will model opinions on background check efficacy based on gender using a linear regression and performing a hypothesis test to find out if the results are significant enough to conclude whether there is evidence that opinions on background checks are affected by gender. I will also investigate how effective background checks are at curbing gun violence and determine if public opinion reflects this result. To produce a decrease in firearm violence, it is necessary to balance evidence-based approaches and public opinion, ensuring that there is a popular mandate for meaningful change.

Using R studio, two new variables of data were created that translated the gender of survey respondents into 1, male, and 0, female and the response to the question of whether background checks make a difference into 1, yes, and 0, no. Then, using the “lm function”, a regression line was created. Because the data was translated into binary 0's and 1's, with 1 representing male and a belief that background checks work and 0 representing female and a belief that background checks do not work, there is only four points on the scatterplot. However, the plot still shows the mean belief in background check efficacy with 88% of women believing that background checks are effective while 79% of men feel the same way. To determine if these results were significant, a hypothesis test was performed. The null hypothesis is that there is no difference between men and women in the mean belief that background checks work. The alternative hypothesis is that there is a difference between men and women in the mean belief that background checks work. Using a confidence interval of 95%, we can be 95% confident that the true mean difference between men and women in the belief that background checks work lies between 0.03 and 0.15. Additionally, because the p-value < 0.05 we can reject the null hypothesis that there is no difference between men and women in the mean belief that background checks work. By rejecting the null hypothesis, we can be mostly certain that there is not enough evidence to support that men and women equally believe that background checks are effective. Although it is likely that women tend to believe background checks are more effective than men, a large majority of respondents, regardless of gender, are confident that background checks work.

Since there is widespread belief that background checks are effective, do they produce the intended result? Between 1976 and 2022, eighteen states have implemented universal background checks that extend beyond the provisions of the Brady Act, encompassing all gun sales. Twelve of these states require that a background check is conducted at the point of sale whenever a firearm is purchased. In contrast, seven states require anyone who is interested in purchasing a firearm to acquire a permit, a process that includes a background check. In a study done by Michael Siegel, Siegel analyzes the effects of universal background check laws and permit laws on firearm homicide rates. He finds that states with a background check requirement at the point of sale do not achieve lower homicide rates or firearm homicide rates. However, states that required a permit before purchasing a firearm saw significant decreases in overall homicide rates as well as firearm homicide rates (Siegel 2024). As demonstrated by the data, background checks when accompanied by firearm permits are effective at reducing firearm violence, but to achieve a true reduction in firearm violence, all states need to implement these rules. Otherwise, potential offenders will continue to have access to firearms through illegal gun trafficking from states with weaker gun laws to states that require permits. Between 2017 and 2021, the United States recovered over 1.4 million guns used in crimes, and nearly a quarter of them crossed state lines, with 74% of them originating in states with no background check requirements (Everytownresearch 2021). Due to a lack of policy uniformity, states that have followed the evidence and implemented permits are suffering the externalities of states that neglect that process. As shown by the data modeled in R Studio, public opinion of background checks is very favorable which should be an opportunity for a policy window to open. However, policy proposals that arise after mass shootings are often motivated by passion and anger geared towards short-term and immediate results such as gun buybacks. Although gun buybacks remove some guns from circulation and act as an easy and tangible way to measure effectiveness based on the number of guns acquired, there is limited evidence to suggest they decrease firearm violence (Charbonneau 2023). As such, it would benefit public safety for policy makers to implement gun permits rather than wasting valuable resources on gun buybacks.

The issue of firearm violence requires a nuanced approach that balances public opinion with evidence-based policy. Despite the results of the analysis demonstrating a significant difference between men and women in the mean belief that background checks are effective, there is still overwhelming support for the notion that background checks achieve lower firearm violence rates. This widespread public favor should serve as a foundation for crafting effective policies that address firearm violence. However, as evidenced by further research, background checks alone are insufficient in decreasing firearm violence without the inclusion of mandatory permits. Although few states have implemented this evidence-based approach, those that did saw measurable reductions in firearm homicide rates. Moving forward, policy makers must continue to prioritize effective policies, such as gun permits, over passion-fueled and ineffective strategies, such as gun buybacks. By aligning the interests of the public with evidence-supported methods, the United States can be one step closer to realizing a future with far less gun violence.

Works Cited

*BBC News*. 2022. “Parkland Shooting: How the Attack Unfolded.” October 12, 2022. <https://www.bbc.com/news/world-us-canada-43071281>.

Charbonneau, Amanda. 2023, “Gun Buyback Programs in the United States,” *rand.org,* 2023-1,<https://www.rand.org/research/gun-policy/analysis/essays/gun-buyback-programs.html#:~:text=Advertised%20by%20taglines%20like%20%22Anonymous,%2C%20and%20Petrie%2C%202005>).

*Everytownresearch.* 2021, *“*Five Things to Know About Crime Guns, Gun Trafficking, and Background Checks,” <https://everytownresearch.org/report/five-things-to-know-about-crime-guns/>

NPR/PBS NewsHour, NPR/PBS NewsHour/Marist Poll: February 2019 Gun Violence, Marist College Institute for Public Opinion, (Cornell University, Ithaca, NY: Roper Center for Public Opinion Research, 2019), <https://ropercenter.cornell.edu/ipoll/study?doi=10.25940/ROPER-31116083>

Siegel, Michael. 2024, “Universal Background Checks, Permit Requirements, and Firearm Homicide Rates” *JAMA Netw Open*. 2024-8, <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2821813>