Project 1: Research Proposal Alexander Ahmann

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In America, police violence against ethnic minorities is not an exception, it is normal, and the most recent example would be the murder of George Floyd¹. It is of the upmost importance that society attacks this problem to promote social justice and reduce the pain and suffering of those communities that are negatively affected by police violence. In my judgement, I believe that this we must first attempt to understand the problem before working out solutions.

Literature review

There are plenty of research jobs that have been conducted prior to my research proposal. An early study by Murray and Herrnstein (1996) attempted to predict the probability of an individual being "in the top decile of self-reported crime" and the probability of and individual "ever [being] interviewed in a correctional facility."

Their method was to use a multivariate logistic regression model with IQ and socioeconomic status in their feature space², and with the authors claiming that IQ had a greater effect on criminal behaviour. The IQ's regression slope for the "top decile" response variable is $\beta_{zAFQT} \approx -.26$ (basic analysis, p. 644) and the IQ's regression slope for the "interviewed in a correctional facility" response variable is $\beta_{zAFQT} \approx -.89$ (basic analysis, p. 645), implying an inverse relationship between IQ and criminal behaviour. In other words, the higher someone's IQ, the less likely they are to be a criminal.

Murray and Herrnstein also took race into account in their analysis. They

¹https://en.wikipedia.org/wiki/Killing_of_George_Floyd

²Murray and Herrnstein used *Armed Forces Qualification Test* (or AFQT) scores as a proxy for IQ. So, with the β regression slope coefficients, I will use a "zAFQT" subscript.

noted that blacks, on average, had lower IQs than whites (p. 279). So, given their logistic regression model, one could reason that blacks, on average, are more likely to be arrested or experience violence from the police because of their below average IQs. It should be noted that there are several flaws with Murray and Herrnstein's study (Gould, 1996) and that it was published relatively early, so we should look at more up-to-date studies.

A more recent study conducted by James et al (2012) that makes use of implicit bias tests shows that it takes longer to shoot black suspects as opposed to white or hispanic suspects. Their experimental design involved having police (n = 36), civilian (n = 72) and former military personnel (n = 6) responses to sixty (60) "realistic, high-definition" video footage. They then analysed the data with a multivariate logistic regression model, and concluded that blacks were less likely to experience violence compared to white and hispanics in the video footage.

Ross (2015) conducted a study analysing data from 2011 to 2014, and concluded that "results provide evidence of a significant bias in the killing of unarmed black Americans relative to unarmed white Americans, in that the probability of being (black, unarmed, and shot by police) is about 3.49 times the probability of being white, unarmed, and shot by police on average." The researchers later did follow up studies (Ross et al, 2018, 2020) and once again came to the conclusion that blacks were more likely to experience police violence.

Fryer (2016) shows that hispanics and blacks are about fifty per cent more likely to experience non-lethal force from the police. However, the author noticed that when statistical controls are put into place, they find no racial differences in extreme violence. The author then tries to explain policing behaviour in terms of utility maximization.

Davis (2017) conducted something of a meta-analysis where she looks specifically how the police interact with blacks. The author notes that black children are more likely to be placed in juvenile detention (903 per 100,000 black boys and 125 per 100,000 black girls), that African Americans are 2.5 times more likely to be arrested by the police, that black men are 21 times more likely to be killed compared to white men, that black men make up 35 per cent of the police population, along with more interesting findings.

Menifield (2018) shows that ethnic minorities are more likely to experience police violence and that the ethnicity of the police officer did not affect their decision to use lethal force. This study also showed that over two-thirds $(\frac{2}{3})$ of people killed the police possessed a gun, African Americans were more likely to be killed and that police violence is more of a problem with macro-level policies.

Edwards et al (2019) reports that "African American men and women, American Indian/Alaska Native men and women, and Latino men face higher lifetime risk of being killed by police than do their white peers" and that "[f]or young men of color, police use of force is among the leading causes of death."

Finally, a report written by Peeples (2020) shows that blacks are more likely to be shot by police, that police do indeed exhibit racial bias, that white officers are more likely to shoot a black person than a black officer in a largely black-populated neighbourhood, and that large cities account for 30 per cent of fatal police shootings.

While they disagree with each other as to what the causal factor(s) that explain black and other ethnic minority deaths are, the research jobs that I have discussed all come to the conclusion that blacks and other ethnic minorities are more likely to be arrested or killed by the police.

Social science principles

The social science principles that I will be dealing with are social roles, beliefs and values, and social institutions—specifically, the government and the economy. (see MindEdge 2020, ch. 1) Social roles such as the police and ethnic minorities will be discussed in my paper. (Ibid.) I will also inquire about the cultural elements that influence to the beliefs and values of the white population, the police in particular. (Ibid.) And the social institutions that I will be concerned with are the government—as policy does seem to have some effect on the police, and that the police is an arm of the government—and economy—as socioeconomic status does seem to play a role in police brutality against minorities.

Target audience

I intend my target audience to consist of those who are involved in government, civilians who vote and police officers themselves. In the government sphere, I am interested in the legistlative branch in particular because they are in charge of drafting laws. I also intend for my work to be digested by the executive and judical branch because they are in charge of enforcing and interpreting the law, as well as state and local governments, and the police officers themselves.

As for civilians who vote, I hope to target specifically whites who are obvilious to racial bias. A Gallup Poll (2020) shows that around 56 per cent of white adults are "confident" in the police. I hope that my research job can convince that subset of the white population to reconsider their confidence and hopefully encourage them to vote in politicians who will implement policies to reduce the effects of

police bias.

Writing style

I will taylor my message by making use of a historical discussion of both the research and rudimentary history of the issue itself. In the research side, I will view the peer-reviewed literature as an indirect discussion between scholars. For example, Murray and Herrnstein (1996) wrote an informal meta-analysis of IQ and its relationship between various social and economic response variables. The biologist and progressive Gould (1996) will responds to what he believes to be Murray and Herrnstein's unfair treatment of the literature. I will also give a brief overview of the history of ethnic minorities in the United States (see MindEdge 2020).

I intend to make use of statistical graphs for visuals. Most of my graphics will be charts and graphs to illustrate the mathematical models that I indent to invoke. (see Ibid). I will also include an appendix discussing the technical and mathematical tools that I used more "in-depth." This section will be reserved for sceptics and those who have the time to "think critically" about the details of my research.

Conclusion

The inquiry that I intent to pursue asks: "are ethnic minorities more likely to get arrested or experience fatal deaths from police because of implicit bias?" To attack this problem, I intend to synthesize previous research and make use of multiple

models employed in the natural and social sciences (for a more verbose discussion, see Page 2018) that make testable and falsifiable predictions. I will also discuss the strengths and weaknesses of each model.

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References

Davis, A. J. (2017). Policing the Black Man: Arrest, Prosecution, and Imprisonment. Vintage.

Edwards, F., Lee, H., & Esposito, M. (2019). Risk of being killed by police use of force in the United States by age, race–ethnicity, and sex. *Proceedings of the National Academy of Sciences*, 116(34), 16793–16798. doi: 10.1073/pnas.1821204116

Gallup Poll (2020). *Black, White Adults' Confidence Diverges Most on Police*. https://news.gallup.com/poll/317114/black-white-adults-confidence-diverges-police.aspx

Gould, S. J. (1996). The Mismeasure of Man. New York: W.W. Norton.

Fryer, R. (2016). An Empirical Analysis of Racial Differences in Police Use of Force. *National Bureau of Economic Research*. doi: 10.3386/w22399

- James, L., Vila, B., & Daratha, K. (2012). Results from experimental trials testing participant responses to White, Hispanic and Black suspects in high-fidelity deadly force judgment and decision-making simulations. *Journal of Experimental Criminology*, *9*(2), 189-212. doi: 10.1007/s11292-012-9163-y
- Menifield, C. E., Shin, G., & Strother, L. (2018). Do White Law Enforcement Officers Target Minority Suspects? *Public Administration Review*, 79(1), 56–68. doi: 10.1111/puar.12956
- MindEdge, Inc. (2020). SCS 200: Applied Social Sciences.
- Murray, C., & Herrnstein, R. J. (1996). The Bell Curve: Intelligence and Class Structure in American Life (A Free Press Paperbacks Book) (Illustrated ed.). Free Press.
- Page, S. E. (2018). Model Thinker: What You Need to Know to Make Data Work for You. New York, NY: Basic Books.
- Peeples, L. (2020). What the data say about police brutality and racial bias and which reforms might work. *Nature*, 583(7814), 22–24. doi: 10.1038/d41586-020-01846-z
- Ross, C. T., Winterhalder, B., & Mcelreath, R. (2020). Racial Disparities in Police Use of Deadly Force Against Unarmed Individuals Persist After Appropriately Benchmarking Shooting Data on Violent Crime Rates. *Social Psychological and Personality Science*, 194855062091607. doi:10.1177/1948550620916071
- Ross, C. T., Winterhalder, B., & Mcelreath, R. (2018). Resolution of apparent

paradoxes in the race-specific frequency of use-of-force by police. *Palgrave Communications*, *4*(1). doi:10.1057/s41599–018–0110-z

Ross, C. T. (2015). A Multi-Level Bayesian Analysis of Racial Bias in Police Shootings at the County-Level in the United States, 2011–2014. *PLOS ONE*, 10(11). doi:10.1371/journal.pone.0141854