ABSTRACT

Title of Thesis:	RACIAL THREAT, BLACK EMPOWERMENT, AND CIVILIANS KILLED BY POLICE: AN ANALYSIS OF THE LARGEST US CITIES IN 2015
	Toryn Sperry, Master of Arts, 2021
Thesis Directed By:	Associate Professor, María B. Vélez, Department of Criminology and Criminal Justice

Estimates suggest that police have killed more than 1,000 people per year for at least nearly a decade. Blacks are 3 times as likely to be killed than Whites. One potential explanation for this disparity is Blalock's racial threat hypothesis, which posits that the dominant group in society will impose social control upon the minority group when large minority populations are perceived as threatening to the dominant group's status. However, if a minority population is large enough, they may be empowered to counter these attempts at social control. This study examines how Black demographic and political empowerment, as well as policy comprehensiveness impact killing rates of civilians. Findings suggest that greater Black demographic and political empowerment are associated with reductions in killings rates for Blacks as well as for Whites and the total population.

RACIAL THREAT, BLACK EMPOWERMENT, AND CIVILIANS KILLED BY
POLICE: AN ANALYSIS OF THE LARGEST US CITIES IN 2015

by

Toryn Sperry

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Master of Arts
2021

Advisory Committee:
  Associate Professor María Vélez, Chair
  Professor Jean McGloin
  Professor James Lynch

Acknowledgements

I would like to thank my thesis chair Dr. María Vélez, who has helped me in more ways that I can count throughout this process. This would not have been possible without your expertise, advice, and kindness at all stages. I would also like to thank my other committee members Dr. Jean McGloin and Dr. James Lynch for your willingness to help me improve my abilities as a scholar and your valuable advice that greatly contributed to a higher quality thesis. Finally, I would like to thank my fellow graduate students at the University of Maryland for your enduring friendship, inspiration, and academic support that has helped me through graduate school.

Table of Contents

List of Tables

Chapter 1: Introduction

Throughout history, Black individuals have experienced extensive forms of violence and oppression at the hands of a variety of policing institutions, including slave patrols, vigilantes, and law enforcement agents (Nummi, Jennings, & Feagin, 2019). These state-sanctioned acts persist today, as law enforcement officials disproportionately deploy force against Black citizens. Estimates suggest that police killed more than 1,000 people in the US in 2020, a number that has remained steady since at least 2014 (Tate, Rich & Jenkins, 2020; Sinyangwe & McKesson, n.d.). Blacks made up 28% of these killings, despite comprising only 13% of the US population. When considering relative risk, Blacks are nearly three times as likely to be killed by police than Whites (Streeter, 2019). This disproportionate rate represents long-standing unequal treatment based on race by a major American institution (Nummi, Jennings, & Feagin, 2019).

Instead of thinking about social control as a legitimate response, an alternative and widely used framework is based on Blalock's racial threat. Blalock (1967) argues that the dominant group in society perceives high concentrations of minorities as a threat to their dominance and consequently impose efforts of formal social control upon the minority group. Social control efforts include mechanisms for which the dominant group in society can maintain their status and power. This is done by regulating the behavior of citizens through formal institutional means, such as having disproportionate police presence in communities that are perceived as more threatening to the social order. While Blalock (1967) proposed that larger minority

populations would result in greater social control efforts (often conceptualized linearly), he also specified that this relationship may vary depending on differential levels of population representation or political empowerment (a curvilinear relationship). For instance, if the population of a minority group is large enough to initiate their own governing coalitions, they may be able to challenge these efforts at social control by taking collective action to benefit their group. In this context, that could mean using their political power to reduce social control efforts by police, such as aggressive or targeted policing of Black communities that increase contacts between police and Black civilians and heighten their risk of violent interactions that may become fatal. Blalock (1967) hypothesized the complexities of this relationship, but these complexities are rarely studied. This study takes an initial step to map out more clearly how racial threat shapes social control efforts with the case of Black civilians killed by police. Specifically, I examine whether Black killing rates are lower in places with greater Black representation (demographic empowerment) and political empowerment (Black police chiefs, relative proportion of Black full-time sworn officers, Black city leadership). In addition to analyzing Black killing rates, I also look at how Black empowerment, both demographically and politically, impacts killing rates for Whites and for the total population.

Many researchers have sought to understand the racial disproportionality of civilians killed by police by examining individual officer characteristics including demographic factors (McElvain & Kposowa, 2008), self-control (Donner et al., 2017), and implicit bias (Fridell 2016; James et al., 2016) to determine patterns for whether specific types of individuals are more at risk of using deadly force. While

these studies provide valuable insight into factors influencing deadly force deployed by police officers against citizens, they typically do not consider the overarching organizational structure of the police department or the city in which the department operates. The current study extends this body of research by shifting the focus of police killings from individual factors such as demographic or personality-related measures to the conditions of the city as well as its police department. Doing so will offer a more comprehensive analysis of police killings, given that officers, departments, and the cities in which they are located work in conjunction with each other to shape policing outcomes. Regarding city and departmental characteristics, I expect that cities characterized as having higher levels of Black demographic empowerment will have lower rates of Black civilians killed by police (hypothesis 1). I also expect that cities characterized as having higher levels of Black political empowerment will have lower rates of Black civilians killed by police (hypothesis 2).

This project contributes to two methodological advances in the study of racialized social control. First, by utilizing data that are considered optimal for estimating police killings across the US, this study can consider a more complete depiction of police violence than those limited by the lack of comprehensive reporting from other official sources. I obtain killing rates from Fatal Encounters, an open-source database that has been tracking detailed information on police-related deaths through online media reports and public records since 2000. This approach is unique in that many previous studies measure civilian deaths using federal data from official sources such as the FBI's Supplementary Homicide Report (SHR) or the National Vital Statistics System (NVSS), which underestimate the number of civilian killings

by nearly 50 percent[1] (Planty et al., 2015; Morgan et al., 2016; Nix et al., 2017).

Although it is likely that Fatal Encounters does not account for all cases that may be included in official data, its overall greater comprehensiveness still captures more of the full picture of police killing rates. In fact, BJS endorsed Fatal Encounters as the most comprehensive in scope out of several open-source databases, including those maintained by *The Guardian* and *The Washington Post* (Banks et al., 2016).

Second, I have assembled an original dataset containing use of force policies for the 100 largest US cities to capture their comprehensiveness. I obtained documents from the Use of Force Project and coded them to indicate whether each department had implemented policies thought to be effective in limiting police violence. Examples of policies include banning chokeholds, requiring de-escalation, and comprehensive reporting requirements. This collection of policies contributes to the literature through its unique ability to analyze comprehensiveness and variability across agencies to better inform how protective/restrictive policies impact police-involved killings. I expect that cities in which the police department has greater

---

[1] The FBI's Supplementary Homicide Report (SHR) does not mandate law enforcement agencies to report homicides, and when agencies do report there are no uniform standards for data collection methods across states. Information is often flawed or incomplete, given that homicides are only published if they were deemed 'justifiable' and reports are often missing relevant demographic information such as sex, age, or race. Additionally, SHR's decentralized data collection approach utilizes multiple software programs that are incompatible with each other, requiring officers to input information multiple times, increasing the likelihood of error. The NVSS is also flawed in that reporting is only mandatory in 36 states and data are aggregated at the county level, preventing the ability of analyzing demographic factors at the individual level. Additionally, for a death to be classified as a police officer involved homicide (POIH), the manner of death must be declared a homicide and relies upon a complete description of how the injury occurred. Mention of police involvement is not required, often resulting in the coroner being unaware that the individual was involved in an attempted arrest when they were killed.

policy comprehensiveness will have lower rates of Black civilians killed by police (hypothesis 3).

Understanding the causes and patterns of police-involved killings is an important undertaking in itself, given that a disproportionate number of Black civilians are killed by those who are sworn to protect them. Furthermore, these killings contribute to a plethora of societal consequences, including intergenerational trauma between friends and family members of the deceased that have far-reaching impacts on entire communities. These events take severe tolls on the mental and physical health of community members, through grief, financial hardships, and the deep-rooted distrust of a major American institution (Bor et al., 2018; Smith Lee & Robinson, 2019; Outland et al., 2020). These killings also delegitimize the institution of policing and fuel a broader sense of legal cynicism in Black communities, which contributes to a heightened sense of stress and defenselessness, requiring vigilance and self-protective measures to avoid or survive police contact (Smith Lee & Robinson, 2019). By analyzing the role of Black demographic and political empowerment and attendant use of force policies in reducing police-involved killings, this study offers invaluable insight into an issue that has plagued the US throughout its history and contributes to a deeper understanding of how to save the lives of Black Americans and the well-being of their communities.

Chapter 2: Conceptual Arguments

Historical Context

Blacks and other persons of color have been characterized as threats to state authority and the social order since the emergence of modern police forces (Hinton & Cook, 2021). Prior to the Civil War, state legislators allowed policymakers to establish paramilitary forces, known as slave patrols, to capture and punish slaves, constituting one of the earliest forms of a police force in the US (Bass, 2001). Despite the Reconstruction amendments abolishing slavery and granting citizenship to former slaves, these efforts for equality were quickly undermined by the passage of new criminal laws implemented to further impose systems of social control to restrict the freedoms and control the behavior of Blacks (Hinton & Cook, 2021). From Black Codes and convict leasing to Jim Crow laws, criminal law increasingly targeted Black Americans, with police in charge of ensuring enforcement.

Throughout the 1960s the American carceral state was vastly expanded, which many historians explain as a response to demographic transformations, civil rights protests, and perceived threats of disorder among urban communities with large concentrations of Black residents (Hinton & Cook, 2021). The resulting heightened surveillance in these communities disproportionately subjected Black residents to police contact, which often included acts of violence perpetrated by the police[2].

---

[2] Many conflict theorists have focused attention on the 'over-policing' of Black communities, but it is also important to consider the co-occurring lack of police response in these same communities. Reports from residents of Black communities have frequently expressed concern over slow response times or many cases in which officers fail to show up to the scene altogether (Brunson, 2007). This 'paradox' of policing in Black communities consists of both under- and over-policing, in which officers are often absent from these communities, but when they do interact with civilians, these interactions tend to be characterized by high levels of violence and aggression.

Police violence in Black communities has persisted to the present day, and researchers often explain this violence as a modern extension of racialized social control aimed at preserving the white-dominated social structure (Gray & Parker, 2020).

Racial Threat

A common explanation for the differential rates of police killings is rooted in the consensus approach. This theory assumes that the members of a society collectively agree on laws and the corresponding punishments when those laws are violated. Thus, social control is a necessary tactic to respond to deviations from what the community has deemed as acceptable behavior (Carmichael, 2005). According to this view, Blacks are more often the victims of lethal police violence because they are more likely to reside in communities characterized by greater levels of serious crime.

In stark contrast, state-sanctioned violence may instead stem from racial threat. According to Blalock (1967), the amount of social control the dominant group imposes on minorities depends on the relative size of the minority group. Blalock argues that when a minority group is perceived as a threat to the interests and resources of the majority, the dominant group will impose efforts of social control to maintain their dominant status in society. However, Blalock (1967) also hypothesized that the relationship between perceived threat and social control efforts likely varies based on differing levels of minority representation. If the population of a minority group is large enough, they can establish their own governing coalitions to advance their group's interests, which include countering attempts at social control.

Blalock (1967) proposes this more complex relationship, but most of the current literature analyzes the relationship between minority population and police killings by assuming linearity. Many of these findings reveal substantially higher social control efforts associated with communities characterized by larger non-white populations. For instance, the relative size and geographic distribution of minority citizens influences the level of political and economic threat that the majority group perceives, contributing to substantial efforts of social control, including larger police forces, greater spending on criminal justice efforts, and higher arrest and imprisonment rates (Liska & Chamlin, 1984; Liska, 1992; Stults & Baumer, 2007).

In addition to allocations of police resources, police officers may use other tactics of coercive control, including the use of violence, when they deem these acts essential for self-protection from minority citizens they perceive to be dangerous (Holmes, Painter, & Smith, 2019). Chamlin (1990) offers support for this idea, finding that the racial composition of states had a significant and positive impact on the rate of civilians killed by police. Parker et al. (2005) tie in the organizational structure of police departments to examine the departmental influence on use of force, arguing that racial threat contributes to the political and social climate of the department, ultimately affecting official policies that set standards for when and how police justify using force. In combination, these findings indicate that in communities with higher concentrations of non-whites, law enforcement agencies disproportionately act as enforcers of racialized social control. This includes employing larger police forces (Liska, 1992; Stults & Baumer, 2007), greater criminal justice expenditures (Liska, 1992), more frequent use of force against civilians

8

(Parker et al., 2005), and higher rates of civilians killed by police (Gray & Parker, 2020). While informative to the literature, these studies assume that the level of social control will always be higher when the minority population is higher and fail to consider alternatives for communities in which demographic and political empowerment may be large enough to counteract these efforts.

Black Political Empowerment

Black political empowerment may be significant in countering some of these efforts. Jacobs and O'Brien (1998) explore this argument by examining what happens when a minority group is large enough to create their own governing coalitions to further the interests of their group. They analyzed whether the race of the city's mayor mediated the relationship between the Black population and police killing rates of Blacks. They argue that Black mayors are likely dependent on minority votes, thus incentivizing police administrators to curb police violence against Black citizens, who comprise 53% of all killings by police in their analysis (Jacobs & O'Brien, 1998). Their findings indicate a positive relationship between percent Black population and the use of deadly force against Blacks, but cities that had a Black mayor had fewer police killings of Blacks. Since Black mayors are likely elected primarily by Black votes, Jacobs and O'Brien (1998: 858) argue that "Black mayors have both the motive and the political resources to reduce killings of Blacks."

A possible explanation for this reduction in killings of Black individuals by police is that the presence of Black elected officials may lead to greater representation of Black interests throughout the policy process. This can be beneficial in two ways, both by advocating for protections of Blacks as well as strengthening Black

perceptions of institutional legitimacy. Saltzstein (1989) finds that the presence of a Black mayor had significant effects on the implementation of police policies that attempt to prevent police abuses directed at the Black community. While many factors contribute to the use of lethal force, formal policies and standard operating procedures of police agencies shape a system of rewarding and disciplining officers, which encourages consistency in responding to civilian encounters (Nix et al., 2017). Previous studies have shown that having more restrictive policies result in fewer instances of deadly force as well as use of force generally (Geller & Scott, 1992; Alpert & MacDonald, 2001). For example, restrictions on shooting nonviolent suspects or at moving vehicles, as well as prohibiting warning shots significantly reduced shootings by police (Geller & Scott, 1992). Additionally, having a Black mayor increases Black representation in city administrative, professional, and protective service positions (Mladenka, 1989), which in turn increases trust in governmental institutions among Black Americans (Bobo & Gilliam, 1990). Feeling as though their needs and interests are being represented helps to legitimize these institutions in Black communities, and in turn may help reduce the amount of resistance toward police (Ochs, 2011).

While several studies have identified beneficial outcomes of Black demographic and political empowerment, many of these analyses restrict the operationalization of political empowerment to the presence of a Black mayor (Staltzstein, 1989; Jacobs & O'Brien, 1998; Ochs, 2011). The current study offers a more comprehensive measure of Black empowerment, extending the analysis to determine whether differential levels of representation can reduce the rate at which

Black civilians are killed by police. First, I consider the impacts of demographic empowerment. As mentioned above, population representation is fundamental to combating attempts at social control efforts and advocating for policies and practices that reduce Black killing rates. Cities characterized as having larger Black populations may have more accessible opportunities, resources, and networks available to Black residents. Second, I consider the impacts of political empowerment. Given that police departments operate in larger political systems, it is important to collectively consider the interplay between various tiers of city and departmental leadership, rather than analyzing these components independently. To account for this complexity, the measure of Black political empowerment includes whether the city had a Black mayor and Black police chief and the proportion of Black full-time sworn officers within the police agency.

In line with Blalock's hypothesis, cities with relatively high levels of Black political representation (elected, appointed, or hired) should have policies that are friendly to police reform and thus fewer Black killings by police. Representation and empowerment at multiple levels should theoretically increase the ability of blacks to infiltrate a white-dominated social structure, reshaping and resisting long-standing efforts of social control. Therefore, cities that rank higher in terms of collective Black political empowerment should have more avenues by which they can advocate for Black interests, including influencing policies and practices that aim to lower rates of Black civilians killed by police.

Chapter 3: Data

Sample

The unit of analysis is the city. Cities are the appropriate level of analysis given the decentralized nature of policing in the US. As a result of the increased national attention on improving accountability and transparency in policing practices, police departments located within large cities have faced increasing pressures to make formal departmental policies and procedures accessible to the public. Due to the availability of these documents, this study focuses on the 100 largest US cities. To ensure that cities have a sizeable Black population so that a single killing does not inflate the Black killing rate, I only examine cities with at least 1,000 Black residents. After imposing this minimum, Hialeah was dropped from the analysis and the resulting sample size is 99.[3] Different dynamics are likely at play in major cities compared to small towns, which limits the generalizability of these findings beyond the scope of large urban centers. Despite these limitations, these cities represent 34 different states and Washington DC, and thus are still able to contribute to a wide representation of diverse urban communities across the country.

Dependent Variables

There are three primary outcomes of interest in this analysis. They include the Black, White, and total rate of police killings of civilians per capita from 2013-2016. For each of these groups, the killing rate represents the number of civilians in a city that were killed by police per 100,000 residents for four years. For instance, the Black

---

[3] See Table 1 for complete list of included cities.

killing rate represents the number of Black civilians that were killed per 100,000

Black residents in the city from 2013-2016. Totals were generated based on the

number of people killed that were attributed to each department, then aggregated and

connected to the corresponding city. The Black, White, and total populations for each

city were obtained from the Census 2015 ASC 5-year estimates. The Black

population is represented by those who indicated that they were Black alone or in

combination with another race, but non-Hispanic. The White population represents

those who indicated that they were White alone, non-Hispanic and the total

population consists of a comprehensive count of every individual (of any race)

residing in the city.

The killing rates were obtained from Fatal Encounters, an open-source

database that tracks detailed information on police-related deaths since 2000. Fatal

Encounters includes all police-related deaths (police homicides whether justifiable or

not, citizens who die in automobiles during vehicular pursuits, and medical

emergencies during police interactions), whether they involved a firearm or some

other use of lethal force (batons, chokeholds, tasers, etc.), as well as killings by off-

duty officers. Paid researchers aggregate data from public records requests and other

crowdsourced sites and double-check this information to fill in any missing gaps.

After it has been thoroughly checked, the data is sent to a verification queue to again

be checked against public sources and Brian Burghart (principal investigator) of Fatal

Encounters. Due to the extent of events captured in this database compared to other

federal or crowd-sourced databases, BJS endorsed Fatal Encounters as the most

comprehensive for analyzing police-involved killings (Planty et al., 2015). To focus

13

only on the most aggressive forms of police violence, all killings that were deemed

suicides or accidents were removed from the analysis.

Independent Variables

I examine three elements of Black empowerment. First, I measure Black

demographic empowerment. I do this by generating Black population quintiles, which

demarcate cities based on 5 levels of varying population representation. Second, I

measure Black political empowerment by creating a comprehensive ordinal measure

with values ranging from 0-3. This measure captures three levels of political

empowerment: mayor, police chief, and full-time sworn officers. I measure whether

the mayor of each city was Black in 2015 (1=Black, 0=not Black). I obtain

information for each city's mayor from Ballotpedia.org based on photographs and

brief website biographies. I measure whether the chief of police for each city

department was Black (1=Black, 0=not Black). I gather information on city police

chiefs by searching police department websites and newspaper articles to identify

who held the position in 2015. I determined the chief's race by analyzing photographs

and reading biographical information from these sources.[4] I also measure the

percentage of Black full-time sworn officers employed by the department. I obtain the

percentage of Black full-time sworn officers from the 2013 Law Enforcement

Management and Administration Statistics (LEMAS). Cities were given a value of 1

---

[4] A second researcher went through each of the links from which I obtained race information and separately coded them to serve as an inter-rater reliability check for any possible discrepancies in the perceptions of each mayor or chief's race.

if the percentage of Black full-time sworn officers was above the mean (14.4), and a value of 0 if the percentage was below the mean.

I add each of these values together to constitute a comprehensive measure of Black political empowerment, ranging from 0-3. In preliminary analyses, the percentage of Black full-time sworn officers was negatively related to killing rates for Blacks, Whites, and the total population. However, this was the only empowerment variable that was significantly associated with changes in killing rates for any racial group. Contrary to these findings, prior literature has found that Black mayors have been associated with reductions in killing rates. These findings lead me to believe that some crucial element is not being captured here by analyzing these variables independently. Theoretically, if having empowerment at the departmental level makes a difference, then having additional empowerment at the city level should lead to even more substantial changes. Thus, I have conceptualized Black political empowerment more wholistically to assess how greater concentrations of power at multiple levels influence killing rates. These results should be cautiously interpreted though, as empirically these variables are not highly correlated (alpha=0.48). Supplemental analyses will dig deeper into alternative conceptualizations of this measure, such as different modeling techniques and the addition of other empowerment variables that may be more highly correlated.

Third, I measure the department's policy comprehensiveness to curb police violence based on suggestions from Campaign Zero's initiative to bring immediate change to police departments (Campaign Zero, 2021). These policies include banning chokeholds/strangleholds, requiring de-escalation, requiring both a warning and that

officers must exhaust all alternatives before shooting, duty to intervene if an officer

witnesses another officer engaging in misconduct or improperly using force, banning

shooting at or from moving vehicles, and requiring comprehensive reporting of all

uses of force (including pointing a firearm).[5] This variable is a count of the number of

these policies that were included in each department's official use of force policy

documents. I obtain all policy documents from the Use of Force Project Policy

Database, which represent departmental policies in place in 2015.

Control Variables

Region. I control for the region in which the city is located by including a

dummy variable for location in the South (South=1), based on Census designations.[6]

Agency Operating Budget. I obtain the dollar amount of each agency's

operating budget as indicated in LEMAS 2013 and standardize this number by

dividing it by 1,000.

Homicide Rate. To account for the dangerous context of a city, I control for

the city's homicide rate per 100,000 residents based on the 2015 UCR Supplementary

Homicide Reports. From a consensus approach, police killings are likely to occur

more frequently in areas characterized by greater levels of violence. By controlling

for the homicide rate in a city, the models can assess whether police killings reflect

reactivity to violence or racial inequality.

---

[5] See Table 2 for list of coding procedures.
[6] According to Census designations, the South includes Alabama, Arkansas, Delaware, D.C., Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

Bias Unit. To capture departmental efforts to address race-related disparities, I control for whether the department has a unit to address bias/hate crime. Agencies received a 1 if they had a special unit with either full or part-time dedicated personnel and received a 0 if the agency had indicated 'no dedicated personnel' or 'not formally addressed.' I obtained this information from LEMAS 2013.

Community Policing Training. To gauge whether departments were actively addressing issues related to the racial disproportionality of negative policing outcomes, I control for the proportion of full-time sworn personnel that received at least 8 hours of training on community policing issues during the previous 12-month period, as indicated by LEMAS 2013. Agencies received a 1 if all new recruits and in-service officers were required to complete the training.

Chapter 4: Analytic Method

I run six models to assess the impacts of both Black demographic and political empowerment on the rate at which civilians are killed by police. Each of these models utilizes Tobit regression, which is frequently used when the presence of many zero values likely indicates a censored dependent variable. In the current analysis, there are 15 cities in which the Black killing rate is zero, 18 cities in which the White killing rate is zero, and 3 cities in which the total killing rate is zero. Following prior work (Jacobs and O'Brien, 1998), I employ Tobit under the assumption that the nature of the data collection could have resulted in censoring of killing rates. To be censored means that at face value, the variable is indicated as a zero, but the actual latent value of the variable is not a true zero. Fatal Encounters uses news article and other public reports to compile their database of police killings. Thus, if events are not reported on either by journalistic outlets or law enforcement officers then they will not be captured by the data. This could mean that some cities may appear to have zero killings, but the true value of the variable is not zero. If this is the case, then there may not be true censoring, which would undermine the suitability of the Tobit model. Given this concern, future analyses will explore alternative modeling strategies, such as the Negative Binomial which is better designed to address rare events.

The first three models assess the impacts of Black demographic empowerment, in which I analyze the relationship between varying Black population quintiles and the killing rates for Blacks, Whites, and the total population. To assess whether Black population empowerment differentially impacts Blacks, Whites, and

the population taken as a whole, I run a model for each of these groups separately. In each of these models, the dependent variable is either the Black, White, or total killing rate and the independent variables are the Black population quintiles and a count of the protective policies in place by the department. I also include controls for whether the city is in the South, the agency's total operating budget (in thousands), the homicide rate per 100,000 residents, whether the agency had a specialized bias unit, and whether the department required officers to undergo community policing training.

The last three models assess the impacts of Black political empowerment, in which I analyze the relationship between Black political empowerment and the killing rates for Blacks, Whites, and the total population. I run separate models for each of these groups to examine differential impacts by race. In each of these models, the dependent variable is either the Black, White, or total killing rate and the independent variables are Black political empowerment and a count of the protective policies in place by the department. I also control for whether the city is in the South, the agency's total operating budget (in thousands), the homicide rate per 100,000 residents, whether the agency had a specialized bias unit, and whether the department required officers to undergo community policing training.

Chapter 5: Results

Descriptive Analyses

From 2013-2016, there were only 3 cities in which there were no reported police killings: Buffalo, Irvine, and Lexington. As shown in Table 3, Black killing rates are higher than White or total killing rates on average. The maximum killing rate per 100,000 across cities was 34.6 for Blacks, 13.06 for Whites, and 8.49 for the total population. Across these cities, the average killing rate for Blacks was 5.44 which is more than twice as much as the average killing rates for Whites (2.02) or for the total population (2.57). These rates align with prior work indicating that Black civilians are killed by police at much higher rates than their White counterparts (Streeter, 2019).

Cities generally ranked low in terms of Black political empowerment (mean=0.76). In 2015, only 18% of cities were headed by a Black mayor, 24% of departments were headed by a Black police chief, and 33% of departments were composed of Black full-time sworn officers at percentages above the mean (14.4). Departments also generally ranked low on the number of protective policies that were included in their official use of force documents. Policy counts ranged from 0-6, with an average of 1.56. Of these policies, comprehensive reporting, requiring de-escalation, banning chokeholds, and duty to intervene were among the least commonly implemented, included in less than 20% of departments. The most commonly implemented policies were requiring a warning before shooting and shooting only when all other alternatives have been exhausted. However, even for these policies, only about half of departments required a warning and only 26%

required shooting to be reserved as a last resort. Overall, these descriptive results reveal that most police departments in the largest US cities had implemented little to none of the policies that are aimed at protecting civilian lives from excessive or deadly force by 2015.

Descriptive analyses also indicate that 38% of these cities are in the South. Agency operating budgets ranged from $38,033,000 to $4,612,690,000, with a mean of $230,565,000. Homicide rates for cities ranged from 0.40 to 52.23 per 100,000 residents, with an average of 11.11 homicides per 100,000 residents. Among police departments, only 45% had a specialized unit to address bias/hate crimes and only 32% required community policing training for new recruits and existing officers.

Table 4 shows comparisons of characteristics among cities that ranked above versus below average in terms of the Black killing rate. Cities with lower than the average Black killing rate were characterized as having greater Black political empowerment generally as well as for individual measures, including more Black mayors, Black police chiefs, and greater percentages of Black full-time sworn officers employed by the department compared to cities that ranked above the average for the Black killing rate. Cities with lower killing rates were also characterized as having more policies implemented to protect civilians by placing restrictions on use of force deployed by officers. Cities with above average killing rates were less likely to be in the South, had lower operating budgets, and higher homicide rates. Interestingly, a greater number of cities with higher killing rates had a designated bias unit and required community policing training of all officers. I posit that this is likely due to bias units being established or community policing training being mandated as a

reaction to fraught police/community relations. In other words, if there are more killings of civilians by police in a city, there is likely more distrust of police among civilians. Thus, the existence of these programs/trainings may be indicative of more police misconduct and/or greater efforts to promote more positive officer/community relations.

Black Demographic Empowerment and Civilians Killed by Police

Table 5 provides Tobit results for the first three models analyzing varying Black population representation and the impacts on the Black, White, and total killing rates. Differential patterns for changes in killing rates emerge for each racial group. For Blacks, significant reductions in killings are found at the second, fourth, and fifth population quintiles. The magnitude of reductions continuously increases as the quintiles get higher, suggesting that as the Black population is larger, the Black killing rate continuously decreases. For Whites, significant reductions in killings are found at the third, fourth, and fifth quintiles and with each subsequent quintile, the magnitude of the reduction gets greater. For the total killing rate, the fourth and fifth are the only quintiles that are significant and the magnitude in the reduction of killings increases from the fourth to fifth quintile. Overall, these results offer support for hypothesis 1, suggesting that greater Black demographic empowerment (more population representation) is associated with lower rates of Black civilians killed by police. In addition, Black demographic empowerment was also associated with reductions in killing rates for Whites and the total population.

The homicide rate is significantly and positively associated with increases in killing rates across all groups, with the strongest magnitude shown for Blacks.

Additionally, required community policing training was associated with an increase in the total killing rate. As mentioned previously, this counterintuitive finding may be caused by the lack of temporality that can be established with the cross-sectional nature of the current study. Without an established temporal order, I am unable to determine whether community policing training (and thus resultant community policing efforts) contributes to higher killing rates or whether these higher killing rates may be at least partially responsible for the agency's perceived need to improve relationships with the community. Location in the South, the agency's total operating budget, and whether the agency had a specialized bias unit do not appear to be significantly related to the killing rates for any racial group in any of the models.

Black Political Empowerment and Civilians Killed by Police

Table 7 provides Tobit results for the final three models that analyze the impacts of Black political empowerment on the rate at which Blacks, Whites, and the total population are killed by police. These findings offer support for hypothesis 2, suggesting that greater levels of Black political empowerment are associated with lower Black killing rates by police. Although this reduction appears to have the greatest magnitude for Black civilians, greater Black political empowerment was also found to be associated with lower killing rates for Whites and the total population. Taken together, it appears that having Blacks embedded within multiple tiers of city and departmental leadership is associated with beneficial reductions in killing rates not only for Black civilians, but for entire communities. Black leaders are likely to advocate for policies that aim to improve or protect the lives of Black citizens. Given previous discussions of the disproportionate rates at which Black individuals and

23

communities are negatively impacted by police violence, Black leadership is likely

more inclined to focus their efforts on improving these conditions, which

inadvertently also improves the safety of Whites and the community as a whole.

In addition to Black political empowerment, the homicide rate was also

significantly and positively related to the White and total killing rate. Community

policing training was also significantly and positively associated with the total killing

rate. Location in the South, the agency's operating budget, and whether the agency

had a specialized bias unit do not appear significant for the killing rates for any racial

group in any of the models.

Use of Force Policies and Civilian Killings

Surprisingly, these findings do not show policies to be significantly associated

with reductions in killings for any racial group in any of the models. Having more

protective policies embedded within official departmental policy documents does not

appear to influence the rate at which civilians are killed by police. While these

findings do not support hypothesis 3, I am cautious to not interpret this to mean that

policies do not matter. As mentioned, most departments had little to no policies

implemented, thus the current study suffers from a lack of variability in policy

comprehensiveness that makes it hard to detect significance.

Sensitivity Analysis

I racially disaggregated the homicide rates because my dependent variables

are racially disaggregated. Table 6 shows the results for demographic empowerment

and the rate of civilians killed by police when race-specific homicide rates are

included. These findings are congruent with the original model (Table 5) in terms of which quintiles are significantly associated with reductions in killings rates for both Blacks and Whites. The only significant difference was that the race-specific homicide rate is no longer significantly related to the Black killing rate. Table 8 shows the results for political empowerment and the rate of civilians killed by police when race-specific homicide rates are included. As in the original model (Table 7), the homicide rate is significantly and positively related to the White killing rate, but not the Black killing rate. However, Black political empowerment is no longer significantly associated with a reduction in the Black killing rate, despite still being significant and negatively related to the White killing rate. These results seem to suggest that Black political leaders face greater obstacles to reducing Black killings when cities are characterized by higher levels of violence perpetrated by Blacks.

Chapter 6: Discussion & Conclusion

For at least nearly a decade, police in the US have killed more than 1,000 people a year (Tate, Rich, & Jenkins, 2014). In nearly one-third of these killings, the victim was Black. Not only are the decedents the victims of these tragic events, but so too are the individual's friends, family, and entire community. The large number of civilians that continue to be killed by those who are sworn to protect them produce ripple effects that transcend generations. Grief, financial hardships, fear, distrust, and delegitimization are only a few of the consequences of state-sanctioned violence toward Blacks that have persisted throughout US history (Nummi, Jennings, & Feagin, 2019). Many researchers have sought to understand the racial disproportionality of civilians killed by police. The goal of this study was to extend this body of research by shifting the focus of police killings from individual officer factors or policy reforms to the larger political context in which police departments and the cities in which they are located work in conjunction with each other to shape policing outcomes. This study also advances the current literature regarding racial threat, by examining the influence of threat on the rate of Black killings by police and whether it is mitigated in places with greater demographic and political power in the hands of Black citizens and greater policy comprehensiveness.

I ran six separate models to evaluate the impacts of Black demographic empowerment, Black political empowerment, and policy comprehensiveness on the killing rates for Blacks, Whites, and the total population. In each of these models, I control for whether the city was in the South, the agency's total operating budget, homicide rate, and departmental efforts to address issues related to hate crimes and

racial disproportionality in policing outcomes. In line with previous research, Black civilians are killed by police at much higher rates than their White counterparts. The average killing rate for Blacks was 5.44 which is more than twice as much as the average killing rate for Whites (2.02) or for the total population (2.57). When comparing cities that had Black killing rates above vs. below the mean, cities with lower rates were characterized as having greater Black political empowerment and more policies implemented to protect civilians by placing restrictions on use of force deployed by officers.

Blalock (1967) hypothesized that the relationship between perceived threat and social control efforts likely varies based on different levels of minority population. Thus, one would expect that if the population of a minority group is large enough, they can establish their own governing coalitions to further their group's interests. Findings from the current study offer support for the beneficial impacts of greater representation of Black interests. When Black demographic power was considered, greater Black populations (demographic empowerment) were significantly associated with reductions in the rates of Black civilians killed by police. Though this benefit was greatest for Blacks, Whites and the total population also saw significant reductions in killing rates. Similar findings were observed when Black political empowerment was analyzed. Black killing rates significantly and continuously reduced as cities were characterized by greater levels of Black political empowerment. This reduction was greatest for Blacks, but Whites and the total population also benefited from greater levels of Black political empowerment. Descriptive analyses and findings from the Tobit models offer support for the

hypothesis that cities with relatively high levels of Black political empowerment should have more policies that are friendly to police reform and ultimately fewer Black killings by police.

Despite findings in support of Black demographic and political empowerment, the results of the analyses did not reflect the hypothesized relationship between policy comprehensiveness and reductions in killing rates. Policies did not appear to be significantly associated with reductions in killing rates for any group in any of the models. I suspect this null finding to be more of a product of the measurement of policy comprehensiveness than for it to indicate that policy comprehensiveness is truly insignificant in saving lives from police violence. Several agencies either did not respond to requests or provided incomplete policy documents. In these instances, the absence of information was coded as 0. Due to these shortcomings in data availability, it is possible that policies may have been present across departments but were unaccounted for in this analysis. Additionally, these documents did not include procedures or consequences for policy violations. The current study was thus unable to capture accountability of officers, limiting findings since the presence of a policy in the document does not guarantee that officers follow them or are punished when they are violated. Future research should continue to examine the extent to which protective policies can reduce civilian killing rates, perhaps by requesting more updated and comprehensive documents to assess policy implementation and accountability.

Although the current study does contribute both methodologically and conceptually to the study of racialized social control and police killings, there are

several limitations that should be considered to pave the way for improvements in future research. First, due to the difficulty in obtaining reliable use of force policy information across a wide range of cities in a systematic way, this study focused on the 100 largest U.S. cities. This focus on large cities leaves out smaller places which are a source of a large majority of civilians killed by police (Sherman, 2018). In fact, cities in which the population is under 10,000 have a substantially higher number of deaths than any other larger population group. This may be due to the fact that larger cities are under more scrutiny and killings are more likely to gain public attention and thus evoke more outrage or reactive measures. Smaller departments may also be less bureaucratic in that there are fewer layers of accountability, which results in less oversight or structure. Since this analysis is limited to the largest cities in the US, the current study is unable to consider a large proportion of civilians killed at the hands of police officers. Most of the current literature focuses on these larger cities, often ignoring the ones where most of the killings are occurring. Future research should analyze cities with smaller populations as well as those with large populations to gain insight on differential factors that are disproportionately driving these high rates of police killings. Even if reform appears to be working in the country's largest cities, residents of smaller communities may be getting left behind.

Second, given that policing in the US is decentralized, having the city as the unit of analysis does provide more specificity than larger geographic units. However, even within a city lots of heterogeneity is unobservable when all precincts are aggregated together. For instance, in a microanalysis of New York City, Fyfe (1980) finds significant correlations between the geographic distribution of arrest and murder

rates and the rate at which citizens are killed by police. Officers' perceptions of threat and public safety vary tremendously even within a single city. The current study's use of the city as the unit of analysis is unable to disaggregate these differences in certain zones or districts, thus masking the heterogeneity within different parts of the city. Future research should focus on dissecting different communities within cities, rather than grouping them all as one and potentially masking local variations in policing outcomes.

Third, the current study utilizes a cross-sectional design to offer a snapshot of how Black representation and policy comprehensiveness impact killing rates. While it is informative to analyze these co-occurring dynamics, the current study cannot speak to changes in city level conditions or policy reform that may help shape police killings. Future research should consider a longitudinal approach that contains differential political empowerment across time to be able to better assess causality. Given the steps forward in police reform because of the recent uptick in Black Lives Matter protests, future research could examine how effective this protest activity has been in implementing meaningful reform and what it takes for implementation to be successful. For example, future research could expand upon this current project by collecting policy, chief, officer, and mayoral data after the summer of 2020 to track how changes have unfolded since 2015. Such a study could allow for an interrogation of policy reform as a moderator for political empowerment and police killings and could provide insight on the role of social movement activity.

Despite these limitations, the current study takes an important step in broadening understanding of the racial disproportionality of civilians killed by police

and attempts to interrogate possible solutions to reduce these tragic events. Given that

Black demographic and political empowerment were shown to be significant in

reducing killings of not only Blacks, but for the entire population, these findings

imply that there are substantial benefits associated with increasing Black

representation throughout the various tiers of both city and departmental political

leadership. While all citizens are at risk of becoming the victim of police violence,

history has shown that this risk has been consistently heightened for Blacks. Because

of the far-reaching negative impacts on individuals and communities, ending police

violence directed at Black civilians is likely to be of utmost importance to Black

political leaders. The findings of this study offer support for the notion that with more

Black representation either demographically or via the political process, Black lives

can be saved, and as a result of these efforts, the rest of the population will also

benefit from increased protections.

In terms of policies directed at reducing the rates at which civilians are killed

by police, there are several possible takeaways. One potential explanation is that

racism remains despite policy prevalence. In other words, the magnitude of structural

and social inequalities that help to perpetuate Black killings may be so deeply

ingrained that the simple passage or implementation of policies is not enough to

undermine these forces. Or, maybe policies can help to remediate these inequalities,

but the process is more gradual than something that can be observed over a few years

or even decades. Another possible alternative is that policies did not appear to matter

due to their relative scarcity across the 100 largest city police departments. The Black

Lives Matter movement had not yet captured the national attention that is has today,

earning its spot as the most widespread protest movement in US history. As has been

shown in response to this protest activity and the attention paid to police brutality and

misconduct, many departments began implementing more comprehensive policies

and setting higher standards of conduct and accountability of their officers. So much

emphasis is placed on the importance of official policies to address these issues, and

often it is assumed without evidence that they will work. This study highlights the

importance of the continual interrogation of whether these policies are working and

what impacts they have across society. If after the evaluation of the recent expansion

of policies across the US there are still no significant reductions in killing rates, this

implies that we are either focusing on the wrong policies or that policies are not the

appropriate avenue by which significant and lasting change can be made to upend the

unequal racial structure of the US to save Black lives from police violence.

Appendices

Table 1. Sample of Cities and Associated Police Departments

City	State	Police Department
Albuquerque	New Mexico	Albuquerque Police Department
Anaheim	California	Anaheim Police Department
Anchorage	Alaska	Anchorage Police Department
Arlington	Texas	Arlington Police Department
Atlanta	Georgia	Atlanta Police Department
Aurora	Colorado	Aurora Police Department
Austin	Texas	Austin Police Department
Bakersfield	California	Bakersfield Police Department
Baltimore	Maryland	Baltimore Police Department
Baton Rouge	Louisiana	Baton Rouge Police Department
Birmingham	Alabama	Birmingham Police Department
Boston	Massachusetts	Boston Police Department
Buffalo	New York	Buffalo Police Department
Chandler	Arizona	Chandler Police Department
Charlotte	North Carolina	Charlotte-Mecklenburg Police Department
Chesapeake	Virginia	Chesapeake Police Department
Chicago	Illinois	Chicago Police Department
Chula Vista	California	Chula Vista Police Department
Cincinnati	Ohio	Cincinnati Police Department
Cleveland	Ohio	Cleveland Police Department
Colorado Springs	Colorado	Colorado Springs Police Department
Columbus	Ohio	Columbus Division of Police
Corpus Christi	Texas	Corpus Christi Police Department
Dallas	Texas	Dallas Police Department
Washington	DC	DC Metropolitan Police Department
Denver	Colorado	Denver Police Department
Detroit	Michigan	Detroit Police Department
Durham	North Carolina	Durham Police Department
El Paso	Texas	El Paso Police Department
Fort Wayne	Indiana	Fort Wayne Police Department
Fort Worth	Texas	Fort Worth Police Department
Fremont	California	Fremont Police Department
Fresno	California	Fresno Police Department
Garland	Texas	Garland Police Department
Glendale	Arizona	Glendale Police Department

Greensboro	North Carolina	Greensboro Police Department
Henderson	Nevada	Henderson Police Department
Honolulu	Hawaii	Honolulu Police Department
Houston	Texas	Houston Police Department
Indianapolis	Indiana	Indianapolis Metropolitan Police Department
Irvine	California	Irvine Police Department
Irving	Texas	Irving Police Department
Jacksonville	Florida	Jacksonville Sheriff's Office
Jersey City	New Jersey	Jersey City Police Department
Kansas City	Missouri	Kansas City Police Department
Laredo	Texas	Laredo Police Department
Las Vegas	Nevada	Las Vegas Metropolitan Police Department
Lexington	Kentucky	Lexington Police Department
Lincoln	Nebraska	Lincoln Police Department
Long Beach	California	Long Beach Police Department
Los Angeles	California	Los Angeles Police Department
Louisville	Kentucky	Louisville Metro Police Department
Lubbock	Texas	Lubbock Police Department
Madison	Wisconsin	Madison Police Department
Memphis	Tennessee	Memphis Police Department
Mesa	Arizona	Mesa Police Department
Nashville	Tennessee	Metropolitan Nashville Police Department
Miami	Florida	Miami Police Department
Milwaukee	Wisconsin	Milwaukee Police Department
Minneapolis	Minnesota	Minneapolis Police Department
New Orleans	Louisiana	New Orleans Police Department
New York	New York	New York Police Department
Newark	New Jersey	Newark Police Department
Norfolk	Virginia	Norfolk Police Department
North Las Vegas	Nevada	North Las Vegas Police Department
Oakland	California	Oakland Police Department
Oklahoma City	Oklahoma	Oklahoma City Police Department
Omaha	Nebraska	Omaha Police Department
Orlando	Florida	Orlando Police Department
Philadelphia	Pennsylvania	Philadelphia Police Department
Phoenix	Arizona	Phoenix Police Department
Pittsburgh	Pennsylvania	Pittsburgh Police Department
Plano	Texas	Plano Police Department
Portland	Oregon	Portland Police Bureau
Raleigh	North Carolina	Raleigh Police Department

Reno	Nevada	Reno Police Department
Riverside	California	Riverside Police Department
Rochester	New York	Rochester Police Department
Sacramento	California	Sacramento Police Department
San Antonio	Texas	San Antonio Police Department
San Bernardino	California	San Bernardino Police Department
San Diego	California	San Diego Police Department
San Francisco	California	San Francisco Police Department
San Jose	California	San Jose Police Department
Santa Ana	California	Santa Ana Police Department
Scottsdale	Arizona	Scottsdale Police Department
Seattle	Washington	Seattle Police Department
Spokane	Washington	Spokane Police Department
St. Louis	Missouri	St. Louis Metropolitan Police Department
St. Paul	Minnesota	St. Paul Police Department
St. Petersburg	Florida	St. Petersburg Police Department
Stockton	California	Stockton Police Department
Tampa	Florida	Tampa Police Department
Toledo	Ohio	Toledo Police Department
Tucson	Arizona	Tucson Police Department
Tulsa	Oklahoma	Tulsa Police Department
Virginia Beach	Virginia	Virginia Beach Police Department
Wichita	Kansas	Wichita Police Department
Winston-Salem	North Carolina	Winston-Salem Police Department

Table 2. Analyzed Policies with Descriptions for Coding

Use of Force Policy	Requirement for Indication of Presence
De-escalation	Department policy requires officers to de-escalate situations prior to using force, when possible. De-escalation techniques include verbal persuasion and warnings, slowing down the pace of an incident, waiting it out, using barriers, creating distance, and requesting assistance from others such as specialized units, CIT trained members, behavioral health care providers, or negotiators to de-escalate a threatening/resistance situation.
Moving vehicles	Officers are not to fire weapons at moving vehicles unless it is completely necessary to counter an immediate threat of death or serious physical injury to another officer or other individual _and_ the subject presents a separate deadly threat other than the vehicle itself.
Chokehold/stranglehold ban	Officers are never permitted to apply chokeholds unless no alternative to deadly/lethal force exists.
Warning before shooting	When permitted by safety, officers should immediately identify themselves as a law enforcement officer and state their intention to shoot or use any other kind of deadly/lethal force before using a firearm or deploying lethal/deadly force, giving the person a reasonable opportunity to comply voluntarily when circumstances of time and safety permit.
Exhaust all alternatives	Deadly/lethal force may only be used as a last resort after all other de-escalation techniques have been exhausted and if the safety of the officer or others are immediately endangered which seems

	likely to result in death or serious bodily injury.
Duty to intervene	Officers are required to intervene when they witness another officer using excessive force; intervention can be both physical and/or verbal, followed by reporting the incident to a supervisor.
Comprehensive reporting	When officers employ use of force, they are required to immediately report the facts of the incident to their supervisor as soon as is practical. *This is required for ALL instances of force, including pointing a firearm at a civilian.*

Table 3. Descriptive Statistics for All Cities

	Mean	SD	Min	Max
Dependent Variables				
Black Killing Rate (per 100,000 Blacks)	5.44	5.73	0	34.6
White Killing Rate (per 100,000 Whites)	2.02	2.14	0	13.06
Total Killing Rate (per 100,000 residents)	2.57	1.45	0	8.49
Independent Variables				
Black Demographic Empowerment				
% Black	21.58	17.90	0.33	81.11
First Quintile	3.69	1.56	0.33	6.19
Second Quintile	8.33	1.71	6.21	12.55
Third Quintile	17.19	2.92	12.98	23.09
Fourth Quintile	27.86	3.25	23.12	35.16
Fifth Quintile	51.01	12.01	35.87	81.11
Black Political Empowerment	0.76	0.90	0	3
Black Mayor (1=yes)	0.18	0.39	0	1
Black Police Chief (1=yes)	0.24	0.43	0	1
Black Officers (1 if > 14.4, mean)	0.33	0.47	0	1
Protective Policies (count)	1.56	1.42	0	6
Ban Chokeholds	0.16	0.37	0	1
Require De-escalation	0.15	0.36	0	1
Require Warning Before Shooting	0.52	0.50	0	1
Shooting as Last Resort	0.26	0.44	0	1
Duty to Intervene	0.16	0.37	0	1
Ban Shooting at Moving Vehicles	0.19	0.40	0	1
Comprehensive Reporting	0.11	0.32	0	1
Controls				
South (1=yes)	0.38	0.49	0	1
Agency Budget (in thousands)	$230,565	$488,577	$38,033	$4,612,690
Homicide Rate (per 100,000 residents)	11.11	9.80	0.40	52.23
Bias Unit (1=yes)	0.45	0.50	0	1
Community Policing Training (1=yes)	0.32	0.47	0	1
N				99

Table 4. Descriptive Statistics for Cities with Black Killings Above vs. Below Average (N=99)

	Black Killing Rate			
	Below Average		**Above Average**	
	Mean	SD	Mean	SD
Black Political Empowerment	0.89	0.94	0.54	0.80
Black Mayor (1=yes)	0.26	0.42	0.11	0.31
Black Police Chief (1=yes)	0.29	0.46	0.16	0.37
Black Officers (1 if > mean)	0.37	0.49	0.27	0.45
Protective Policies (count)	1.73	1.55	1.27	1.12
Ban Chokeholds	0.18	0.39	0.14	0.35
Require De-escalation	0.18	0.39	0.11	0.31
Warning Before Shooting	0.55	0.50	0.46	0.51
Shooting as Last Resort	0.27	0.45	0.24	0.43
Duty to Intervene	0.19	0.40	0.11	0.31
Ban Shooting at Vehicles	0.21	0.41	0.16	0.37
Comprehensive Reporting	0.15	0.36	0.05	0.23
South (1=yes)	0.45	0.50	0.27	0.45
Agency Budget in thousands)	$235,432	$580,616	$222,409	$280,147
Homicide Rate (per 100,000)	10.42	9.37	12.27	10.51
Bias Unit (1=yes)	0.45	0.50	0.46	0.51
CP Training (1=yes)	0.29	0.46	0.38	0.49
N	62		37	

Table 5. Black Demographic Empowerment & Civilians Killed by Police

	Black Killing Rate	White Killing Rate	Total Killing Rate
	Coef. (S.E.)	*Coef. (S.E.)*	*Coef. (S.E.)*
Black Population Quintiles			
2	-4.55 (1.69)**	-0.60 (.599)	0.32 (.362)
3	-3.26 (1.83)	-1.74 (.647)**	-0.27 (.391)
4	-5.31 (1.86)**	-2.77 (.658)***	-0.86 (.397)*
5	-8.34 (2.46)**	-4.17 (.872)***	-2.04 (.536)**
Protective Policies (count)	-0.18 (.406)	-0.20 (.144)	-0.17 (.087)
South	-0.80 (1.25)	0.75 (.444)	0.13 (.268)
Agency Operating Budget	-1.05 (1.19)	-2.77 (4.23)	-1.76 (2.55)
Homicide Rate (per 100,000)	0.18 (.081)*	0.11 (.029)***	0.12 (.017)**
Bias Unit	1.76 (1.18)	-0.08 (.419)	-0.04 (.253)
Community Policing Training	1.58 (1.16)	0.64 (.411)	0.61 (.248)*
N			99

*p<0.05, **p<0.01, ***p<0.001

Table 6. Black Demographic Empowerment & Civilians Killed by Police (With Race-Specific Homicide Rates)

	Black Killing Rate	White Killing Rate
	Coef. (S.E.)	*Coef. (S.E.)*
Black Population Quintiles		
2	-4.20 (1.76)*	-0.27 (.595)
3	-2.09 (1.86)	-1.31 (.637)*
4	-4.06 (1.96)*	-1.83 (.672)**
5	-4.37 (1.88)*	-1.53 (.649)*
Protective Policies (count)	0.08 (.453)	-0.09 (.153)
South	-1.46 (1.38)	0.42 (.472)
Agency Operating Budget	-1.27 (1.26)	-4.31 (4.30)
Homicide Rate (per 100,000)	0.06 (.055)	0.22 (.058)***
Bias Unit	2.14 (1.31)	-0.05 (.452)
Community Policing Training	1.05 (1.28)	0.41 (.435)
N		92

*p<0.05, **p<0.01, ***p<0.001

Table 7. Black Political Empowerment & Civilians Killed by Police

	Black Killing Rate	White Killing Rate	Total Killing Rate
	Coef. (S.E.)	*Coef. (S.E.)*	*Coef. (S.E.)*
Black Political Empowerment	-1.73 (.758)*	-0.96 (.277)**	-0.55 (.165)**
Protective Policies (count)	-0.15 (.413)	-0.08 (.151)	-0.10 (.090)
South	-1.01 (1.23)	0.31 (.451)	-0.00 (.268)
Agency Operating Budget	-7.15 (1.21)	-2.89 (4.41)	-1.07 (2.62)
Homicide Rate (per 100,000)	0.08 (.066)	0.05 (.024)*	0.09 (.014)***
Bias Unit	1.22 (1.16)	-0.17 (.422)	-0.05 (.251)
Community Policing Training	1.66 (1.22)	0.65 (.445)	0.63 (.264)*
N			99

*p<0.05, **p<0.01, ***p<0.001

Table 8. Black Political Empowerment & Civilians Killed by Police (With Race-Specific Homicide Rates)

	Black Killing Rate	White Killing Rate
	Coef. (S.E.)	*Coef. (S.E.)*
Black Political Empowerment	-1.22 (.689)	-0.57 (.239)*
Protective Policies (count)	0.02 (.454)	0.00 (.155)
South	-1.19 (1.35)	0.17 (.460)
Agency Operating Budget	-8.98 (1.24)	-1.02 (4.23)
Homicide Rate (per 100,000)	0.08 (.056)	0.21 (.057)***
Bias Unit	1.49 (1.23)	-0.07 (.421)
Community Policing Training	1.18 (1.31)	0.42 (.449)
N		92

*p<0.05, **p<0.01, ***p<0.001

Bibliography

Alpert, G., & MacDonald, J. (2001). Police use of force: an analysis of organizational characteristics. *Justice Quarterly*, *18*(2), 393–409.

Banks, D., Ruddle, P., Kennedy, E., & Planty, M. (2016). *Arrest-related deaths program redesign study, 2015-16: Preliminary findings* (pp. 1-10, Rep. No. 250112). Bureau of Justice Statistics.

Bass, S. (2001). Policing space, policing race: Social control imperatives and police discretionary decisions. *Social Justice*, *28*, 156–176.

Blalock, H. M. (1967). *Toward a theory of minority-group relations*. New York, NY: Wiley.

Bobo, L., & Gilliam, F. (1990). Race, sociopolitical participation, and empowerment. *American Political Science Review, 84*, 377-393.

Bor, J., Venkataramani, A. S., Williams, D. R., & Tsai, A. C. (2018). Police killings and their spillover effects on the mental health of black Americans: a population-based, quasi-experimental study. *Lancet (London, England)*, *392*(10144), 302–310.

Brunson, R. (2007). Police don't like black people: African American young men's accumulated police experiences. *Criminology & Public Policy, 6*(1), 71-101.

Burghart, B. (2019). Methodology. Retrieved February 08, 2021, from https://fatalencounters.org/methodology/

Campaign Zero. (2021). #8 Can't Wait. Retrieved July 12, 2021 from https://8cantwait.org/

Carmichael, J. T. (2005) The determinants of jail use across large US cities: An assessment of racial, ethnic, and economic threat explanations. *Social Science Research, 34*, 538-569.

Carmichael, J. T., & Kent, S. L. (2014). The persistent significance of racial and economic inequality on the size of municipal police forces in the United States, 1980–2010. *Social Problems*, *61*(2), 259–282.

Chamlin, M. B. (1990). Determinants of police expenditures in Chicago, 1904–1958. *Sociological Quarterly*, *31*(3), 485–494.

Donner, C. M., Maskaly, J., Piquero, A. R., & Jennings, W. G. (2017). Quick on the draw: Assessing the relationship between low self-control and officer-involved police shootings. *Police Quarterly*, *20*(2), 213–234.

Fridell, L. A. (2016). Racial aspects of police shootings: Reducing both bias and counter bias. *Criminology & Public Policy*, *15*(2), 481–489.

Geller, W. A., & Scott, M. S. (1992). *Deadly force: What we know: A practitioner's desk reference on police-involved shootings*. Washington, D.C.: Police Executive Research Forum.

Gray, A. C., & Parker, K. F. (2020). Race and police killings: Examining the links between racial threat and police shootings of black Americans. *Journal of Ethnicity in Criminal Justice*, *18*(4), 315–340.

Hinton, E., & Cook, D. A. (2021). The mass criminalization of black Americans: A historical overview. *Annual Review of Criminology*, *4*(1), 261–286.

Holmes, M. D. (2000). Minority threat and police brutality: Determinants of civil rights criminal complaints in US municipalities. *Criminology*, *38*(2), 343–368.

Holmes, M. D., Painter, M. A. I. I., & Smith, B. W. (2019). Race, place, and police-caused homicide in U.S. municipalities. *Justice Quarterly*, *36*(5), 751–786.

Jacobs, D., & O'Brien, R. M. (1998). The determinants of deadly force: A structural analysis of police violence. *American Journal of Sociology*, *103*(4), 837–862.

James, L., James, S. M., & Vila, B. J. (2016). The reverse racism effect: Are cops more hesitant to shoot black than white suspects? The reverse racism effect. *Criminology and Public Policy*, *19*(1), 457–479.

Klinger, D., Rosenfeld, R., Isom, D., & Deckard, M. (2015). Race, crime, and the micro-ecology of deadly force. *Criminology & Public Policy, 15*(1), 193-222.

Liska, A. (1992). *Social threat and social control*. Albany: State University of New York Press.

Liska, A., & Chamlin, M. (1984). Social structure and crime control among macrosocial units. *American Journal of Sociology, 90*(2), 383-395.

Liska, A. E. , & Yu, J. (1992). Specifying and testing the threat hypothesis: Police use of deadly force. In A. E.Liska (Ed.), *Social threat and social control* (pp. 53–68). Albany: State University of New York Press.

MacDonald, J. M., Kaminski, R. J., Alpert, G. P., & Tennenbaum, A. N. (2001). The temporal relationship between police killings of civilians and criminal

homicide: a refined version of the danger-perception theory. *Crime & Delinquency*, *47*(2), 155–172.

Marschall, M. J., & Ruhil, A. (2007). Substantive symbols: The attitudinal dimension of black political incorporation in local government. *American Journal of Political Science, 51*(1), 17-33.

McElvain, J., & Kposowa, A. (2008). Police officer characteristics and the likelihood of using deadly force. *Criminal Justice and Behavior*, *35*(4), 505–521.

Mckesson, D., & Sinyangwe, S. (n.d.). Use of Force Policy Database. Retrieved February 08, 2021, from http://useofforceproject.org/database

Mladenka, K. R. (1989). Blacks and Hispanics in urban America. *American Political Science Review, 83,* 165-191.

Morgan, C., Britt, S. P., Irene, P., & Jennifer, P. (2016). The conundrum of police officer-involved homicides: Counter-data in Los Angeles County. *Big Data & Society*.

Nix, J., Campbell, B. A., Byers, E. H., & Alpert, G. P. (2017). A bird's eye view of civilians killed by police in 2015: Further evidence of implicit bias. *Criminology & Public Policy*, *16*(1), 309–340.

Nummi, J., Jennings, C., & Feagin, J. (2019). #Blacklivesmatter: Innovative black resistance. *Sociological Forum*, *34*, 1042–1064.

Ochs, H. L. (2011). The politics of inclusion: Black political incorporation and the use of lethal force. *Journal of Ethnicity in Criminal Justice*, *9*(3), 238–265.

Outland, R. L., Noel, T., Rounsville, K., Boatwright, T., Waleed, C., & Abraham, A. (2020). Living with trauma: Impact of police killings on the lives of the family and community of child and teen victims. *Current Psychology*, *(20201125)*.

Parker, K., MacDonald, J., Jennings, W., & Alpert, G. (2005). Racial threat, urban conditions and police use of force: Assessing the direct and indirect linkages across multiple urban areas. *Justice Research and Policy, 7*(1), 53-79.

Planty, M., Burch, A., Banks, D., Couzens, L., Blanton, C., & Cribb, D. (2015). Arrest-Related Deaths Program: Data Quality Profile. Retrieved December 31, 2020, from https://www.bjs.gov/index.cfm?ty=pbdetail

Roh, S., & Robinson, M. (2009). A geographic approach to racial profiling: The microanalysis and macroanalysis of racial disparity in traffic stops. *Police Quarterly*, *12*(2), 137–169.

Saltzstein, G. H. (1989). Black mayors and police policies. *The Journal of Politics*, *51*(3), 525–544.

Schwartz, G. L., & Jahn, J. L. (2020). Mapping fatal police violence across U.S. metropolitan areas: Overall rates and racial/ethnic inequities, 2013-2017.

Sherman, L. W. (2018). Reducing fatal police shootings as system crashes: Research, theory, and practice. *Annual Review of Criminology*, *1*(1), 421–449.

Sinyangwe, S., McKesson, D., & Elzie, J. (n.d.). Mapping Police Violence. Retrieved January 25, 2021, from https://mappingpoliceviolence.org/

Smith Lee, J. R., & Robinson, M. A. (2019). "That's my number one fear in life. It's the police": Examining young black men's exposures to trauma and loss resulting from police violence and police killings. *Journal of Black Psychology*, *45*(3), 143–184.

Streeter, S. (2019). Lethal force in black and white: Assessing racial disparities in the circumstances of police killings. *Journal of Politics*, *81*(3), 1124–1132.

Stults, B., & Baumer, E. (2007). Racial context and police force size: Evaluating the empirical validity of the minority threat perspective. *American Journal of Sociology, 113*(2), 507-546.

Tate, J., Rich, S. & Jenkins, J. (2020, January 22). Fatal Force: Police shootings database. Retrieved January 11, 2021, from https://www.washingtonpost.com/graphics/investigations/police-shootings-database/

Zimring, F. E. (2017). *When police kill*. Harvard University Press.