RACE AND DEADLY FORCE:
ASSESSING MINORITY- THREAT ARGUMENTS

by
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ABSTRACT

No social justice issue has been more present in the news media recently than the deaths of racial minorities at the hands of the police in the United States of America. This clear division between communities and the police has resulted in protests and marches sweeping the nation under the statement that “Black Lives Matter.” With racial disparities in the criminal justice system being a long-standing issue, the need for empirical investigations into the factors that contribute to police use of force is essential in today’s criminological literature. In this study, Blalock’s (1967) theory of minority-group relations is utilized to determine the impact that racial threat has on the use of deadly force by police. This study offers a state-level analysis that accounts fully for Blalock’s theory by including race-specific economic measures and indicators of political-threat, which are often overlooked in this literature. Census data are merged with other existing data on the use of deadly force [Supplementary Homicide Reports (SHR) and Mapping Police Violence (MPV)] to explore the impact of racial threat on racial patterns in police violence. This study indicates that there are some discrepancies in results based on which data source is used to measure police lethality, SHR versus MPV. In the end, though, there is some support for Blalock’s threat theory at the state-level; however, the most consistent result is family disruption, which may indicate that other theoretical frameworks, such as social disorganization, should be explored.
Chapter 1

RACE, THREAT, AND THE POLICE’S USE OF FORCE

Introduction

In recent years, the United States has witnessed numerous media accounts and videos depicting police interactions resulting in the deaths of the citizen(s) involved. Important to these accounts is the rise in the use of portable cameras, oftentimes in the form of cellular phones, which allow for citizens to capture the incident, known as “citizen journalism,” that otherwise may not have drawn attention (Farmer & Sun, 2016; Lersch & Mieczkowski, 2005). An unfortunate truth is that these accounts, historically and to this day, have disproportionately involved the use of lethal force against African Americans; especially those who are also young and male (Durán, 2016; Hirschfield, 2015; Lersch & Mieczkowski, 2005; Locke, 1996; Sorensen, Marquart, & Brock, 1993; Worden, 1996). As Feagin (1986) claimed, “Black Americans seem to be the only large minority to receive such violence at the hands of white authorities” (p.198). These incidents have resulted in the rise of the social movement Black Lives Matter, which has called into question the notion of the United States of America being a post-racial society while also advocating for police accountability (Chaney & Robertson, 2015).

The disproportionate use of lethal force against African Americans by the police is not a new development in the US; in fact, it dates to the earliest formations of law enforcement (Embrick, 2015; Lersch & Mieczkowski, 2005). Importantly, there is evidence that the earliest conception of policing can be traced back to slavery and...
slave patrols, and that police brutality has been a tool used to punish insubordination (Bass, 2001). These long-standing, disproportionate criminal justice outcomes have been supported by a history of White “superiority” and the negative stereotyping of “Blackness” (Twine & Gallagher, 2008). This stereotyping of “Blackness” includes the association of darker skin tones with criminality and lawlessness, which is particularly salient when observing the framing of young-Black-men (Chaney & Robertson, 2015; Entman, 1990, 1992; Gabbidon, 2015; Leonard, 2016; Muhammad, 2010; Skogan, 1995; Welch, 2007). The criminal justice system helps to exacerbate these stereotypes and the typified view of “Black as criminal” also appears to offer a subtle rationale for the justification of justice tactics that exploit race furthering the overrepresentation of Black persons in the justice system (Collins, 1998; Welch, 2007), including the use of lethal force by the police. In conclusion, criminal justice outcomes have a long history of disproportionately impacting minority racial groups, and this is especially true when considering African Americans. Thus, while the law appears to be race-neutral, this does not seem to be true since race and racial differences permeate all aspects of life in America (Cole, 1999; Omi & Winant, 2015).

In this study, police use of force is the central focus, particularly their use of lethal force. Additionally, this study is concerned with the racial disparities regarding lethal force. To explore this issue, racial threat arguments are examined and this study also investigates the reliability of data sources on the racialized nature of lethal encounters with the police. When studying the use of lethal police force, criminologists and other social scientists have relied on the data provided by the FBI’s Supplementary Homicide Reports (SHR). Unfortunately, these reports have classification and underreporting inaccuracies, and there is a long history of
researchers criticizing these reports and pointing out their problematic character (Fyfe, 2002; Williams, Bowman, & Jung, 2016, p.10). Most recently, Williams et al. (2016) reported on an open-source content analysis conducted in which they discovered that approximately 30-45% of incidents involving citizens killed by police are not reported in the SHR and other official databases collected by states or federally. To address this issue, several other data sources have tried to fill this void in our knowledge by providing a more accurate picture of lethal force. Three examples of these data sources include: Mapping Police Violence (MPV), The Counted (from The Guardian), and Fatal Force (from The Washington Post). Therefore, this thesis incorporates data from Mapping Police Violence to capture the racial nature of lethal police force.

This study will focus on the use of deadly force by the police and the state-level factors that may help to understand when this violent outcome will most likely occur. Specifically, the questions of interest here are: what effects do the economic, political, and racial characteristics of a state have on the application of lethal police violence; and, are these effects consistent across two of the data sources that measure when this deadly violence occurs? To explore these questions, Hubert Blalock’s (1967) minority-threat theory will be utilized to include factors of structural discrimination and racism within the economic and political realms, while also taking the size of the Black population into consideration. By focusing on the use of deadly force, this study contributes to a growing literature that has not been studied as frequently at the state-level as other criminal justice outcomes, such as death sentences (Jacobs & Carmichael, 2002; Jacobs & Carmichael, 2004; Jacobs, Carmichael, & Kent, 2005). With the growing attention being given to these cases of violence, this study also provides an important and timely account of police actions and their racial
character. While the police may not be acting through overt racism or discrimination (Walker, Spohn, & DeLone, 1996), there has been evidence of a definite racialized character to lethal force outcomes. Finally, studying lethal force is vital because of the negative impact that exposure to these violent encounters can have on civic engagement and trust in already disadvantaged communities (Desmond, Papachristos, & Kirk, 2016).

**Police Use Of Force: Race, Theory, And Previous Studies**

As the frontline of the criminal justice system, the police are the visible representation of state authority and crime control (Liska & Yu, 1992). Society relies on the police to engage with citizens, to maintain order, to enforce the laws, and to work towards crime prevention. In carrying out these actions the police are bestowed unique powers and authority that are legitimated by the state (Alpert & MacDonald, 2001). For example, the state-sanctioned and legal use of force – when appropriate – is a core feature unique to the police; this ability to use force is widely controversial (Alpert & MacDonald, 2001; Bittner, 1970; Holmes, 2000; Jacobs & O’Brien, 1998; Kindy & Kelly, 2015; Lersch & Mieczkowski, 2005). Police use of force may be proper or excessive and it may, or may not, be necessary or justified in carrying out legitimate police actions (Holmes, 2000). Death is the result of the most coercive act of state-sanctioned force (Jacobs & Britt, 1979; Liska, 1992). It is also important to note that the police have considerable discretion when carrying out their tasks (Lipsky, 2010) and, thus, in choosing when and how to use violent force against citizens. In sum, “exercising its monopoly on legitimate violence, policing demonstrates its ability to ‘protect’ and ‘secure’ the public by annihilating violence and danger in effigy” (Linneman, Wall, & Green 2014, p.17).
When it comes to understanding the relationship between race and the criminal justice system, including the use of force – lethal and otherwise – by the police, the conflict paradigm has often been considered (Kubrin, Stucky, & Krohn, 2009; Liska, 1992). The conflict perspective relies on observing whether the “creation of laws, the enforcement of laws, and distribution of punishment are done in a discriminatory manner,” specifically regarding the White power structure (Gabbidon, 2015, p.121). Additionally, within this perspective, law enforcement agencies are often viewed as maintaining control over dangerous classes of people who are understood as threatening to the existing public order that benefits the privileged populations (Gabbidon, 2015; Jacobs & O’Brien, 1998; Quinney, 1974). As Linneman et al. (2014) state: “Police power will always be in the service of the social order that authorizes it. To reject police violence and state killing is also to reject existing social arrangements” (p.18). If this is true, it is expected that greater levels of state coercion would be present in areas of greater inequality since this is an unnatural condition that must be maintained by some form of force (Jacobs & Britt, 1979). Thus, those who have less access to resources will likely have less influence within the state and will, therefore, be unable to protect themselves from police violence (Jacobs & Britt, 1979).

In the conflict paradigm, race, economics, and politics play a prominent role, especially when criminal law is seen as a tool of domination and control used by advantaged social classes in maintaining the existing order of society (Quinney, 1974). Thus, some have suggested that the use of violence by police is likely to be more prevalent in areas with clear racial and economic divisions (Jacobs & O’Brien, 1998).

The underclass, or the subordinate racial and ethnic groups, are the object of social control and must be kept suppressed so that dominant groups maintain their position,
and coercion and violence within the legal system (i.e. the police) can help accomplish this goal (Quinney, 1974).

A core theoretical framework within the use of force literature that takes a conflict approach was proposed by Hubert Blalock (1967): the theory of minority-group relations, or racial threat theory (Hirschfield, 2015). Blalock viewed society as being organized around racialized competition where racial and ethnic groups are in constant conflict and struggle over desired resources (Dollar, 2014). Through this conflict, the “dominant” racial/ethnic group learns to employ race-based discriminatory practices that combat the gains of those who make up the minority groups; thus, assuaging the threat that these racial/ethnic minorities pose (Blalock, 1967). Discriminatory practices included forms of symbolic segregation such as the lasting effects of Jim Crow and/or organized violence through social control, and the restriction of political rights such as racially charged voter restriction and the voting patterns of White citizens (Blalock, 1967). The goals of these discriminatory practices were to stunt the growth in power and influence of minority populations, or to bar them from their threatening social position all together (Blalock, 1967). Importantly, state-sanctioned forms of control, such as the police, can be utilized to this end (Blalock, 1967). Racial and ethnic minorities, due to their lower position in the racial hierarchy, are also those less likely to have access to resources that would protect them from the police and police use of force against them (Jacobs & Britt, 1979). There are three central themes that Blalock outlined in his discussion that could lead to discriminatory practices: economic threat, political threat, and the relative size of the racial minority group(s).
Economic threat was conceptualized by Blalock (1967) as the threat that arises from the economic competition between dominant and minority racial groups. This includes competition regarding job availability, job stability, and wages earned; if the minority group is successful in these areas, the dominant group (Whites) could lose their advantaged social positioning (Blalock, 1967; Dollar, 2014; Gabbidon, 2015). Blalock argued that this aspect of his theory was closely related to frustration-aggression theory and, therefore, the discrimination from this threat would often entail some degree of violence towards the threatening racial group. Past studies of the use of force by police demonstrate some support for this aspect of threat theory. For example, in a study from 2000, Holmes found that economic inequality was a positive predictor of instances of police brutality. In a different study, Smith (2003) found that our nation’s largest cities with large and threatening populations, such as those who are impoverished, have been shown to have higher incidents of police violence. At the state-level, Jacobs & Britt (1979) found that states with more economic inequality were also those most likely to have the largest number of deaths resulting from police violence. In contrast, other macro-level studies of police violence using Blalock’s framework have not evidenced the predicted relationship between economic threat and the use of force. For example, in two analyses at the city-level, economic inequality/threat did not have a significant effect on the use of deadly force by police (Jacobs & O’Brien, 1998; Smith, 2004). However, Jacobs & O’Brien (1998) did include a second analytical model that involved only incidents of police deadly force against Black citizens and, in this model, found support for their economic inequality measure.
The second aspect of Blalock’s (1967) theoretical framework revolved around the politics, or \textit{power-threat}, and conceptualizes the ability for groups to mobilize resources. The underlying threat that results from the political arena involve the fear of losing power; if the racial minority can gain access to the political realm and the resources therein, they could challenge the existing order of the White majority (Dollar, 2014; Gabbidon, 2015). The resources regarding political involvement include but are not limited to the access to property, authority, prestige, and various human rights (Gabbidon, 2015). Most commonly, and as Blalock (1967) proposed, this aspect of the theory has been measured by accounting for whether the city being observed has a mayor who is African American. Using this measure, one study found that having a Black mayor did result in a reduction of deadly force incidents, but only when observing incidents that involved the victimization of Blacks specifically (Jacobs & O’Brien, 1998).

Finally, Blalock (1967) emphasized the importance of observing the size of the racial group that is perceived as threatening. Specifically, he believed that perceived threat will increase consistent with the increase in the size of the racial minority’s growth (Blalock, 1967). Most recently, Smith and Holmes (2014) found general support for this aspect of the theory when utilizing measures of the Black population and the Hispanic population when observing excessive force in minority communities. Holmes (2000) also reported similar results in his study that observed incidents of police brutality. However, Jacobs and Britt (1979) found no support across states regarding the size of the Black population. This finding was echoed in a later study at the city-level when observing total incidents of deadly force (Jacobs & O’Brien, 1998). In contrast, two other studies of police use of lethal violence, conducted by
Smith (2003, 2004), found consistent support for the Black population being a significant and positive predictor. When looking at Black-specific incidents of victimization, Jacobs and Britt (1979) also found support for this aspect of Blalock’s theory. Finally, Liska and Yu (1992) found that the most consistent predictor of fatal police force was the percent of the population that was non-White.

As the results of these past studies indicate, at the state- and city-level, there are inconsistencies regarding every aspect of Blalock’s threat theory when used to explore police use of force. When observing deadly force, particularly, there has been some support for the economic threat hypothesis (Jacobs & Britt, 1979), but others have not found support (Smith, 2004) except when utilizing Black-specific models (Jacobs & O’Brien, 1998). Similarly, some studies of deadly force have found evidence that the size of the Black, or non-White, population is a significant predictor (Liska & Yu, 1992; Smith, 2003, 2004); however, other studies have not found the same support for this measure (Jacobs & Britt, 1979; Jacobs & O’Brien, 1998). Unfortunately, regarding police deadly force, there has not been much attention given to Blalock’s political aspect of the threat theory; when it has been examined, there is some evidence that the presence of a Black mayor did make a difference in police lethality against Black Americans (Jacobs & O’Brien, 1998). As these studies also indicate, there is a need to disaggregate the incidents of deadly force along racial lines since it has been found that the threat measures were only significant when looking at the Black-specific incidents of victimization by the police (Jacobs & Britt, 1998). In addition, the macro-level studies of deadly force discussed above have not been conducted very recently; thus, they have not utilized the new data sources that may better account for police lethality.
In summary, the goal of this current study is to re-examine the macro-state-level predictors of the race-specific nature of police’s use of fatal force by improving on the previous literature in several significant ways. First, this study includes measures that test several hypotheses associated with the propositions of Blalock’s threat theory that centers on structural racism and discrimination. This is important given the deficiency of previous research attending to all three aspects – economic, political, and racial composition – being tested together. Second, this study utilizes the Mapping Police Violence data and the Supplemental Homicide Reports. This allows for the differences of these two data sources to emerge, which is important given the problems of the data in the SHR. Third, this study utilizes race-specific dependent variables since it is likely that the threat hypothesis will better predict the use of deadly force by police against those who are Black than their White counterparts. This is due to the fact that this theory focuses on structural racism in a society built on a racial hierarchy that places Whites at the top and Blacks at the bottom. These improvements and the fact that the racial disproportionality of lethal police violence have become so visibly present in the past few years makes the research of this study relevant and vital to American society.

Endnotes

1 In his study, Durán (2016) found that “for young Black and Latino males, it often appeared as if a higher level of force was used for non-serious situations” (p.74).

2 Other important factors of when police use force include when violent crimes have been committed, and if the suspect was “drunk, antagonistic, or physically resistant to the police” (Worden 1996, p.37). Even when controlling for these additional factors, the effect of race continues to be statistically significant regarding the use of force by police (Worden 1996).
3 The data collected by *The Guardian* resembles that of *Mapping Police Violence* (discussed in further detail below) by definition and total counts; however, it does not have information before 2015 (see https://www.theguardian.com/us-news/ng-interactive/2015/jun/01/the-counted-police-kilings-us-database).

*The Washington Post* is more limited in its definition of deadly force incidents and only captures those that involved firearms being discharged and officers who were on-duty (Nicholson-Crotty, Nicholson-Crotty, & Fernandez 2017; Williams, Bowman, & Jung 2016) (See https://www.washingtonpost.com/graphics/national/police-shootings-2016/).

4 Walker, Spohn, and DeLone (1996) concluded that the criminal justice system practices “contextual discrimination.” This means that racial and ethnic minorities will be treated more harshly at some stages than others, experience more punitiveness in some cases than others, and that certain types of crimes and their surrounding characteristics will lead to harsher treatment than Whites would experience under the same exact circumstances.

5 This theory is also commonly referred to as minority-group threat or power-threat theory (Gabbidon 2015).

6 Blalock’s (1967) work frequently refers to Whites and non-Whites, but he is especially concerned with the African American population due to the especially polarized history between them and the White population. Consequently, the current study only examines White and Black racial groups.

7 At its most basic, this theory states that “aggression may be displaced from the source of frustration to substitute targets;” see Blalock’s (1967) discussion on pages 42-44 for a fuller account of this theory.

8 Blalock (1967) also believes that there is a threshold point and once the racial minority reaches this point, the threat associated will level or taper.
Chapter 2

METHODOLOGY, ANALYTICS, AND PREDICTING LETHAL FORCE

Dependent variables

Multiple dependent variables are utilized in this study. The *Supplemental Homicide Reports* (SHR), which are released by the FBI and are constructed from monthly reports that individual law enforcement agencies compiled at the state-level (Department of Justice [DOJ], 2014), provide the data for the first set of dependent variables. The SHR provides homicide data including detailed accounts of the data and location, victim and offender demographics, the weapon used, the incident circumstances/situational characteristics, and what the relationship between the victim(s) and offender(s) was (DOJ, 2014). There are several limitations to this data though, as the Williams et al. (2016) article outlines, however, other scholars have noted that these limitations have persisted for many years (Fyfe, 2002; Hirschfield, 2015). For example, the SHR does not include homicides at the federal-level and its data collection is voluntary in nature, which contributes to inconsistencies in police agency submissions and the possibility of misclassified information (DOJ, 2014; Hirschfield, 2015; Williams et al., 2016). The definition that they use to denote these incidents may also be problematic. In the SHR data, the circumstances that correspond to police lethality are reported as justifiable and are, specifically, labeled as “felons killed by police,” which is restrictive and excludes other circumstances (Fyfe, 2002; Hirschfield, 2015). However, in addition to these restrictions, the figures reported in the SHR remain inaccurate (Fyfe, 2002).
Mapping Police Violence (MPV) has collected data on the use of deadly force by the police since 2013 and it is continually updated as incidents occur in real-time. In compiling this data, MPV has relied on other comprehensive databases as a starting point: FatalEncounters.org, U.S. Police Shootings Database, and KilledByPolice.net. Moreover, those who run the MPV data have also conducted some of their own research to add more quality and depth to this data, such as including information from social media outlets, obituaries, criminal records databases, and police reports.

Overall, this collection effort hopes to provide more transparency and accountability for police departments. Another goal is to decrease unjust police lethality within American communities. For conceptual purposes, this data goes beyond the SHR in the scope of the incidents it includes in its data collection process. Here, they define police killings as “a case where a person dies as a result of being chased, beaten, arrested, restrained, shot, pepper-sprayed, tasered, or otherwise harmed by police officers, whether on-duty or off-duty, intentional or accidental” (Mapping Police Violence, 2017).

As noted previously, MPV is not the only data source that has been developed in recent years. Two other major sources are The Counted and Fatal Force; however, these data sources are more limited in their data collection efforts than MPV. While there are differences between these three sources, there are also some general consistencies. First, they all rely on sources from the internet, news articles, and some police records (Campbell, Nix, & Maguire, 2017). Additionally, The Counted and MPV rely on data collection from crowdsourcing, whereas Fatal Force does not (Campbell et al., 2017). Even with these differences in data collection, the total numbers of lethal force cases are relatively consistent across these sources (Campbell
et al., 2017). Specifically, as Campbell et al. (2017) reported, there were 990 incidents according to *Fatal Force*, 1,146 in *The Counted*, and *MPV* denoted 1,210 incidents in 2015. These differences likely stem from the definitions used to define incidents of police lethality. For example, *Fatal Force* only reports on incidents involving shootings by officers who are on-duty at the time (Campbell et al., 2017; Nicholson-Crotty, Nicholson-Crotty, & Fernandez, 2017; Williams et al., 2016). As noted earlier, the definition used by *MPV* is much more inclusive. For this reason and because *MPV* and *SHR* data overlap for two years, *MPV* was used as the point of comparison.

In this work, both the *SHR* and *MPV* data provided separate dependent variables that will be utilized. First, this study limits the dependent variables to race-specific measures of deadly force incidents for Black victims and White victims. Additionally, these race-specific instances of deadly force were combined and averaged over a two-year period for both datasets, 2013-2014. This is done so that the values of these variables are more stable and this resembles the work of Smith (2003, 2004) who calculated police-caused homicides over five-year periods. In the end, there are four separate dependent variables: Black- and White-specific counts for both *Mapping Police Violence* and the *Supplemental Homicide Reports* spanning 2013-2014. Besides racial differences, it is also important to take gender and age into consideration when researching homicide and victimization (see Chilton & Chambliss, 2014; Fox & Fridel, 2017). However, these are not examined here since incidents of police lethality do not often involve females (Lersch & Mieczkowski, 2005) and since lethal force is disproportionately used against the young (Sorenson et al., 1993). Regarding gender for example, between 2013 and 2014 *MPV* reported 31 Black
women killed by the police and 73 White women; and these numbers are even lower in the SHR.

In Table 1, which shows the descriptive statistics, I present the differences between these data sources along racial lines. When looking at the means of Black victims of police lethality, the SHR data only indicates a mean of 2.98 in contrast to the mean of 5.47 the MPV, when matched by state to the SHR, reports. Additionally, there is a difference between the White SHR and MPV data matched by state, 6.83 compared to 9.06 respectively. When all states are taken into consideration regarding the MPV data, the Black and White means are relatively consistent to when they were matched by state to the SHR. Specifically, these means are 6.06 for Black victims and 9.25 for White victims of police lethality.
Table 1  Descriptive statistics for all variables

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td><strong>Race-specific variables.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dependent variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPV (2013-2014; n=43)</td>
<td>5.467</td>
<td>6.641</td>
</tr>
<tr>
<td>MPV (2013-2014; n=51)</td>
<td>6.059</td>
<td>7.652</td>
</tr>
<tr>
<td>SHR (2013-2014; n=43)</td>
<td>2.978</td>
<td>4.47</td>
</tr>
<tr>
<td><strong>Threat indexes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political ideology</td>
<td>71.083</td>
<td>14.688</td>
</tr>
<tr>
<td>Economic threat</td>
<td>2.958</td>
<td>0.442</td>
</tr>
<tr>
<td>Mobilization</td>
<td>12.328</td>
<td>1.470</td>
</tr>
<tr>
<td><strong>Control variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>12.302</td>
<td>2.895</td>
</tr>
<tr>
<td><strong>Non-race-specific variables.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Threat variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Black</td>
<td>10.837</td>
<td>10.929</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>15.116</td>
<td>1.042</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>2.003</td>
<td>0.861</td>
</tr>
<tr>
<td>Violent arrest rate</td>
<td>134.179</td>
<td>69.119</td>
</tr>
</tbody>
</table>

Due to the differences between these datasets, it is expected that the results based on the hypotheses outlined above will not be consistent. That is, since the SHR is limited by only capturing “felons killed by police” and fails to even collect this information well (Fyfe, 2002), this data source underestimates incidents of deadly force of both Black and White Americans. Furthermore, the SHR only provides data for only 43 states including the District of Columbia. Thus, including analyses of the MPV data is important as a point of comparison with the SHR, but it is also important since it provides a fuller account of killings by the police in the United States. The
descriptive statistics for these dependent variables and the threat and control variables discussed in the next two sections can be seen in Table 1. It should be noted that the dependent variables for both the MPV and SHR race-specific measures matched by state are represented, but so are the MPV measures that include all states since these are all utilized.

**Racial threat variables**

Several of the threat variables for this study came from the one-year estimates provided by the *American Community Survey (ACS)* for 2010. The use of the one-year estimates is justified given the use of state-level predictors since it is best suited for the analysis of large populations (Census Bureau, 2017). Specifically, the *ACS* provided data that was utilized in producing measures regarding the economic threat component of Blalock’s theory. Two measures were utilized specifically: mean family income and median earnings. Both income and earnings included Black- and White-specific values. To measure economic competition, or threat, these measures were transformed into ratios following the work of other researchers (Jacobs & O’Brien, 1998; Parker, Stults, & Rice, 2005). Thus, the White measure of median income was divided by the Black measure of median income and this was repeated regarding earnings. In the end, the larger the value of these ratios, the greater inequality there is economically between Whites and Blacks within the states. Based on Blalock’s (1967) propositions, it is hypothesized that states with more inequality between Whites and Blacks will have less incidents of deadly force against Blacks, since this would symbolize less competition between the races economically. However, in the models looking at Whites killed by the police, it is expected that there will be fewer incidents in states
with greater economic inequality given the fact that they are at the top of the economic ladder.

The data made available by Peter K. Enns\(^5\) provided the measures that were used to capture the political aspect of Blalock’s theory. These include the states’ Republican identifiers (see Enns & Koch, 2013) and the percent of the states’ population that identifies as conservative politically (see Enns & Koch, 2013). Both variables resemble other state-level analyses that examined racial threat and state-sanctioned violence in the form of death sentences (Jacobs & Carmichael, 2002; Jacobs & Carmichael, 2004; Jacobs, Carmichael, & Kent, 2005). While these are not direct measures of political threat, there is reason to believe that they are important to the threat theory. As previous research has indicated, racial threat has been shown to have an impact on state Republicanism and conservativeness. For example, Jacobs and Tope (2008) found that, at the state-level, the legislatures of states experienced Republic growth concomitant with the growth of the Black population and violent crime, which is perceived by Whites to mostly involve racial minorities. As Blalock (1967) noted, Black political leadership may also play an important role regarding perceived threat of the Black population. Thus, a measure was created using the results of the 2012 Presidential Election where Barrack Obama won a second term in the office of the President. This measure was constructed using election results as reported by NBC News\(^6\) and measures, dichotomously (1=state voted against President Obama, 0=state voted for President Obama), the states whose majority population voted against President Obama that year. In the end, it is hypothesized that states with greater Republican and conservative ideology will have more incidents of Blacks
killed by the police; this relationship could be expected to be true regarding White victims too, but to a lesser degree.

Regarding the third aspect of Blalock’s threat theory, the ACS provided the racial composition measure. Specifically, the percent of the states’ population that identified as African American/Black and non-Hispanic, was included in this analysis, which has been shown to be a consistently strong and stable predictor at the macro-level (Pratt & Cullen, 2005), especially regarding the prevalence of homicide (Land, McCall, & Cohen, 1990). Additionally, the inclusion of this measure is the most common in racial threat research (Dollar, 2014; Kubrin et al., 2009). Thus, it is hypothesized that states with more Black residents will also exhibit more instances of deadly force against Black persons. The opposite is hypothesized to be true in the White models; specifically, states with more Black residents would likely have fewer instances of Whites killed by the police.

Two final measures were utilized from the ACS to capture racial threat; however, they were not explicitly outlined in Blalock’s original propositions. Specifically, these measures can be generally understood as racial mobilization and this includes mobility across state lines and from abroad into states. Mobilization measures are included because with more persons of one race or another moving into an area, it may indicate that racial group to be viewed by others as more threatening. Thus, these mobilization measure may help to better capture the actual growth of these populations within a state. Ultimately, it is hypothesized that states with more Black Americans moving into them from other states and abroad will also result in more Blacks killed by the police. This is hypothesized since it indicates an increase in the population, but also because it may increase the visibility of the Black population. In
the White models, it is expected that White mobilization will likely have no impact on instances of deadly force by the police.

**Analytical considerations.**

Due to the possible interrelations among these independent threat variables, principle components factor analysis using varimax rotation was utilized (Land et al., 1990; Parker et al., 2005). Two separate analyses were run, one for Black-specific measures and one for White-specific ones since the dependent variables are also race-specific. Table 2 displays that the threat measures loaded into three separate measures for both race-specific models and only those that loaded above a value of 0.5 are reported (Land et al., 1990; Parker et al., 2005). First, the two economic measures loaded together and, thus, an economic threat measure was constructed. When looking at the economic index descriptive statistics along racial lines, displayed in Table 1, there is not much difference across the racial groups. Second, the three political measures loaded together and, as a result, a political ideology measure of Republicans and conservativism was created. Regarding political ideology, the Black-specific index reports a mean of 71.08 compared to the mean of 70.84 in the White-specific index. Finally, the mobilization measures were transformed into a solitary measure for both the White and Black populations. The combined Black mobility measures result in a mean of 12.33 compared to the combined White mobility measures that resulted in a mean of 12.32. It is important to note that the racial composition measure was not included in these factor analyses, even though this variable is often correlated with economic measures (Land et al., 1990). Since this variable directly measures one aspect of Blalock’s theory, its effect needs to be interpreted separately. Ultimately, as the VIFs displayed in the analyses below indicate, there does not appear to be an issue
of multicollinearity from not including the size of the Black population in the factor analysis. The descriptive statistics for these indexes can be seen in Table 1.

Table 2  Principle Component Analysis Utilizing Varimax Rotation for Racial Threat Variables

<table>
<thead>
<tr>
<th></th>
<th>Black Model</th>
<th></th>
<th></th>
<th>White Model</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Income (ratio)</td>
<td>0.939</td>
<td></td>
<td></td>
<td>0.936</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earnings (ratio)</td>
<td>0.930</td>
<td></td>
<td></td>
<td>0.935</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Republican</td>
<td>0.929</td>
<td></td>
<td></td>
<td>0.928</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>0.977</td>
<td></td>
<td></td>
<td>0.972</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voted against Obama</td>
<td>0.881</td>
<td></td>
<td></td>
<td>0.877</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobility across states</td>
<td>0.845</td>
<td></td>
<td></td>
<td>0.926</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobility from abroad</td>
<td>0.872</td>
<td></td>
<td></td>
<td>0.850</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>2.689</td>
<td>1.756</td>
<td>1.461</td>
<td>2.856</td>
<td>1.752</td>
<td>1.507</td>
</tr>
<tr>
<td>Variance explained</td>
<td>38.4%</td>
<td>25.1%</td>
<td>20.9%</td>
<td>40.8%</td>
<td>25.0%</td>
<td>21.5%</td>
</tr>
</tbody>
</table>

Only factor loadings >0.500 are reported here.

Control variables

Besides the threat measures discussed above, several other measures that may help to understand the use of deadly violence by the police were included in this study. First, the total population for each state was included since areas with larger populations also provide more chances of interactions between the police and citizens. Thus, there may be a greater chance for meetings that resulted in lethal force being deployed. This measure is logged to correct for skewness. A second population measure is the percent of the population that is Hispanic. This measure is important to
include given the fact that Latinos have replaced African Americans as the largest racial/ethnic minority and that these growing populations from Latin America have come to be scapegoated for crime and criminality in contemporary times (Martinez Jr., 2006), much like the Black population has been for years. Additionally, there is some evidence that Latino threat does predict higher levels of punitiveness toward their population (Stewart, Martinez Jr., Baumer, & Gertz, 2015). Importantly, this measure was logged, similar to the total population of the state, to correct for its skewed distribution. While this has often been utilized to measure threat like the percent of the population that is Black, this study is particularly interested in just White and Black victims of police violence. For this reason, including the measure of the Hispanic population is only observed here as a control. Thus, a different relationship would be expected given the dependent variables being Black- and White-specific counts of deadly police violence. The measure of the Hispanic/Latino population is expected to lessen the counts of deadly violence across the states regarding Blacks and Whites who are killed since the prevalence of this population may draw attention from the Black population and Whites.

The rate of violent crime arrests from each state, which was constructed using Uniform Crime Report data for 2010, was also included in this study. This factor is often understood through the consensus perspective and takes a reactive understanding regarding the police’s use of deadly force (Jacobs & Britt, 1979; Jacobs & O’Brien, 1998). Here, the use of lethal force by police would be understood as simply a reaction to the criminal violence taking place within their area of patrol (Jacobs & Britt, 1979; Jacobs & O’Brien, 1998). Thus, more violent crime may result in more violence being dealt by the police. In several studies, violence in the area was found to be a
significant predictor in police use of force, excessive and deadly. For example, Alpert and MacDonald (2001) found that the violent crime rate of a jurisdiction was the strongest explanatory factor in reported incidents of police use of force. In addition, Jacobs and Britt (1979) found that violence was a significant predictor of deadly force across states and, similarly, Jacobs and O’Brien (1998) found that the murder rate was a significant predictor of deadly force across cities for total and Black-specific instances of police lethality. Finally, Smith (2003, 2004) found that the violent crime rate was a consistent and significant, positive predictor of police violence across cities.

An additional control measure observes the impact of family disruption on the use of police deadly force, one of the strongest and most stable macro-level predictors in the criminological literature (Land et al., 1990; Pratt & Cullen, 2005). Therefore, the percent of the population that is divorced for both Blacks and Whites is included in their respective race-specific models. Specifically, areas with more familial disruption may not have social networks that are able to provide social control, which is often tied to more violent crime in these areas (Shihadeh & Steffensmeier, 1994). As a result, this lack of social control may contribute to persons being involved in more criminal activity and, therefore, there would be more chances for interactions in with police. Finally, the geographic region of the US in which the state resides may also provide an important insight regarding police violence. Thus, two separate geographic measures have been included in the analyses below. Both measures were created by coding those states within the respective regions, South or West, dichotomously (1=the state residing in that geographic region, 0=for states not in the region). South is included since there may be lasting effects of racialized violence that plagued its history while West is included due to its highly diverse population and large Latino
population. It should be noted that the predictor variables shown in Table 1 include all states but those that were already missing from the data sources. Also, Table 1 does not include regional variables since they are nominal.

**Analytic technique**

Due to the nature of the dependent variables, count models, such as Poisson and negative binomial regressions, were considered and utilized for the analyses reported below. These statistical analyses provide an alternative to other forms of regression analysis, such as ordinary least squares (Osgood, 2000). These analyses are appropriate for dependent variables that measure counts, or integer-valued responses that are positive and discrete (Beck & Tolnay, 1995). These regressions, which were race-specific, were also offset for the population being observed. Thus, models that looked at Black victims of police violence were offset by the natural log transformation of the total Black (non-Hispanic) population, and this was repeated for White models with the White-specific measures. It is important to note that for the SHR-Black models, negative binomial regressions were the appropriate analysis, which indicates that this dependent variable was overdispersed, whereas Poisson regressions were more appropriate for the other models (Osgood, 2000). This was determined by examining the likelihood-ratio test of \( \alpha=0 \), where the Black models from the SHR data indicated a \( \text{chibar2}(1) \) value was significantly different from zero (Osgood, 2000). Robust standard errors were also requested, which corrects for heteroskedasticity. Additionally, incident rate ratios (IRR), which are estimates that are exponentiated, were requested as an alternative to the coefficients that negative binomial and Poisson regressions provide (Rabe-Hesketh & Skrondal, 2012b). In the result tables, variance inflation factors (VIF) are reported to check multicollinearity.
and Bayesian information criterion (BIC) values are also reported where lower values indicated preferred models (Rabe-Hesketh & Skrondal, 2012a). It is important to note that, while the analyses were originally nested, only full models are reported below since the findings from control models were fairly consistent when all predictors were included and the threat measures did add significantly to model fit and significance.

### Results


Black models.

In Table 3, three models are presented that correspond to Black victims of lethal police violence and this includes separate models for the SHR and MPV data. Model 1 of Table 3 corresponds to the SHR data while Model 2 displays the analyses regarding the MPV data that is matched with the SHR data. For the analyses in these first two Black models, the data was matched by state since there were several states missing data in the SHR. When observing the impact of independent variables across these two data sources regarding Black victims, there are some general discrepancies regarding the measures of South, Hispanic, economic threat, and the size of the Black population to a certain extent. These findings give credence to the importance of observing the new data collected regarding these instances of violence.

First, the results of the Black SHR model’s (Model 1) findings will be discussed. In Model 1, southern states have a lower rate (0.294 or 70.6%) of Black civilians killed by police. Thus, southern states have fewer instances of police lethality against Black civilians and this finding is not replicated in Model 2 as shown later.
Also, the logged percent of the population that was Hispanic maintained a similar significant effect as in the control model. Specifically, as the Hispanic population increases by one value, the rate of incidents of police lethality increase by about a factor of 1.438 (43.8%). However, none of the racial threat measures reached significance regarding the Black population killed by the police as measured by the SHR.

Table 3  Negative binomial and Poisson regressions using IRR (robust standard errors) for Black victims of lethal police force

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SHR (N=42)</td>
<td>MPV (N=42)</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>1.044 (0.228)</td>
<td>1.001 (0.098)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.438 (0.229)*</td>
<td>0.827 (0.072)*</td>
</tr>
<tr>
<td>South</td>
<td>0.294 (0.154)*</td>
<td>0.927 (0.225)</td>
</tr>
<tr>
<td>West</td>
<td>1.252 (0.649)</td>
<td>1.282 (0.302)</td>
</tr>
<tr>
<td>Divorce</td>
<td>1.081 (0.157)</td>
<td>1.079 (0.062)</td>
</tr>
<tr>
<td>Violent arrest rate</td>
<td>0.998 (0.002)</td>
<td>1.001 (0.001)</td>
</tr>
<tr>
<td><strong>Threat variables/indexes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political ideology</td>
<td>1.022 (0.015)</td>
<td>1.003 (0.007)</td>
</tr>
<tr>
<td>Economic threat</td>
<td>0.577 (0.306)</td>
<td>0.564 (0.156)*</td>
</tr>
<tr>
<td>Mobilization</td>
<td>0.872 (0.222)</td>
<td>0.948 (0.104)</td>
</tr>
<tr>
<td>Percent Black</td>
<td>0.997 (0.023)</td>
<td>0.977 (0.013)+</td>
</tr>
<tr>
<td>Constant</td>
<td>4.23E-06</td>
<td>0.000</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.134</td>
<td>0.191</td>
</tr>
<tr>
<td>Log pseudolikelihood</td>
<td>-64.309</td>
<td>-70.877</td>
</tr>
<tr>
<td>BIC value</td>
<td>173.470</td>
<td>182.877</td>
</tr>
<tr>
<td>VIF range</td>
<td>1.42, 3.10</td>
<td>1.42, 3.10</td>
</tr>
</tbody>
</table>

***p<0.001  **p<0.01  *p<0.05  +p<0.10
When looking at the lethal violence against the Black population from the MPV data, a different story is told. In the MPV model (Model 2) regarding the Black population killed by the police, there are three significant findings. One control variable, the measure of the Hispanic population, reached significance. This finding indicates that as the Hispanic population increases by one unit, there was a decrease, by about 0.827 (17.3%), in the rate of incidents of Black persons killed by the police. While Hispanic was significant in Model 1 as well, its relationship with lethal force was in the opposite direction. Unlike the SHR results in Model 1, two of the racial threat measures used to predict the Black-specific instances of deadly force reached or approached significance. First, the economic threat measure that consists of the White-to-Black ratios of earnings and income was significant and indicates that as inequality increases, there is a 0.564 (43.6%) rate decrease in incidents where the police killed Black Americans. This means that where the Black population is worse off economically than the White population, there are fewer incidents of police lethality. This may be interpreted as indicating that the Black population is so unequal that they pose no real threat to the White population, thus there is a lesser need for the police to enforce the racial hierarchy. However, it is also contradictory to some of the previous studies noted above that found that areas with the greatest inequality also had the most deaths at the hands of police (Jacobs & Britt, 1979). Secondly, there is approximately a 0.977 (2.3%) rate decrease in incidents of Blacks killed by the police as the Black (non-Hispanic) population increases by one percent. While this appears to indicate a clear contradiction to racial threat, it may be that these states have Black populations large enough to have reached a point where they are enough of a majority to no longer be considered threatening (Blalock 1967).
White models.

In Table 4, the results of two separate models regarding lethal police violence against White victims are reported from both the MPV and SHR datasets. Specifically, Model 3 corresponds to the SHR data and the results regarding the MPV data, matched by state with the SHR data, are in Model 4. As the Black models indicated, there are some clear differences regarding the effects of independent variables between these two sources of lethal force data. Specifically, there were discrepancies regarding measures of the total population, Hispanic, West, and mobilization. However, there were consistencies when observing divorce and economic threat. In addition, and as expected, the impact of the racial threat and control variables differed when considering White victims of lethal force instead of Black victims.

Table 4  Poisson regressions using IRR (robust standard errors) for White victims of lethal police force

<table>
<thead>
<tr>
<th></th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SHR (N=42)</td>
<td>MPV (N=42)</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>1.433 (0.148)**</td>
<td>1.062 (0.046)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.330 (0.155)*</td>
<td>0.947 (0.048)</td>
</tr>
<tr>
<td>South</td>
<td>0.822 (0.482)</td>
<td>1.351 (0.256)</td>
</tr>
<tr>
<td>West</td>
<td>1.386 (0.654)</td>
<td>1.925 (0.336)**</td>
</tr>
<tr>
<td>Divorce</td>
<td>1.432 (0.117)**</td>
<td>1.194 (0.046)**</td>
</tr>
<tr>
<td>Violent arrest rate</td>
<td>0.999 (0.001)</td>
<td>0.999 (0.001)</td>
</tr>
<tr>
<td>Threat variables/indexes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political ideology</td>
<td>0.999 (0.012)</td>
<td>1.008 (0.005)</td>
</tr>
<tr>
<td>Economic threat</td>
<td>2.079 (0.729)*</td>
<td>1.395 (0.191)*</td>
</tr>
<tr>
<td>Mobilization</td>
<td>1.490 (0.353)+</td>
<td>1.069 (0.101)</td>
</tr>
<tr>
<td>Percent Black</td>
<td>0.984 (0.020)</td>
<td>0.992 (0.005)</td>
</tr>
</tbody>
</table>
In the SHR model for White victims (Model 3), the effects three control variables reach significance. First, as the total population of the state increases by one unit, the rate of lethal incidents increases by a factor of 1.389 (38.9%). Second, as the Hispanic/Latino population increases by one unit, there is also a 1.330 (33.0%) increase in the rate of police lethality against Whites. Third, as divorces within the White population increase by one percent, there are also more instances of lethal police violence against White persons at a rate of 1.432 (43.2%). Additionally, one of the threat measures reached significance in this model and one approached significance. The economic threat measure indicates that states with greater economic inequality between Whites and Blacks have higher counts of Whites killed by the police. That is, when Whites are more successful economically, they are also more likely to be killed by the police. Specifically, the rate of Whites killed by the police is 2.079 (107.9%) times greater as the inequality between Whites and Blacks increases by one unit. This is a direct contradiction to the conflict perspective and threat theory,

<table>
<thead>
<tr>
<th></th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SHR (N=42)</td>
<td>MPV (N=42)</td>
</tr>
<tr>
<td>Constant</td>
<td>4.34E-14</td>
<td>1.07E-08</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.577</td>
<td>0.303</td>
</tr>
<tr>
<td>Log pseudolikelihood</td>
<td>-89.231</td>
<td>-88.988</td>
</tr>
<tr>
<td>BIC value</td>
<td>219.576</td>
<td>219.091</td>
</tr>
<tr>
<td>VIF range</td>
<td>1.36, 4.04</td>
<td>1.36, 4.04</td>
</tr>
</tbody>
</table>

***p<0.001 **p<0.01 *p<0.05 +p<0.10
specifically. The predictor that approached significance was the measure of White mobilization; specifically, the rate of Whites killed by the police increases at a factor of 1.490 (49.0%) as the mobility of Whites increases. Thus, states that have more White mobility also have a greater likelihood to have police interactions resulting in White deaths.

In the White $MPV$ model (Model 4) missing the same states as the $SHR$ data, there are some inconsistencies as indicated in the Black models. In this model, there are three significant predictors of lethal violence against Whites. Significant control variables include if the state is in the West and the White divorce measure and both predict a positive relationship between them and police lethality against Whites. Specifically, and unlike Model 3, western states exhibit higher rates – 1.925 or 92.5% – of police violence against Whites. Similar to what was found in Model 3, as divorce increases by one percent, the rate of White deaths at the hands of the police increase by a factor of 1.194 (19.4%). Regarding the threat variables, only one reached significance. Like Model 3 and contradictory to racial threat theory, states where Whites are better off economically compared to Blacks also have higher instances of lethal police violence against White citizens. Specifically, as the inequality between Whites and Blacks increases by one unit, the rate of police lethality increases by a factor of 1.395 (39.5%) regarding White victims.

Besides these differences within racial groups measured across separate databases, the results also show some important racial differences. However, racial differences will be observed in more detail next when discussing the results from
Table 5 considering MPV counts including all states. What is most important from the findings in Tables 3 and 4 is that what database is used to measure deadly force matters since results are not consistent across the SHR and MPV.

Table 5  Poisson regressions using IRR (robust standard errors) for the MPV data only (N=48)

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 5</td>
<td>Model 6</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>1.052 (0.090)</td>
<td>1.039 (0.047)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.806 (0.071)*</td>
<td>0.965 (0.044)</td>
</tr>
<tr>
<td>South</td>
<td>1.115 (0.262)</td>
<td>1.387 (0.260)+</td>
</tr>
<tr>
<td>West</td>
<td>1.089 (0.259)</td>
<td>2.095 (0.292)***</td>
</tr>
<tr>
<td>Divorce</td>
<td>1.115 (0.049)*</td>
<td>1.163 (0.036)***</td>
</tr>
<tr>
<td>Violent arrest rate</td>
<td>1.002 (0.001)+</td>
<td>0.999 (0.001)</td>
</tr>
<tr>
<td><strong>Threat variables/indexes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political ideology</td>
<td>1.000 (0.007)</td>
<td>1.008 (0.005)+</td>
</tr>
<tr>
<td>Economic threat</td>
<td>0.874 (0.258)</td>
<td>1.319 (0.166)*</td>
</tr>
<tr>
<td>Mobilization</td>
<td>1.029 (0.101)</td>
<td>1.013 (0.073)</td>
</tr>
<tr>
<td>Percent Black</td>
<td>0.971 (0.013)*</td>
<td>0.991 (0.005)+</td>
</tr>
</tbody>
</table>

Constant 1.75E-06 9.87E-09
Pseudo R² 0.165 0.223
Log pseudolikelihood -83.239 -101.935
BIC value 209.061 250.325
VIF range 1.33, 2.95 1.33, 4.53

***p<0.001 **p<0.01 *p<0.05 +p<0.10
The final analyses of this study, reported in Table 5, includes two models that observed only the *Mapping Police Violence* data averaged across the two-year period (2013-2014) and including all states, not just those that were not missing in the *SHR* data. This analysis is included because, as argued earlier, the *MPV* makes some important improvements to lethal force data collection by defining incidents more broadly, not relying solely on police records, and *MPV* does not suffer from missing data across some states. In addition, this analysis is used to highlight the important racial differences regarding when lethal force is employed. Thus, Model 5 in Table 5, corresponds to Black victims and Model 6 in Table 5 corresponds to White victims of lethal force. Clearly, these results indicate that victims of police deadly force need to be observed disaggregated by race since there are several differences in the impacts of the predictor variables. For instance, inconsistent measures include Hispanic, violent arrest, South, West, political ideology, and economic threat. However, two measures were relatively consistent regardless of race: divorce and the percent of the population that is Black. Additionally, the inclusion of the states that were excluded in the previous analyses also appears to have altered the results of the analysis.

In the *MPV* Black model (Model 5 of Table 5), there are three significant predictors and one that approached significance. First, divorce indicates a positive and significant relationship. This finding means that the rate of Blacks killed by the police increases by a factor of 1.115 (11.5%) as Black divorces within a state increase by one percent. In addition, the logged percent of the population that is Hispanic reaches significance, indicating that states with larger Hispanic populations tend to have fewer instances of lethal police violence against Blacks. Specifically, as the Hispanic population increases, the rate of police lethality decreases by about 0.806 (19.4%)
regarding Black Americans. Thus, Hispanics may provide a buffer of sorts when it comes to the police employing lethal force against Blacks. Additionally, the percent Black (non-Hispanic) measure reached significance. This finding indicates that as the Black population increases by one percent, there is a decrease, by a factor of 0.971 (2.9%), in incidents of police lethality against Black Americans. This may indicate that once the Black population is sufficiently large, they are no longer seen as a threat.

One final variable approached significance in this model, the violent arrest rate within the state. This finding indicates that police lethality increases at a rate of 1.002 (0.2%) as the rate of violent crime arrests increase by one unit. This gives tentative support of the consensus, or reactive, understanding of the criminal justice system; however, the effect is miniscule.

In Model 6 of Table 5, several significant findings regarding Whites killed by the police are reported. First, both residing in the West – by a rate of 2.095 (109.5%) – and an increase in White divorces – by a rate of 1.163 (16.3%) – indicate positive relationships that are significance. Additionally, states in the South approach significance and result in an increase, by a factor of 1.387 (38.7%), in incidents of Whites killed by the police. Thus, regional measures appear to matter more when considering the use of lethal force against Whites than against Blacks. Also, divorce appears to be invariant regarding the use of deadly force against Blacks and Whites since it was a positive and significant predictor in Models 5 and 6. This lends some credence to the importance of family disruption that has been indicated in previous literature (Pratt & Cullen, 2005). Additionally, three of the threat measures predicted relatively significant relationships regarding police lethality as well. As seen previously and contradictory to threat theory, the economic threat measure was
significant, indicating that states with more economic inequality – where Whites are better off – have more instances of White persons killed by the police. Specifically, as the inequality between the White population and Black population increases by one unit, there is also an increase in the rate of Whites killed by the police by a factor of 1.319 (31.9%). Unexpectedly, this measure of economic threat had no significant effect regarding Blacks killed by the police. In addition, the political ideology measure – Republicanism and conservativeness – approached significance at a rate of increase in White police killings by a factor of 1.008 (0.8%) for each increase, but this is a small effect. This variable indicated no significant effect regarding Blacks killed by the police. Finally, the percent of the population that is Black (non-Hispanic) also approached significance in this model. As expected, as the percent of the Black population increases by one there is a slight decrease in the rate of incidents of police lethality against Whites by about 0.991 (0.9%). Thus, where there are more Blacks there are less Whites killed by the police. Overall, as these findings indicate, using race-specific counts matter since there are inconsistencies between Models 5 and 6; however, divorces are a consistent predictor of lethal force. Also, the size of the Black population indicates a significant negative effect in both models, but this is interpreted differently. For Blacks it may be that once their population reaches a large enough portion of the state’s population they are no longer seen as threatening, but for whites it may mean that where there are larger Black populations there will be less policing attention given to Whites.

Endnotes

1 There are three persons who comprise the Planning Team for MPV. Importantly, they have held varying roles regarding policy analysis, data science, education,
activism, youth leadership, and so on, with a special emphasis on working within communities of color for racial justice and equity (see http://mappingpoliceviolence.org/planning-team/ for more information).

2 Only the years of 2013 and 2014 were since the SHR had even more missing states in 2015 than the previous two years and because these are the two earliest years of the MPV data. The states already missing from the SHR include: Alabama, Florida, Massachusetts, New Hampshire, New York, and North Dakota.

3 By using the years 2013-2014, the dependent variable is lagged compared to the years that the independent variables come from - 2010. Allowing this time-lag has been utilized in other state-level studies of Blalock’s threat theory when observing other criminal justice outcomes, including death sentences (Jacobs & Carmichael 2002; Jacobs & Carmichael 2004; Jacobs, Carmichael, & Kent 2005). Additionally, while these studies did not examine police violence, death sentences are also state-sanctioned forms of violence resulting in death. For this reason, and because they were focused on states as the units of analysis, these three studies were paramount in constructing the methodology guiding the current study.

4 See https://www.census.gov/programs-surveys/acs/guidance/estimates.html

5 This data can be found at Peter K. Enns’ website (http://thedata.harvard.edu/dvn/dv/Enns).

6 This information can be found at http://elections.nbcnews.com/ns/politics/2012/all/president/#.WWbADojyvIU

7 These nested models are available upon request.

8 It should be noted that VIF values are above 4.0, which is generally used as a conservative cut-off point, in every SHR and MPV White-specific model. However, these values are still well below the value of 10.0 that has been suggested by some as indicating multicollinearity (Kutner, Nachtsheim, & Neter 2004).

9 Due to the predictor variables used having missing values, the number of states included in these models are 48, not the full 50 plus Washington D.C. Missing states here include Washington D.C., North Dakota, and Wyoming; which were also missing in the earlier SHR and MPV comparison models in Tables 3 and 4.
Chapter 3

WHY THE DATA CHOSEN MATTERS, RACE, AND MINORITY-THREAT

Discussion and Conclusions

In recent years, the US media has covered numerous cases highlighting the use of excessive and, sometimes, lethal police force. As Hirschfield (2015) wrote, “When it comes to police lethality, the United States is unrivaled among industrialized nations” (p. 1110). Unfortunately, many of these instances have resulted in the deaths of Black Americans. Thus, the purpose of this study was to re-examine the connections between race and police use of deadly force at the state-level. In proceeding with this goal in mind, Blalock’s (1967) racial threat framework was utilized. This theory stresses the importance of economics, politics, and the perceived threat surrounding the size of the population of racial minority groups, those who are African American/Black in this case, compared to the racial majority. In testing this theory and observing lethal police violence, two separate data sources were observed. For years, researchers have been dependent on the FBI’s Supplemental Homicide Reports, although these reports have long been criticized for inaccuracies regarding deaths at the hands of the police (Fyfe, 2002; Williams et al., 2016). Thus, Mapping Police Violence, a recently developed alternative data source, was also examined. The MPV makes several improvements on the SHR data. It is more comprehensive in its data collection, not relying on just police records, cases of deadly force are not as narrowly defined, and states are not able to opt out the inclusion of their data.
Supplemental Homicide Reports vs. Mapping Police Violence Conclusions

As the results of the analyses in this study indicate in Tables 3 and 4, there are some definite inconsistencies across the two separate data sources at the state-level when they are matched by state, especially when observing police lethality against Black Americans. That is, the data tell different stories. Firstly, the Black SHR data required an alternative analysis to the Poisson regression, which was appropriate for all the other analyses, due to overdispersion of the dependent variable (Osgood, 2000). Additionally, while not directly comparable, the findings reported from these matched analyses are not consistent. The Black-specific SHR model (Model 1) only reported significance for the Hispanic population measure and the regional variable of residing in the South. In contrast, Hispanic reached significance in the MPV model (Model 2) but in the opposite direction, which is consistent with the hypothesis that larger Hispanic populations would likely result in an inverse relationship since they may be more visibly threatening that the Black population due to the conflation of immigration with crime. It could also be that their population plus the Black population are a majority in some states, resulting in less perceived threat from minority populations in general. States in the South had no significant effect in the Black-specific MPV (Model 2). Also, one of the threat measures was significant and one approached significance in the MPV model, but none did when examining the SHR data regarding Black victims. Specifically, and as expected, the MPV model (matched with the states of the SHR) found that as inequality increased between White and Black populations in a state, there were less incidents of police lethality against Black Americans. This could mean that, while the Black population is clearly economically disadvantaged, they do not appear to be in direct competition with the White population indicating that less police lethality is necessary to reinforce this
inequality. Finally, the Black population composition measure approached significance and denoted an inverse relationship, which may offer support to the contention that one the Black population reaches a threshold they are no longer viewed as a threatening and dangerous racial group (Blalock, 1967).

When observing the differences across data sources and White victims of fatal police force, more inconsistencies are reported. In the White-specific SHR model (Model 3), the size of the total state population and Hispanic populations resulted in more incidents of lethality against Whites, as did increases in divorce within the White population. Regarding the threat measures, the SHR data results for Whites killed by the police reported positive relationships between economic threat and White mobilization. For the White MPV model (Model 4) matched by state to the SHR data, states in the West – a similar relationship was present in the SHR model – and increases in the divorced White population, which is consistent with the SHR model, were shown to have positive associations with police lethality against Whites. Additionally, and consistent with the SHR results, increasing inequality between White and Black Americans resulted in an increase of police lethality against Whites. This appears to offer a clear contradiction to the conflict and racial threat frameworks discussed above. Since Whites are more economically advantaged, it is expected that they would not be found as victims of police violence since they are not the “threatening” population (Blalock, 1967; Quinney, 1974). This contradictory finding needs to be explored more in-depth in future research.

Mapping Police Violence and Racial Differences Conclusions

Since there are some clear inconsistencies when examining the SHR and MPV data sources, and since evidence has been provided that the MPV is arguably better,
MPV models with all states included were also examined in this study. In particular, these full MPV analyses (Models 5 and 6) are used to highlight racial differences. In the Black MPV model (Model 5), the Hispanic population maintains an inverse relationship with Black civilians killed by the police. In addition, the Black divorced population results show a positive relationship with police lethality, indicating that areas with more family disruption also have more police violence. Here, there is some evidence of the reactive hypothesis (Jacobs & Britt, 1979; Jacobs & O’Brien, 1998), or that areas of more violent crime will also result in more Black Americans being killed by the police. Finally, the Black composition measure indicates a significant, inverse association with police lethality providing tentative evidence of Blalock’s (1967) threshold proposition.

In contrast, with the White MPV model (Model 6), residing in the South and West shows higher levels of Whites killed by the police, as do higher levels of divorce among Whites. In addition, two of the threat measures approached significance: right-wing political ideology, which indicated a positive relationship with police lethality against Whites, and the Black population measure, which indicated an inverse relationship. Both findings are consistent with expectations, especially that the larger the Black population the less incidents of Whites killed by the police there will be. Finally, the economic threat measure maintained the significance and positive effect seen in the other White-specific models of police lethality, which indicates that more inequality between the races results in more police violence against Whites. Again, this provides contradictory evidence of the conflict and threat hypotheses (Blalock, 1967; Quinney, 1974) and needs to be examined further.
Based on these findings a couple general conclusions can be made about racial differences and lethal force. First, region appears to matter for Whites killed by the police, but not when considering Blacks. Second, size of the Black population does matter for both but in different ways. Third, there is tentative evidence that states with more violent crime have more incidents of lethal force against Black, which may give some evidence to the conflation of Blacks with violent crime. Fourth, economic threat may not be as important as Blalock’s theory proposes regarding lethal force. Finally, family disruption appears to be crucial in understanding lethal force regardless of racial group.

Racial Threat Theory Conclusions

In the end, when it comes to the threat theory, and conflict perspective in general, there are several inconsistencies regarding the propositions and hypotheses provided by Blalock (1967). In models regarding Black persons killed by the police, there is virtually no support for Blalock’s threat theory except the possibility that once the Black population is sufficiently large they will no longer be perceived as threatening (Blalock, 1967). Political Republicanism and conservatism appears to play no significant role in predicting lethal force, nor does economic inequality or the mobility of the Black population. In addition, there was a finding regarding the White-specific models that were contrary to what is expected given the threat hypotheses and conflict theory. Specifically, that as economic inequality increases between these two races, so too does the prevalence of Whites who are killed by police authorities. Thus, threat theory does not appear to be an adequate framework on its own regarding lethal force measured at the state-level. This indicates that, at least when observed at the state-level, it does not appear that structural forms of racism and discrimination are
effective predictors of lethal force incidents; even though there is evidence of Black Americans being killed at disproportionate rates compared to Whites.

Limitations, Future Research, and Conclusions

While these results do not bode well for threat theory or outright contradict it, there are several factors that may have influenced these findings. First, this analysis has been conducted with state-level data, which is, arguably, not the most appropriate unit of analysis to capture group processes and the perceptions of threat. However, there is some research indicating that the level of analysis may not matter and that the effects of predictor variables should be relatively invariant, but they conclude that more work needs to be done in this regard (Land et al., 1990). Thus, future research would benefit from a similar analysis, but at different macro-levels of analysis such as counties or cities. Second, this analysis was limited in the number of years available for the measures of deadly force since Mapping Police Violence has only been collecting data since 2013 and because of missing data in the Supplemental Homicide Reports.

Third, there are other variables that may help us to better capture what Blalock proposed in his theory. For example, research has stressed the importance of examining dynamic structural variables, not just static measures (Chamlin, 1989; Jacobs & O’Brien, 1998). Specifically, to fully capture the proposition of the size of the minority populations, it may be more beneficial to use dynamic measures to see actual increases and decreases in the population (Chamlin, 1989). Especially, since the growth in the population may be what is most threatening (Blalock, 1967). In addition, the use of the population size to capture threat has been called into question by some. For example, Gallagher (2003) said that we need to proceed cautiously with using
population size measures as a proxy since these racial populations are often overestimated by White citizens; thus, the actual size measure may not accurately capture the threat felt by the White population. Supporting this conclusion, Kubrin et al. (2009) have also argued that to measure threat we need to measure perceptions directly. In addition, this study only utilized income and earnings to measure economic inequality, but it has been argued that other measures should also be considered such as education and occupation (Kubrin et al., 2009; see Chiricos & Waldo, 1975). Finally, there may be other theories that could help us to better understand when the police with proceed with fatal force. The most consistent variable across all models, Black and White, and regarding both data sources, was the percent of the population that is divorced. This finding has longstanding evidence in macro-level studies (Pratt & Cullen, 2005). Oftentimes, this variable is included in studies of concentrated disadvantage or social disorganization (Pratt & Cullen, 2005); thus, more attention to this theoretical framework may be beneficial to future research of police lethality.

Future research should begin to consider these issues and try to recognize what other macro-level predictors will help us to better understand the use of deadly force. For example, as Hirschfield (2015) noted, America’s gun culture may be another area of future research regarding police lethality. He believes this is the case since in this culture “police are precariously primed for the possibility that suspects are packing;” thus, there may be a constant fear and sense of danger in this line of work (Hirschfield, 2015, p.1112). In addition, we should also begin to look at legitimate versus illegitimate incidents of lethal force (Hirschfield, 2015) to see what disparities exist here and what factors may contribute to legitimacy of this fatal force. Future research
should also begin to examine more than just the Black-White dichotomy of police violence victimization. Recent research has found some support for the contention that Latinos are also perceived as a threatening population in the US (Stewart et al., 2015). Thus, future research should examine whether the threat propositions help us understand other races and ethnicities as victims of fatal force. Finally, there are other data sources available that could also be explored regarding the use of fatal force by the police such as *The Counted (The Guardian)* and *Fatal Force (The Washington Post)*.

In conclusion, there is much more work that needs to be done when observing the use of deadly force by police in America. There is a long history of racialized policing and evidence appears to indicate this persistence into the twenty-first century (Hirschfield, 2015; Lersch & Mieczkowski, 2005; Locke, 1996; Sorensen et al., 1993; Worden, 1996). While this study did not offer much evidence to support the racial threat theory proposed by Hubert Blalock (1967), there is still clear evidence that Black Americans are disproportionately subjected to lethal police force. The new data provided by outlets such as *Mapping Police Violence* are a step in the right direction to police accountability, but more research is still needed. Several limitations to this study have been outlined and there are some definite possibilities for future research that may help us to better understand police lethality. With the attention that has been given lethal force in recent years, it is clear that this is a pressing and controversial issue with serious implications for police and race relations in our country. Thus, we must do everything that we can to understand when the police resort to this violence and what societal factors help to predict the use of lethal force.
REFERENCES


