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## Article

# Racial Disparities in Police Crime Victimization

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**Abstract:** Policing has become a topic of intense public scrutiny and protest in the aftermath of several recent highly questionable and violent police–citizen encounters including the acts of police violence against George Floyd in Minneapolis (MN), Breonna Taylor in Louisville (KY), and Jacob Blake in Kenosha (WI). These encounters have led to large-scale street protests, the legitimization of the Black Lives Matter movement, and what many commentators perceive as a “national reckoning” on the issue of racial justice. The focus of our research is on police crime—a particular form of police misconduct that involves the criminal arrest of police officers. Our work is designed to identify cases in which law enforcement officers have been arrested for any type of criminal offense(s). One area of police scholarship that has thus far been neglected is the relationship between citizen race and the perpetration of police crime. We are aware of no existing empirical studies on whether, and if so, to what degree, citizen race is associated with crimes committed by police officers. The public has been forced to re-examine and question the role and legitimacy of police against the backdrop of protests and concerns about how police may contribute to racial injustice and discrimination. The broadest research issue involved an examination of the association between police crime and the race of the victim. Our goal was to identify and examine any racial disparities of police crime overall and within specific types of police crime. The analyses compared police crimes committed against Black victims to all other police crimes identified within the dataset. More specifically, we examined the degree to which police crimes perpetrated against Black victims tend to be more violent than those perpetrated against non-Black victims. CHAID regression models were utilized to explore any multivariate relationships between race and police crime. Data were derived from published news articles using the Google News search engine and its Google Alerts email update service. Our database currently includes information on more than 18,700 cases of police crime from years 2005–2021. The study utilized data derived from this larger project. The study examined those cases of police crime in which we have identified a victim and recorded information on the race of the victim. The dataset for this study includes information on 865 criminal arrest cases of sworn nonfederal law enforcement officers within the United States from 2005 through 2014.

**Keywords:** police crime; police misconduct; police violence; victimization



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## 1. Introduction

Racial disparities within the context of American policing have endured as an important topic within both the public policy agenda and criminal justice scholarship. The establishment of the President's Task Force on 21st Century Policing is perhaps the best and most recent example of the importance and persistence of the issue on the public policy agenda. The Task Force was organized in 2014 to address several main topics or “pillars” that included the strengthening of police legitimacy through procedural justice. One primary objective was to address sustained distrust between police and Blacks, or “the sense that in a country where our basic principle is equality under law, too many

individuals, particularly young people of color, do not feel as if they are being treated fairly” (President’s Task Force on 21st Century Policing 2015, p. 5).

The focus on racial disparities echoed across nearly one-half century and the 1968 release of the report of the President’s National Advisory Commission on Civil Disorders (known as the Kerner Commission), an earlier federal task force that identified discriminatory policing and a flawed justice system as the root cause of more than 150 urban riots and disorders between 1965 and 1968 that resulted in more than USD 100 million in property losses and the deaths of dozens of citizens, the majority of them Black (George 2018; U.S. National Advisory Commission on Civil Disorders 1968).

Both of these federal commissions—enacted five decades apart but focused largely on the same underlying problem—share contexts that are at once strikingly similar and disturbing. Racial disparities in policing are once again the topic of intense public debate in the aftermath of several recent notorious and violent police encounters with Black persons including George Floyd in Minneapolis (MN), Breonna Taylor in Louisville (KY), and Jacob Blake in Kenosha (WI). These encounters instigated large-scale public protests, promoted the legitimization of the Black Lives Matter movement, and forecast what some commentators describe as a national reckoning on racial disparities in policing (Altman 2020; McLaughlin 2020).

Racial disparities have been well documented since the 1960s within the scholarly literature on police, including studies focused on disparate citizen perceptions, police interventions, and police force. Citizen surveys, for example, demonstrate that Blacks are more likely to report unwanted or adversarial police contacts, to personally experience verbal or physical abuse, and to report that they have been stopped or questioned by police without proper cause (Tuch and Weitzer 1997). There is substantial empirical evidence that police disproportionately intervene with Black persons in terms of arrests, citations, and searches (see, e.g., Fridell and Lim 2016). Scholars have also found evidence of racial disparities in the use of police force including situations involving noncustodial encounters (Schuck 2004), use of physical restraints (Terrill and Mastrofski 2002), Taser deployment (Crow and Adrion 2011), and victimization in fatal police shootings (Nix et al. 2017).

The focus of our research is on police crime, which is a specific form of police misconduct that involves the criminal arrest of police officers. Our work is designed to identify cases in which law enforcement officers have been arrested for any type of criminal offense(s). The occurrence of a criminal arrest(s) distinguishes police crime from other forms of police misconduct and corruption that in many cases are not detected, investigated, and/or do not result in the criminal arrest of the police officer who perpetrates them. Our database currently includes information on more than 18,700 cases of police crime arrests from years 2005–2021. The current study utilizes a subset of data derived from this larger project, specifically those cases in which data were available on the race of the police crime victim from years 2005–2014 ( $N = 865$ ).

We are aware of no existing empirical studies on whether, and if so, to what degree, citizen race is associated with crimes committed by police officers. The absence of data on this topic is conspicuous considering levels of sustained distrust between police and communities and large-scale public protests focused on how racial disparities in policing may contribute to racial injustice and discrimination. This study more specifically builds on the scholarly literature that documents racial disparities in citizen perceptions, police interventions, and police force, since our analysis is particularly focused on the degree to which police crimes perpetrated against Black victims differ in terms of violence than those police crimes perpetrated against non-Black victims. We proceed with a review of the relevant literature that includes an initial overview of the scholarship focused on the identification of racial disparities in policing, particularly those studies that identified racial disparities in terms of police use of force or violence. This section is followed by a review of scholarship on police crime and those who are victims of crimes perpetrated by police officers.

### 1.1. Research on Racial Disparities in Police Use of Force

Racial disparities in police use of force have been well-documented, so much so that the focus of some of the most recent studies have been on meta-reviews of this literature (e.g., [Hollis and Jennings 2018](#)) or disparate measures of police use of force and other methodological issues evident within this line of research ([Fridell 2017](#); [Klahm et al. 2014](#)). Other more recent studies using multivariate analyses are designed to identify and explain observed racial disparities and determine the degree to which they are the result of police bias or differential involvement with the police and/or varying levels of suspect resistance to legitimate police efforts to control situations. This section of the review presents an overview of the more recent studies that have identified racial disparities in police use of force and reviews that discuss some of the methodological issues that complicate explanations about the reasons for those disparities. Closer to our specific purpose, readers need to recognize that our investigation of racial disparities in police crime victimization differs fundamentally from other studies in this line of research since we are focused only on those encounters that involved officers who perpetrated crimes themselves and were ultimately arrested.

Racial disparities in policing have been identified in terms of several different dimensions. For example, multiple studies use surveys to document racial differences in the degree to which citizens approve of police use of force. Whites have been found to be more likely to approve of police use of force than Blacks in studies derived from both regional ([Jefferis et al. 1997](#)) and national samples of citizens ([Arthur and Case 1994](#); [Halim and Stiles 2001](#); [Thompson and Lee 2004](#)). [Crawford and Burns \(2008\)](#) found that police were more likely to use physical force against Black suspects using a sample of in-custody arrests. Some studies suggest that non-White suspects are at greater risk of being subjected to non-lethal force based on official reports ([Lee 2016](#); [Terrill and Paoline 2017](#)) and systematic social observations of police ([Terrill and Mastrofski 2002](#)). [Kahn et al. \(2017\)](#) found that Blacks and Latinos had higher levels of force used against them during the initial stages of police encounters. [Nix et al. \(2017\)](#) used data derived from media accounts of fatal police shootings to report that Blacks are killed by police at almost twice the rate of Whites. Finally, [Lersch et al. \(2008\)](#) found the racial composition of neighborhoods to be a significant predictor of police use of force even when controlling for incidents of active physical resistance.

Studies utilizing multivariate analyses, however, sometimes find no significant relationship between suspect race/ethnicity and police use of force when controlling for levels of suspect resistance and other situational or community-level factors ([Engel et al. 2000](#); [Garner et al. 2002](#); [Klinger 2008](#)). Mixed findings in this line of research have largely been attributed to differences in the manner in which police use of force has been measured and other methodological issues. [Fridell \(2017\)](#) provided a comprehensive identification and discussion of the factors that may contribute to mixed findings on the topic.

Studies in this line of research utilize different operational definitions of police force. For example, scholars initially focused on definitions that were limited to acts of physical violence including kicks, punches, and the use of weapons. Later studies, however, operationalized force to include police behaviors that can more easily be defined as acts of coercion rather than violence such as commands, threats, or the routine handcuffing of criminal suspects. [Klahm et al. \(2014\)](#) in their systematic review of this literature found that the vast majority of studies on police force failed to provide a clear conceptualization of police force, and many others failed to distinguish between the terms coercion and force or used them interchangeably. The absence of common operational definitions of police force obviously contributes to confusion and mixed findings on the relationship between force and suspect race across studies.

Other methodological discrepancies contribute to mixed findings on the relationship between suspect race and police force ([Fridell 2017](#)). Studies differ in terms of the types of suspected criminal offenses included in the analyses. Crime type influences both the likelihood that police will use force and force levels within particular police–citizen

encounters. Studies in this line of research also vary in terms of both generalizability and the degree that they incorporate measures such as levels of suspect resistance that may at least in part explain variations in police use of force across samples of White and non-White criminal suspects. Studies based on data derived from a single police agency are obviously more difficult to generalize than those based on national samples, and studies that incorporate relevant control measures can more readily distinguish encounters that involved the legitimate exercise of police force from those that evidence racial bias.

Methodological discrepancies contribute to mixed findings across studies focused on race and police force; however, points of discussion remain in terms of whether, and if so, to what degree, these issues extend to cases where the citizen(s) may not be defined as any sort of criminal suspect and the actions of the involved police officer are clearly not legitimate and cross the line to criminal behavior. The section below provides an overview of the recent scholarship on police crime and what is known about the citizens who are the victims in cases where police themselves break the law.

### *1.2. Research on Police Crime and Victimization*

There had been very few studies that provided specific data on the nature and prevalence of police crime until recent advances in methodology and data collection produced nationwide systematic data about the crimes committed by law enforcement officers. This section provides an overview of the literature based on data derived from a large comprehensive project designed to locate cases in which sworn law enforcement officers have been arrested for one or more criminal offenses using the internet-based Google News search engine and its Google Alerts search tool. The current study utilized data derived from this same large comprehensive project. Our review of studies derived from this larger project should be understood within the context of two issues. First, some of the existing studies on police crime based on this project were not focused on victimization and do not provide substantial data on police crime victims. Second, findings with regard to victims within this literature should be interpreted with caution given the amount of missing data. News articles frequently omit information on crime victims in order to protect privacy.

[Stinson et al. \(2010\)](#) focused on the association between police officer experience and police crime, particularly crimes committed by officers who were in the late stage of their career approaching retirement. [Stinson et al. \(2014b\)](#) identified and analyzed cases in which police officers were arrested for driving under the influence of alcohol and/or drugs. These two previous studies on police crime do not provide substantial data on victimization.

Other studies in this line of research do not specifically focus on victimization but provide some substantive information based on the type(s) of offenses committed by police officers. [Stinson et al. \(2012b\)](#), for example, found that some types of police crime were more likely to be committed by officers who were off-duty including simple and aggravated assaults, offenses related to the consumption of alcohol, and several different types of sex crimes. Research focused on the arrest of police officers involved in drug-related corruption and crime identified drug trafficking and sales as the most recurrent pattern, but the second-most prevalent pattern of criminal behavior involved thefts/shakedowns of street-level drug dealers by police ([Stinson et al. 2013](#)). A study on the profit-motivated crimes of police found this phenomenon most commonly involved some form of nonviolent theft from persons, buildings, and also embezzlement ([Stinson et al. 2018](#)).

Studies in this line of research focused on police who committed crimes using less-lethal weapons or those involving domestic violence or sexual misconduct and violence provide more information on victims. [Stinson et al. \(2012a\)](#) identified a comparatively small number of cases in which police were arrested for crimes involving the illegal use of conductive energy devices commonly referred to as Tasers. These cases were highly unusual events where police deployed Tasers against criminal suspects who had already been handcuffed or even citizens who were clearly not criminals at all including victims who were spouses or friends of the arrested officer. Research focused on the perpetration of violence within police families referred to as officer-involved domestic violence found

that victims commonly experience abuse outside the boundaries of traditional spousal roles including children, current and former boyfriends/girlfriends, and former spouses. Victims of officer-involved domestic violence are distinguished because the perpetrator is a police officer expected to enforce domestic violence statutes (Ammons 2005; Stinson and Liederbach 2013).

Research focused on police crimes associated with sexual misconduct identified 548 cases within a three-year window including 118 cases of rape, indicating that these sorts of heinous police crimes occur with some regularity within jurisdictions across the nation. This research also found victims to be inordinately young, mostly children (Stinson et al. 2014a, 2014c). Other studies within this line of research focus on the most egregious forms of sex-related crime labeled as police sexual violence, including rape, sodomy, and aggravated sexual assault. These studies define how predatory police officers target victims and take advantage of opportunities provided through both the structure of police work and the vulnerabilities of victims. The most common contexts for the perpetration of police sexual violence were identified as cases of “child predation” involving victims who were minors, cases of “driving while female” where police use traffic enforcement powers to sexually abuse women, and cases involving victims associated with the sex-worker industry (Kraska and Kappeler 1995; Stinson et al. 2020a, 2020b; Walker and Irlbeck 2002).

There are no existing studies in this line of research focused on the intersection of race and police crime. Hollis and Jennings (2018, p. 190) in their review of scholarship on race and police force explain that “it is apparent that there is a robust need for reliable and systematic data collection on police use of force in general and as it pertains to investigations of race and police use of force specifically.” Our review of the recent scholarship on police crime suggests a similar need within this line of research on data and analyses to investigate the role of race within the context of crimes perpetrated by police officers themselves. We describe our method in more detail in the section that follows.

## 2. Method

This study is part of a larger research project on police crime that examines cases of nonfederal sworn law enforcement officers each of whom were arrested since 2005. Police crimes are those criminal offenses committed by sworn law enforcement officers who have the general powers of arrest. As we have discussed elsewhere, data were culled from news articles published on the internet using the Google News search engine and the automated Google Alerts email update service. Google Alerts searches were set up using the 48 search terms developed by Stinson (2009). The Google Alerts email update service constantly crawled the Google News search engine on each of the 48 search terms. An email message was sent each time one of the automated daily searches of the Google News search engine identified a news article that matched any of the search terms. The email alerts contained a link to the uniform resource locator (URL) for the identified news articles. The news articles were located, examined for relevancy, printed, logged, and then scanned into digital images, indexed, and archived in an object-relational project database for subsequent coding and content analysis. Whenever possible, additional news articles and court records were subsequently located by research assistants and added to the database. This study focused on victim race in police crime arrest cases during the decade 2005–2014.

### 2.1. Coding and Content Analysis

Content analyses were conducted to code the cases in terms of (a) arrested officer, (b) employing agency, (c) charged criminal offense(s), (d) victim characteristics, (e) type of police crime, (f) adverse employment outcomes, and (g) criminal case dispositions. The data collection guidelines of the National Incident-Based Reporting System (NIBRS) were used as the coding protocol for each criminal offense (see U.S. Department of Justice 2000). Fifty-seven criminal offenses are included in the NIBRS, consisting of 46 incident-based criminal offenses in one of 22 crime categories, as well as 11 additional arrest-based minor

criminal offense categories. An additional eight offenses were added following an earlier pilot study because police officers who were arrested often were charged with criminal offenses not included in the NIBRS (e.g., online solicitation of a child, indecent exposure, official misconduct (sometimes called official oppression or violation of oath), vehicular hit-and-run, perjury (as well as unsworn falsification), and criminal deprivation of civil rights (see [Stinson 2009](#))).

The primary unit of analysis in this study was criminal arrest case. This provided the opportunity to differentiate between officers' crimes with multiple victims and officers who were arrested on multiple occasions within the study years 2005–2014. By coding each arrest case separately, the criminal case dispositions in each case as well as the adverse employment actions attached to each arrest case could be documented for analysis. Cases were also coded on [Stinson's \(2009, 2015\)](#) typology of police crime, which posits that most crime committed by police officers is alcohol-related, drug-related, sex-related, violence-related, and/or profit-motivated. These types of police crime are not mutually exclusive categories, and thus each type of police crime was coded as a dichotomous variable because crimes committed by officers often involve more than one type of police crime. Cases were also coded on variables relating to the race and ethnicity of arrested officers and their victims. Race was coded as a binary variable where Black = 1 and non-Black = 0, and ethnicity was coded as a binary variable where Hispanic = 1 and non-Hispanic = 0.

Secondary data were employed from the Census of State and Local Law Enforcement Agencies (CSLLEA) to ascertain demographic data including the number of full-time sworn personnel and part-time sworn personnel employed by each agency where arrested officers served (see [U.S. Department of Justice 2008](#)). Ten employing law enforcement agencies included in this study were not listed in the 2008 wave of the CSLLEA. County and independent city five-digit Federal Information Processing Standards (FIPS) identifier numbers were used to verify location of arrested officers' employing law enforcement agencies, as well as for use as a key variable to merge other data sources into the project's master database and dataset (see [U.S. Census Bureau 2010](#)). The [U.S. Department of Agriculture's \(2003\)](#) county-level urban to rural nine-point continuum scale was used to measure rurality with population data from the U.S. Census Bureau's decennial census in year 2000 for county, independent city, and state populations.

## 2.2. Reliability

Analytic procedures were undertaken to ensure reliability of the data. An additional coder was employed to independently code a random sample of five percent of the total number of cases from years 2005–2011 in the larger study. Intercoder reliability was assessed by calculating the Krippendorff's alpha coefficient across 195 variables of interest on a random sample ( $n = 290$ , 4.3%) of the cases ( $N = 6724$ ) (see [Hayes and Krippendorff 2007](#)). Krippendorff's alpha is often recognized as the standard reliability statistic for content analysis research ([Riffe et al. 2019](#)). The Krippendorff's alpha coefficient (Krippendorff's  $\alpha = 0.9153$ ) is strong across the variables in this study, indicating a high level of intercoder reliability (see [Krippendorff 2013](#)).

## 2.3. Statistical Analysis

Chi-square bivariate associations were used to measure the relationships of variables with multiple dependent variables at the nominal level. Cramer's  $V$  measured the strength of the relationships with values ranging from 0 to 1 and allowed for an "assessment of the actual importance of the relationship" ([Riffe et al. 2005](#), p. 191). Using a classification tree, also known as a decision tree, multivariate relationships were explored. This statistical technique classified cases by the dependent variable, violence-related, using a variety of predictor variables. Classification trees identify hierarchical interactions among variables produced by a visualized output. The data are split in a recursive manner, creating subsets of the data in the lower branches of the tree. Influential and significant predictors are selected as the splitting variables. The data are continually split until a decision node

is reached, which classifies the data based upon frequencies of the dependent variable in the final node. Decision tree techniques are beneficial due to their ability to handle interaction effects in data without being bound to statistical assumptions (Sonquist 1970). Classification tree analysis has been used to examine police practices including career-ending police misconduct (Kane and White 2013), police drug corruption arrests (Stinson et al. 2013), fatal and nonfatal incidents involving conductive energy devices (White and Ready 2009), police sexual misconduct (Stinson et al. 2014a, 2014c), and profit-motivated police crime (Stinson et al. 2018).

This study used Chi-square Automatic Interaction Detection (CHAID) algorithm, a type of classification tree that uses  $\chi^2$  associations as the splitting criteria (Kass 1980). Using the p-value from the  $\chi^2$  associations, CHAID examined all possible splits for predictor variables and selected predictors based on the optimal number of splits. CHAID was utilized using the following parameters: tree depth set to 3 levels of growth, minimum size of parent nodes are at least 25 cases, minimum size of child nodes are at least 10 cases, and Pearson  $\chi^2$  splitting criteria. The predictive power of the CHAID models was assessed using the Area Under the Curve (AUC) of the Receiver Operating Characteristic (ROC). The ROC curve is visually represented with the true positive rate on the y-axis and the false positive rate on the x-axis. Possible AUC scores range from 0 to 1, with 0.5 signifying the model is no better than a random prediction and 1 representing a model that perfectly classifies all cases. The AUC measures the predictive accuracy and is able to compare and assess the statistical models (Bewick et al. 2004; Dolan and Doyle 2000). The AUC is interpreted as a proportional reduction of error (PRE) measure of explained variation by calculating  $R_{ROC}^2 = 2(AUC - 0.5)$  (Menard 2010).

#### 2.4. Strengths and Limitations

The use of news articles as the primary data source is an established method of analyzing police misconduct (see, e.g., Kraska and Kappeler 1995; Lawrence 2000; Lersch and Feagin 1996; Rabe-Hemp and Braithwaite 2013; Ross 2000; Stinson 2020). As we have reported elsewhere, our data collection methodology utilizing the Google News search engine and the Google Alerts email service provided an unparalleled amount of information on police crime arrest cases throughout the United States. The Google Alerts email update service provides the ability to run automated queries of the Google News search engine and deliver real-time daily search results. The Google News search engine draws content from more than 50,000 news publications (Bharat 2012) and retrieves information on a larger number of police crime arrest cases than would be available through other methods (Payne 2013). Ready et al. (2008) found that news coverage of police misconduct is consistent with official police records of the events. Research also suggests that law enforcement agencies are not especially effective at controlling media accounts of police misconduct (Chermak et al. 2006).

There are several limitations of the data in this study. First, we do not purport to include every instance of a law enforcement officer being arrested during the study years 2005–2014. This study included every case known to our research group of a nonfederal sworn law enforcement officer who was arrested during the years 2005–2014 and where we were able to ascertain the race of the victim.

Second, the research was limited by the content, and the quality of information available for each case varied. Data on several variables of interest were missing in some of the cases analyzed. Many of the police crime arrest cases in our database were excluded from the present study because we were unable to determine victim race from the materials available to us. Race (Black versus non-Black) was coded as dichotomous variable due to limited information in the source materials analyzed. This variable was subjectively coded using photographs and videos of officers and victims. We cannot know the degree to which the cases that included data on victim race differ significantly from the cases in which these data were missing and therefore not included in some of the analyses for the present study.



This limitation complicates our efforts to make broad conclusions based on analyses that excluded cases of police misconduct that did not include information on victim race.

Third, the study was limited only to cases that involved an official arrest based on probable cause for crimes committed. We do not report any data on alleged criminal behavior of sworn officers who were not arrested.

Lastly, we acknowledge that these data were the result of a filtering process that includes the exercise of discretion by media organizations in terms of both the type of news covered and the nature of the content devoted to particular stories (Carlson 2007). Selection bias may be present within the sample in this study because race of police crime victims might be more prominently featured in news stories about certain serious types of police crime cases. As such, we acknowledge that data based on news media reports of police misconduct cannot be assumed to be indicative of all cases of police misconduct.

### 3. Results

Cases of nonfederal sworn law enforcement officers who were arrested on or between 1 January 2005 and 31 December 2014 were selected for the study where we were able to determine the victim race ( $N = 865$ ). In these cases, 38.7% ( $n = 335$ ) of the victims were identified as Black. The remaining cases were treated as having victims who were non-Black. The arrest cases involved 685 individual officers employed by 397 nonfederal law enforcement agencies located in 292 counties and independent cities in 48 states (all except Maine and Wyoming) and the District of Columbia. Of these 685 officers who were arrested, 96 of the arrested officers had more than one case ( $\bar{X} = 1.26$ ,  $Mdn = 1.00$ ,  $Mode = 1$ ,  $SD = 1.002$ ) because they had more than one crime victim (one criminal case per crime victim) and/or were arrested on more than one occasion while employed as a sworn law enforcement officer during the study years 2005–2014.

Table 1 presents characteristics of the arrested officers and their employing law enforcement agencies. Most of the arrest cases involved male officers ( $n = 816$ , 94.3%). Arrested officer ages ranged from 21 to 73 ( $\bar{x} = 37.38$ ,  $SD = 8.770$ ), with 0 to 49 years of service at time of their arrest ( $\bar{x} = 10.91$ ,  $SD = 7.677$ ). Most of the cases involved arrested officers who held nonsupervisory patrol and street-level ranks ( $n = 724$ , 83.6%) and were employed by municipal police departments ( $n = 649$ , 75.0%) located within metropolitan counties ( $n = 792$ , 91.6%). Over half of the cases involved officers who were arrested for committing crimes while they were on-duty ( $n = 455$ , 52.6%). The employing law enforcement agencies were located throughout the United States, including agencies in the Southern states ( $n = 366$ , 42.3%), Northeastern states ( $n = 198$ , 22.9%), Midwestern states ( $n = 182$ , 21.0%), and Western states ( $n = 119$ , 13.8%).

**Table 1.** Officer and agency characteristics in police crime arrest cases, 2005–2014 ( $N = 865$ ).

	<i>n</i>	(%)	(Valid %)		<i>n</i>	(%)		<i>n</i>	(%)
Sex				Officer Duty Status			Agency Type		
Male	816	(94.3)	(94.3)	On-Duty	455	(52.6)	Primary State Police	37	(4.3)
Female	49	(5.7)	(5.7)	Off-Duty	410	(47.4)	Sheriff's Office	113	(13.1)
							County Police Dept.	43	(5.0)
Age				Rank			Municipal Police Dept.	649	(75.0)
19–23	15	(1.7)	(1.9)	Officer	675	(78.0)	Special Police Dept.	20	(2.3)
24–27	101	(11.7)	(13.1)	Detective	49	(5.7)	Constable	1	(0.1)
28–31	101	(11.7)	(13.1)	Corporal	18	(2.1)	Tribal Police Dept.	1	(0.1)
32–35	145	(16.8)	(18.8)	Sergeant	69	(8.0)	Regional Police Dept.	1	(0.1)
36–39	104	(12.0)	(13.5)	Lieutenant	19	(2.2)			
40–43	137	(15.8)	(17.8)	Captain	7	(0.8)	Full-Time Sworn Officers		
44–47	66	(7.6)	(8.6)	Major	2	(0.2)	0	3	(0.3)
48–51	50	(5.8)	(6.5)	Colonel	0	(0.0)	1	7	(0.8)
52–55	33	(3.8)	(4.3)	Deputy Chief	4	(0.5)	2–4	17	(2.0)
56 or older	18	(2.1)	(2.3)	Chief	22	(2.5)	5–9	24	(2.8)
Missing	95	(11.0)					10–24	71	(8.2)
				Function			25–49	51	(5.9)

Table 1. Cont.

	<i>n</i>	(%)	(Valid %)		<i>n</i>	(%)		<i>n</i>	(%)
Years of Service				Patrol and Street Level	724	(83.6)	50–99	71	(8.2)
0–2	72	(8.3)	(11.4)	Line/Field Supervisor	106	(12.3)	100–249	104	(12.0)
3–5	106	(12.3)	(16.9)	Management	35	(4.0)	250–499	85	(9.8)
6–8	107	(12.4)	(17.0)				500–999	95	(11.0)
9–11	75	(8.7)	(11.9)	Region of United States			1000 or more	337	(39.0)
12–14	71	(8.2)	(11.3)	Northeastern States	198	(22.9)			
15–17	73	(8.4)	(11.6)	Midwestern States	182	(21.0)	Part-Time Sworn Officers		
18–20	62	(7.2)	(9.9)	Southern States	366	(42.3)	0	701	(81.0)
21–23	20	(2.3)	(3.2)	Western States	119	(13.8)	1	22	(2.5)
24–26	20	(2.3)	(3.2)				2–4	44	(5.1)
27 or more years	23	(2.7)	(3.7)	Level of Rurality			5–9	39	(4.5)
Missing	236	(27.3)		Metropolitan County	792	(91.6)	10–24	32	(3.7)
				Non-Metro County	73	(8.4)	25–49	22	(2.5)
Arresting Agency							50–99	5	(0.6)
Employing Agency	272	(31.4)	(31.4)				100–249	0	(0.0)
Another Agency	593	(68.6)	(68.6)				250–499	0	(0.0)

Victim characteristics are presented in Table 2. The majority of the cases involved a male victim (*n* = 545, 63.0%). Victim ages ranged from 0 to 92, with an average victim age of 28.66 (SD = 15.573). Most of the victims were adults aged 18 or older (*n* = 737, 85.2%). Most of the cases involved a victim who is a stranger or nonstranger acquaintance (*n* = 638, 73.8%), although some of the victims were fellow law enforcement officers (*n* = 72, 8.3%).

Table 2. Victim characteristics in police crime arrest cases, 2005–2014 (N = 865).

	<i>n</i>	(%)	(Valid %)		<i>n</i>	(%)	(Valid %)
Victim’s Race				Victim’s Law Enforcement Status			
White	497	(57.5)	(57.5)	Victim is Not a Police Officer	793	(91.7)	(91.7)
Black	335	(38.7)	(38.7)	Victim is a Police Officer	72	(8.3)	(8.3)
American Indian	9	(1.0)	(1.0)	Missing	0	(0.0)	
Asian	24	(2.8)	(2.8)	Victim Adult or Child			
Missing	0	(0.0)		Adult	737	(85.2)	(85.4)
Victim’s Race (Dichotomous)				Child	126	(14.6)	(14.6)
Black	335	(38.7)	(38.7)	Missing	2	(0.2)	
Non-Black	530	(61.3)	(61.3)	Victim’s Sex			
Missing	0	(0.0)		Female	305	(35.3)	(35.9)
Victim’s Ethnicity				Male	545	(63.0)	(64.1)
Hispanic	115	(13.3)	(13.3)	Missing	15	(1.7)	
Non-Hispanic	750	(86.7)	(86.7)	Victim’s Age			
Missing	0	(0.0)		Birth–5	25	(2.9)	(4.4)
Victim’s Relationship				6–11	22	(2.5)	(3.9)
Current Spouse	52	(6.0)	(6.0)	12–13	11	(1.3)	(1.9)
Former Spouse	7	(0.8)	(0.8)	14–15	23	(2.7)	(4.1)
Current Girlfriend or Boyfriend	17	(2.0)	(2.0)	16–17	42	(4.9)	(7.4)
Former Girlfriend or Boyfriend	19	(2.2)	(2.2)	18–19	36	(4.2)	(6.3)
Child or Stepchild	40	(4.6)	(4.6)	20–24	99	(11.4)	(17.5)
Some Other Relative	8	(0.9)	(0.9)	25–32	135	(15.6)	(23.8)
Unrelated Child	84	(9.7)	(9.7)	33–41	80	(9.2)	(14.1)
Stranger or Acquaintance	638	(73.8)	(73.8)	42 or older	94	(10.9)	(16.6)
Missing	0	(0.0)		Missing	298	(34.5)	

This study was interested in using victim race to predict the types of crime perpetrated against these victims by sworn law enforcement officers. Table 3 presents statistically

significant chi-square bivariate associations for the dependent variable victim race. The strongest bivariate association for victim race was with the geographic regions within the United States with  $\chi^2 (3, N = 865) = 85.282, p < 0.001, V = 0.314$ . Observed cell counts of cases with Black victims in the Southern and Midwestern states were higher than expected. Official capacity and duty status also had statistically significant bivariate associations of moderate strength with victim race, where official capacity  $\chi^2 (1, N = 865) = 58.404, p < 0.001, V = 0.260$ , and duty status  $\chi^2 (1, N = 865) = 42.773, p < 0.001, V = 0.222$ . Observed cell counts of arrest cases were higher than expected for Black victims in cases involving arrested officers who were on-duty and/or acting in their official capacity when committing a crime. Violence-related crimes had a statistically significant association of moderate strength with victim race, where  $\chi^2 (1, N = 865) = 32.392, p < 0.001, V = 0.194$ . Several inherently violence-related variables were also associated with Black victims, including officer brandished a gun, weapons law violations, aggravated assault, and murder or non-negligent manslaughter. Observed cell counts for these violence-related variables were higher than expected for Black victims. There was a statistically significant bivariate association of moderate strength between an agency scandal/cover-up with victim’s race, where  $\chi^2 (1, N = 865) = 46.939, p < 0.001, V = 0.233$ . Agencies were more likely than expected to cover up or have a scandal involving police crimes perpetrated against a Black victim, compared to police crime cases with a non-Black victim.

**Table 3.** Victim race bivariate associations.

Variable Label	N	$\chi^2$	df	p	V
<b>Offense Characteristics</b>					
Official Capacity	865	58.404	1	<0.001	0.260
Duty Status	865	42.773	1	<0.001	0.222
Officer Brandished Gun	865	36.340	1	<0.001	0.205
Violence-Related	865	32.392	1	<0.001	0.194
Alcohol-Related	865	29.858	1	<0.001	0.186
Profit-Motivated	865	25.781	1	<0.001	0.173
Weapons Law Violations	865	16.482	1	<0.001	0.138
Vandalism	865	11.770	1	0.001	0.117
Family Violence	865	9.765	1	0.002	0.106
Official Misconduct	865	7.605	1	0.006	0.094
Aggravated Assault	865	7.430	1	0.006	0.093
Civil Rights Violations	865	7.257	1	0.007	0.092
Murder and Non-Negligent Manslaughter	865	7.173	1	0.007	0.091
Drug-Related	865	5.983	1	0.014	0.083
Bribery	865	5.358	1	0.021	0.079
<b>Officer and Victim Characteristics</b>					
Officer’s Race—Black	696	54.690	1	<0.001	0.280
Victim is a Police Officer	865	22.768	1	<0.001	0.162
Victim’s Sex	850	16.624	1	<0.001	0.140
Officer’s Ethnicity—Hispanic	696	5.331	1	0.021	0.088
Officer Has History of PTSD	865	6.511	1	0.011	0.087
Child Victim	863	3.983	1	0.046	0.068
Officer Previously Shot Someone with Gun	865	3.904	1	0.048	0.067
<b>Agency Response</b>					
Agency Scandal/Cover-Up	865	46.939	1	<0.001	0.233
Officer’s Chief Under Scrutiny	865	32.415	1	<0.001	0.194
Officer’s Supervisor is Disciplined	865	11.194	1	0.001	0.114
Reassigned to Another Position	865	7.997	1	0.005	0.096
<b>Case Processing Characteristics</b>					
Federal Court	865	6.089	1	0.014	0.084
<b>Employing Agency Characteristics</b>					
Geographic Region	865	85.282	3	<0.001	0.314

Using victim race as an independent variable, this study also examined variables associated with the different types of crimes. Table 4 explores bivariate associations with violence-related crimes. Both victim race and victim ethnicity were significantly associated with violence-related cases, where victim race  $\chi^2(1, N = 865) = 32.392, p < 0.001, V = 0.194$ , and victim ethnicity  $\chi^2(1, N = 685) = 67.121, p < 0.001, V = 0.279$ . Observed cell counts of violence-related crimes committed by a sworn law enforcement officer were higher than expected for Black victims but lower than expected for Hispanic victims. The strongest bivariate association for violence-related was profit-motivated, where  $\chi^2(1, N = 865) = 309.215, p < 0.001, V = 0.598$ . Police crimes that are classified as violence-related are rarely also classified as profit-motivated. The patterns are similar for alcohol-related and drug-related police crimes. Duty status was associated with violence-related crimes, where  $\chi^2(1, N = 865) = 5.083, p = 0.024, V = 0.077$ . Observed cell counts for on-duty violence-related crimes were lower than expected.

**Table 4.** Violence-related bivariate associations.

Variable Label	N	$\chi^2$	df	p	V
Offense Characteristics					
Profit-Motivated	865	309.215	1	<0.001	0.598
Alcohol-Related	865	29.699	1	<0.001	0.185
Drug-Related	865	22.576	1	<0.001	0.162
Police Sexual Violence	865	12.718	1	<0.001	0.121
Sex-Related	865	5.506	1	0.019	0.080
Duty Status	865	5.083	1	0.024	0.077
Officer and Victim Characteristics					
Victim's Ethnicity—Hispanic	865	67.121	1	<0.001	0.279
Victim Injury	809	57.000	3	<0.001	0.265
Victim's Race—Black	865	32.392	1	<0.001	0.194
Child Victim	863	6.705	1	0.010	0.088
Officer's Sex	865	4.098	1	0.043	0.069
Employing Agency Characteristics					
Geographic Region	865	11.688	3	0.009	0.116

The classification tree in Figure 1 predicted violence-related police crime. The regression tree correctly classified 91.3% of the cases ( $AUC = 0.867, 95\% \text{ CI } [0.829, 0.906], R^2_{ROC} = 0.734$ ) with the dichotomous victim race variable as the initial splitting criterion. Of the 335 cases involving a Black victim, 94.6% ( $n = 317$ ) were violence-related. Of the 317 violence-related cases with a Black victim, 139 cases involved an officer pulling, firing, or threatening the victim with a firearm. Of the cases in which the officer did not brandish or use their firearm, the majority (90.8%,  $n = 178$ ) were also violence-related crimes. The additional statistically significant predictor variables for the model included profit-motivated crime, alcohol-related police crime, duty status, state or federal court, and geographic region.

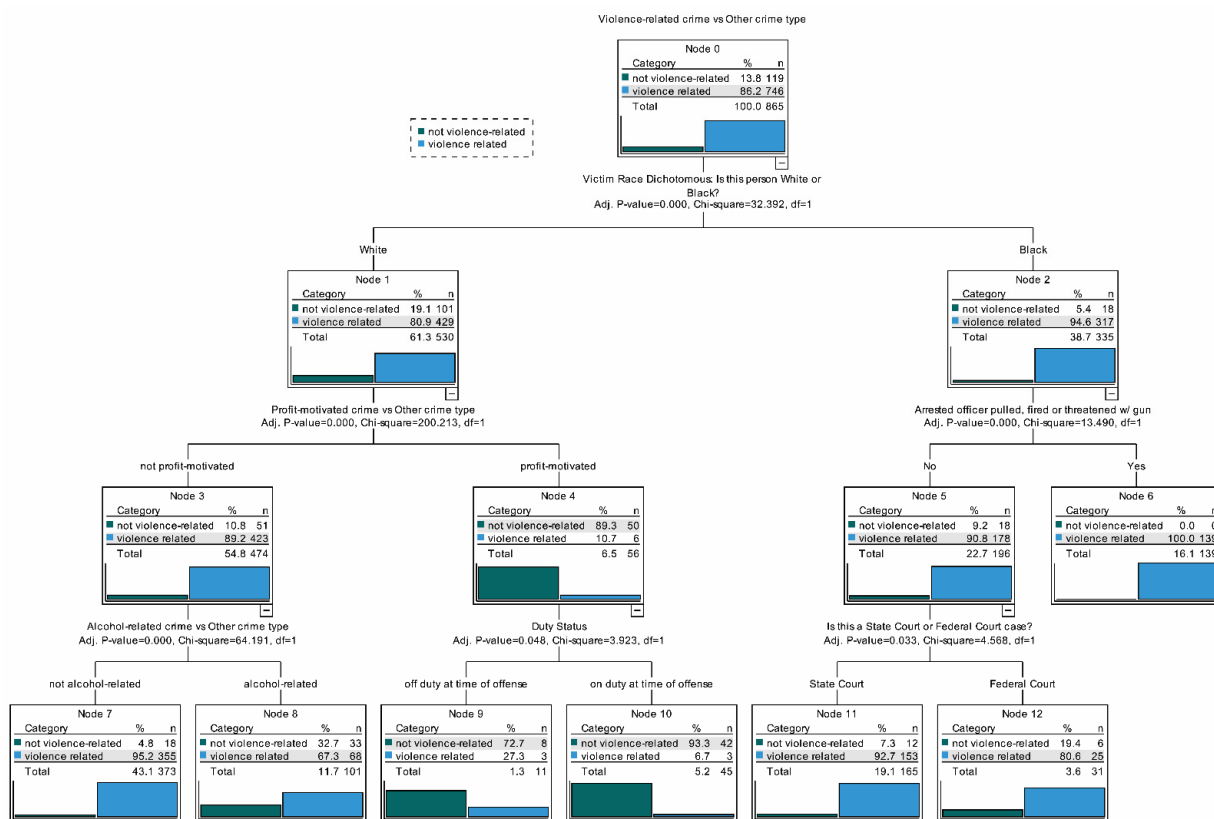


Figure 1. CHAID model predicting violence-related police crime (N = 865).

#### 4. Discussion

American policing has been the subject of ongoing controversy surrounding the issue of race and disparities in the manner in which law enforcement officers interact with citizens. These patterns have become all too familiar to scholars, citizens, and police executives over several decades: encounters between police and citizens of color become the subject of intense public scrutiny—often through popular media accounts—that foreshadow large-scale public condemnation of police and questions about the legitimacy of the entire institution. This cycle most recently played out on the heels of several egregious police–citizen encounters and the parallel establishment of the President’s Task Force on 21st Century Policing in 2014. We suggested that this most recent pattern of controversy and socio-political response seems very similar to those that erupted during the late 1960s.

The recurring pattern demonstrates the ongoing need for data on the nature and character of police interactions with people of color and analyses designed to investigate whether and/or under what circumstances police behavior exhibits racial or ethnic disparity. Our research seeks to fill a void in the scholarly literature on the identification of racial disparities within the context of citizen encounters that involve police who themselves break the law. Our data were in some ways limited because we were unable to determine victim race in some cases, mostly because news-based accounts often fail to report the race of crime victims. However, there is still a notable absence of published studies on this specific phenomenon and police legitimacy has been damaged as a result of recent high-profile and violent encounters between police and people of color. Therefore, a substantive discussion based on our limited data concerning how citizens of color may be differentially impacted by crimes perpetrated by police officers seems particularly salient.

Our analyses identified several associations between victim race and the perpetration of various types of police crime. However, our substantive findings are on some level singular and involve the manner in which police tend to break laws within the context of their interactions with Black victims. Our findings show numerous characteristics unique

to violence-related police crimes against Black victims. The strongest predictor in our CHAID model of violence-related police crime against a Black victim was a police officer's brandishing or using a firearm in the commission of a crime against that victim. In cases where an officer committed a violence-related police crime against a Black victim that did not involve the use of a police firearm, the strongest predictor was whether the arrested officer was prosecuted for his or her crime in a state or federal criminal court. This suggests that some of the violence-related police crimes committed against Black victims are serious federal crimes likely associated with the criminal deprivation of civil rights by a police officer. The racial disparities in police crime in this regard are striking: police crimes against Black persons are typically serious crimes, often involving the criminal misuse of firearms by police.

The consequences with regard to individual Black persons who become victims of police crime seem clear in terms of the potential for street-level violence at the hands of rogue police officers who engage in various forms of criminal misconduct. Our findings on the intersection of race and police crime also demonstrate consequences that are perhaps less obvious but more severe in terms of the wider relationship between police and communities of color.

More than five decades ago, the Kerner Commission recognized the impact of police misconduct in terms of individual victims as well as the wider community and the fact that misbehavior on the part of relatively few police officers can engender larger-scale mistrust and collective doubt about police legitimacy across entire communities. These problems were exacerbated as patrol officers came to "see the city through a windshield and hear about it on the police radio" where police officers increasingly viewed their patrol areas as consisting only of people of color who they commonly perceived as lawbreakers ([U.S. National Advisory Commission on Civil Disorders 1968](#), p. 160). The Commission noted that officers in the 1960s rarely took the time to get out of their police cruisers to meet and understand the people who live and work in their patrol areas. In his testimony before the Commission, sociologist Albert J. Reiss suggested that the costs of police misconduct in Black communities are much higher than statistics suggest because "over a period of time, a substantial proportion of citizens, particularly in high-crime-rate areas, may experience at least one encounter with a police officer where prejudice is shown" ([U.S. National Advisory Commission on Civil Disorders 1968](#), p. 160).

Numerous recommendations were made by the Kerner Commission to improve abrasive relations between the police and minority communities, including recommendations to eliminate the high sense of insecurity and the belief among many Blacks in the existence of a dual standard of law enforcement, to establish fair and effective mechanisms for police to investigate citizen complaints against officers, and to develop and use innovative programs to promote community support for law enforcement.

A generation later, President Obama established the President's Task Force on 21st Century Policing and noted an enduring distrust of police within many communities, especially among young Black people who do not feel they are treated fairly by the police. Among its many recommendations, the Task Force suggested that law enforcement culture should embrace a guardian mindset instead of a warrior mindset to build legitimacy and trust with the people in the communities they serve ([President's Task Force on 21st Century Policing 2015](#)). The Task Force recognized that police behavior is more likely to conform to culture than rules and recommended that law enforcement agencies adopt procedural justice as a guiding principle in the development of policies and practices.

Citizens including those of color confer legitimacy to police only when they believe that police are acting in ways that are procedurally just. Our findings with regard to police crime indicate racial disparities in the treatment of victims and the need for renewed focus on the development and implementation of training and practices that promote police-community collaboration and organizational cultures rooted in procedural justice. The promotion of a culture of procedural justice based on our findings must also extend to organizational procedures designed to identify and punish cases of police misconduct and,

more specifically, investigations designed to determine the degree to which these cases may have been at least in part racially motivated.

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## References

- Altman, Alex. 2020. Why the Killing of George Floyd Sparked an American Uprising. *Time*, June 4. Available online: <https://time.com/5847967/george-floyd-protests-trump/> (accessed on 1 January 2021).
- Ammons, Jennifer. 2005. Batterers with badges: Officer-involved domestic violence. *Women Lawyers Journal* 90: 28–39.
- Arthur, John A., and Charles E. Case. 1994. Race, class, and support for police use of force. *Crime, Law and Social Change* 21: 167–82. [CrossRef]
- Bewick, Viv, Liz Cheek, and Jonathan Ball. 2004. Statistics review 13: Receiver operating characteristic curves. *Critical Care* 8: 508–12. [CrossRef]
- Bharat, Krishna. 2012. Google News Turns 10. *Google News Blog*, September 22. Available online: <http://googlenewsblog.blogspot.com/2012/09/google-news-turns-10.html> (accessed on 25 July 2021).
- Carlson, Matt. 2007. Order versus access: News search engines and the challenge to traditional journalistic roles. *Media, Culture & Society* 29: 1014–30. [CrossRef]
- Chermak, Steven M., Edmund McGarrell, and Jeffrey Gruenewald. 2006. Media coverage of police misconduct and attitudes toward police. *Policing: An International Journal of Police Strategies & Management* 29: 261–81. [CrossRef]
- Crawford, Charles, and Ronald Burns. 2008. Police use of force: Assessing the impact of time and space. *Policing and Society* 18: 322–35. [CrossRef]
- Crow, Matthew S., and Brittany Adrion. 2011. Focal concerns and police use of force: Examining the factors associated with taser use. *Police Quarterly* 14: 366–87. [CrossRef]
- Dolan, Mairead C., and Michael Doyle. 2000. Violence risk prediction: Clinical and actuarial measures and the role of the Psychopathy Checklist. *The British Journal of Psychiatry* 177: 303–11. [CrossRef]
- Engel, Robin Shepard, James J. Sobol, and Robert E. Worden. 2000. Further exploration of the demeanor hypothesis: The interaction effects of suspects' characteristics and demeanor on police behavior. *Justice Quarterly* 17: 235–58. [CrossRef]
- Fridell, Lorie. 2017. Explaining the Disparity in Results Across Studies Assessing Racial Disparity in Police Use of Force: A Research Note. *American Journal of Criminal Justice* 42: 502–13. [CrossRef]
- Fridell, Lorie, and Hyeyoung Lim. 2016. Assessing the racial aspects of police force using the implicit- and counter-bias perspectives. *Journal of Criminal Justice* 44: 36–48. [CrossRef]
- Garner, Joel H., Christopher D. Maxwell, and Cedrick J. Heraux. 2002. Characteristics associated with the prevalence and severity of force used by the police. *Justice Quarterly* 19: 705–46. [CrossRef]
- George, Alice. 2018. The 1968 Kerner Commission Got It Right, But Nobody Listened. *Smithsonian Magazine*, March 1. Available online: <https://www.smithsonianmag.com/smithsonian-institution/1968-kerner-commission-got-it-right-nobody-listened-180968318/> (accessed on 1 January 2021).
- Halim, Shaheen, and Beverly L. Stiles. 2001. Differential Support for Police Use of Force, the Death Penalty, and Perceived Harshness of the Courts: Effects of Race, Gender, and Region. *Criminal Justice and Behavior* 28: 3–23. [CrossRef]
- Hayes, Andrew F., and Klaus Krippendorff. 2007. Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures* 1: 77–89. [CrossRef]

- Hollis, Meghan E., and Wesley G. Jennings. 2018. Racial disparities in police use-of-force: A state-of-the-art review. *Policing: An International Journal* 41: 178–93. [CrossRef]
- Jefferis, Eric S., Robert J. Kaminski, Stephen Holmes, and Dena E. Hanley. 1997. The effect of a videotaped arrest on public perceptions of police use of force. *Journal of Criminal Justice* 25: 381–95. [CrossRef]
- Kahn, Kimberly Barsamian, Joel S. Steele, Jean M. McMahon, and Greg Stewart. 2017. How suspect race affects police use of force in an interaction over time. *Law and Human Behavior* 41: 117–26. [CrossRef]
- Kane, Robert J., and Michael D. White. 2013. *Jammed Up: Bad Cops, Police Misconduct, and the New York City Police Department*. New York: New York University Press.
- Kass, Gordon. V. 1980. An exploratory technique for investigating large quantities of categorical data. *Applied Statistics* 29: 119–27. [CrossRef]
- Klahm, Charles Frank, IV, James Frank, and John Liederbach. 2014. Understanding police use of force: Rethinking the link between conceptualization and measurement. *Policing: An International Journal of Police Strategies & Management* 37: 558–78. [CrossRef]
- Klinger, David A. 2008. On the importance of sound measures of forceful police actions. *Criminology & Public Policy* 7: 605–17. [CrossRef]
- Kraska, Peter B., and Victor E. Kappeler. 1995. To serve and pursue: Exploring police sexual violence against women. *Justice Quarterly* 12: 85–111. [CrossRef]
- Krippendorff, Klaus. 2013. *Content Analysis: An Introduction to Its Methodology*, 3rd ed. Thousand Oaks: Sage.
- Lawrence, Regina C. 2000. *The Politics of Force: Media and the Construction of Police Brutality*. Berkeley: University of California Press.
- Lee, Joongyeup. 2016. Police use of nonlethal force in New York City: Situational and community factors. *Policing and Society* 26: 875–88. [CrossRef]
- Lersch, Kim Michelle, and Joe R. Feagin. 1996. Violent police-citizen encounters: An analysis of major newspaper accounts. *Critical Sociology* 22: 29–49. [CrossRef]
- Lersch, Kim Michelle, Thomas Bazley, Thomas Mieczkowski, and Kristina Childs. 2008. Police use of force and neighbourhood characteristics: An examination of structural disadvantage, crime, and resistance. *Policing and Society* 18: 282–300. [CrossRef]
- McLaughlin, Elliott C. 2020. How George Floyd's Death Ignited a Racial Reckoning that Shows No Signs of Slowing Down. *CNN.Com*. August 9. Available online: <https://www.cnn.com/2020/08/09/us/george-floyd-protests-different-why/index.html> (accessed on 1 January 2021).
- Menard, Scott. 2010. *Logistic Regression: From Introductory to Advanced Concepts and Applications*. Los Angeles: Sage.
- Nix, Justin, Bradley A. Campbell, Edward H. Byers, and Geoffrey P. Alpert. 2017. A bird's eye view of civilians killed by police in 2015: Further evidence of implicit bias. *Criminology & Public Policy* 16: 309–40. [CrossRef]
- Payne, Brian K. 2013. *White-Collar Crime: The Essentials*. Thousand Oaks: Sage.
- President's Task Force on 21st Century Policing. 2015. *Final Report of the President's Task Force on 21st Century Policing*. Washington, DC: U.S. Department of Justice, Office of Community Oriented Policing Services. Available online: <https://www.ncjrs.gov/App/Publications/Abstract.aspx?ID=271066> (accessed on 5 October 2018).
- Rabe-Hemp, Cara E., and Jeremy Braithwaite. 2013. An exploration of recidivism and the officer shuffle in police sexual violence. *Police Quarterly* 16: 127–47. [CrossRef]
- Ready, Justin, Michael D. White, and Christopher Fisher. 2008. Shock value: A comparative analysis of news reports and official records on TASER deployments. *Policing: An International Journal of Police Strategies & Management* 31: 148–70. [CrossRef]
- Riffe, Daniel, Stephen Lacy, and Frederick G. Fico. 2005. *Analyzing Media Messages: Using Quantitative Content Analysis in Research*, 2nd ed. Mahwah: Lawrence Erlbaum Associates.
- Riffe, Daniel, Stephen Lacy, Brendan R. Watson, and Frederick G. Fico. 2019. *Analyzing Media Messages: Using Quantitative Content Analysis in Research*, 4th ed. New York: Routledge.
- Ross, Jeffrey Ian. 2000. *Making News of Police Violence: A Comparative Study of Toronto and New York City*. Westport: Praeger.
- Schuck, Amie M. 2004. The masking of racial and ethnic disparity in police use of physical force: The effects of gender and custody status. *Journal of Criminal Justice* 32: 557–64. [CrossRef]
- Sonquist, John A. 1970. *Multivariate Model Building: The Validation of a Search Strategy*. Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan.
- Stinson, Philip M. 2009. *Police Crime: A Newsmaking Criminology Study of Sworn Law Enforcement Officers Arrested, 2005–2007*. Indiana: Indiana University of Pennsylvania.
- Stinson, Philip M. 2015. Police crime: The criminal behavior of sworn law enforcement officers. *Sociology Compass* 9: 1–13. [CrossRef]
- Stinson, Philip M. 2020. *Criminology Explains Police Violence*. Oakland: University of California Press.
- Stinson, Philip M., and John Liederbach. 2013. Fox in the henhouse: A study of police officers arrested for crimes associated with domestic and/or family violence. *Criminal Justice Policy Review* 24: 601–25. [CrossRef]
- Stinson, Philip M., John Liederbach, and Tina L. Freiburger. 2010. Exit strategy: An exploration of late-stage police crime. *Police Quarterly* 13: 413–35. [CrossRef]
- Stinson, Philip M., Bradford W. Reynolds, and John Liederbach. 2012a. Police crime and less-than-lethal coercive force: A description of the criminal misuse of TASERs. *International Journal of Police Science & Management* 14: 1–19. [CrossRef]
- Stinson, Philip M., J. Liederbach, and Tina L. Freiburger. 2012b. Off-duty and under arrest: A study of crimes perpetrated by off-duty police. *Criminal Justice Policy Review* 23: 139–63. [CrossRef]



- Stinson, Philip M., John Liederbach, Steven L. Brewer, Hans D. Schmalzried, Brooke E. Mathna, and Krista L. Long. 2013. A study of drug-related police corruption arrests. *Policing: An International Journal of Police Strategies & Management* 36: 491–511. [CrossRef]
- Stinson, Philip M., John Liederbach, Steven L. Brewer, and Brooke E. Mathna. 2014a. Police sexual misconduct: A national scale study of arrested officers. *Criminal Justice Policy Review* 26: 665–90. [CrossRef]
- Stinson, Philip M., John Liederbach, Steven L. Brewer, and Natalie Todak. 2014b. Drink, drive, go to jail? A study of police officers arrested for drunk driving. *Journal of Crime and Justice* 37: 356–76. [CrossRef]
- Stinson, Philip M., Steven L. Brewer, Brooke E. Mathna, John Liederbach, and Christine M. Englebrecht. 2014c. Police sexual misconduct: Arrested officers and their victims. *Victims & Offenders* 10: 117–51. [CrossRef]
- Stinson, Philip M., John Liederbach, Michael Buerger, and Steven L. Brewer. 2018. To protect and collect: A nationwide study of profit-motivated police crime. *Criminal Justice Studies* 31: 310–31. [CrossRef]
- Stinson, Philip M., John Liederbach, and Robert W. Taylor. 2020a. Police sexual violence: Exploring the contexts of victimization. *Sexual Assault Report* 23: 49–58.
- Stinson, Philip M., Robert W. Taylor, and John Liederbach. 2020b. The situational context of police sexual violence: Data and policy implications. *Family & Intimate Partner Violence Quarterly* 12: 59–68.
- Terrill, William, and Stephen D. Mastrofski. 2002. Situational and officer-based determinants of police coercion. *Justice Quarterly* 19: 215–48. [CrossRef]
- Terrill, William, and Eugene A. Paoline. 2017. Police Use of Less Lethal Force: Does Administrative Policy Matter? *Justice Quarterly* 34: 193–216. [CrossRef]
- Thompson, Brian L., and James Daniel Lee. 2004. Who cares if police become violent? Explaining approval of police use of force using a national sample. *Sociological Inquiry* 74: 381–410. [CrossRef]
- Tuch, Steven A., and Ronald Weitzer. 1997. Racial differences in attitudes toward the police. *The Public Opinion Quarterly* 61: 642–63. [CrossRef]
- U.S. Census Bureau. 2010. *2010 FIPS Codes for Counties and County Equivalent Entities*. Washington, DC: U.S. Department of Commerce, U.S. Census Bureau. Available online: <https://www.census.gov/geo/reference/codes/cou.html> (accessed on 14 March 2016).
- U.S. Department of Agriculture. 2003. *Measuring Rurality: Rural-Urban Continuum Codes. (Computer File)*. Washington, DC: U.S. Department of Agriculture, Economic Research Service. Available online: <http://www.ers.usda.gov/briefing/rurality/ruralurbcon/> (accessed on 5 May 2011).
- U.S. Department of Justice. 2000. *National Incident-Based Reporting System: Data Collection Guidelines*. Washington, DC: U.S. Department of Justice, Federal Bureau of Investigation, Criminal Justice Information Services Division. Available online: [http://www.fbi.gov/about-us/cjis/ucr/nibrs/nibrs\\_dcguides.pdf/view](http://www.fbi.gov/about-us/cjis/ucr/nibrs/nibrs_dcguides.pdf/view) (accessed on 9 March 2013).
- U.S. Department of Justice. 2008. *Census of State and Local Enforcement Agencies (CSLEA)*. Washington, DC: U.S. Department of Justice. [CrossRef]
- U.S. National Advisory Commission on Civil Disorders. 1968. *Report of the National Advisory Commission on Civil Disorders*. Washington, DC: U.S. Government Printing Office.
- Walker, Samuel, and Dawn Irlbeck. 2002. *Driving while Female: A National Problem in Police Misconduct*. Omaha: Department of Criminal Justice, Police Professionalism Initiative, University of Nebraska at Omaha. Available online: <http://samuelwalker.net/wp-content/uploads/2010/06/dwf2002.pdf> (accessed on 2 August 2016).
- White, Michael D., and Justin Ready. 2009. Examining fatal and nonfatal incidents involving the TASER: Identifying predictors of suspect death reported in the media. *Criminology & Public Policy* 8: 865–91. [CrossRef]