

The Effects of Race and Physical Evidence on the Likelihood of Arrest for Homicide

Race and Justice

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DOI: 10.1177/2153368719900358

journals.sagepub.com/home/raj

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Abstract

Previous research examining the association between criminal suspect's race and the likelihood of arrest has produced inconsistent findings. Social scientists remain unsure as to whether Black or White criminal suspects have a higher probability of arrest. Still others find no substantive association between a criminal suspect's race and the likelihood of arrest. This study contributes to the extant literature by examining the relationship between a criminal suspect's race and the arrest sanction for the crime of homicide while controlling for the strength of physical evidence linking the criminal suspect to the crime. Although strength of physical evidence against a defendant in a criminal case has been repeatedly shown to be important in determining a variety of criminal justice processing outcomes, it has typically been excluded from research studies examining the arrest decision due to data limitations. Logistic regression results show that Black homicide suspects are not more likely than similarly situated White homicide suspects to be arrested by police. Results also show that Black-on-White homicides are not more apt than other offender–victim racial combinations to culminate in an arrest. Based on these findings, it appears that a homicide suspect's race does not play a noteworthy role in influencing the likelihood of arrest after accounting for the strength of physical evidence gathered against the criminal suspect in the case.

Keywords

race, homicide, strength of physical evidence, arrest

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Background

The effect of criminal suspect's race on the likelihood of arrest has been studied extensively. It is generally accepted that Black citizens are arrested at higher rates than Whites or any other racial group for that matter. While representing approximately 13% of the U.S. population (U.S. Census Bureau, 2018), Blacks account for 27% of arrests for both misdemeanor and felonies. Black citizens also have an elevated proclivity of being apprehended by the police for the crime of homicide. They account for roughly 53% of the homicide arrests made by police (Uniform Crime Report, 2018). This figure has also remained relatively constant over time (Cooper & Smith, 2011).

Although researchers generally agree that racial disparities exist in the use of the arrest sanction for homicide and for most other crimes, the exact causal mechanisms responsible for the overrepresentation of Black citizens in arrest statistics are far less clear. Two broad perspectives have been advanced in the literature to account for the observed racial disparity in the use of the arrest sanction. Normative theories argue that there is simply differential criminal offending across racial groups, which in turn accounts for the higher arrest rate for Black citizens. These types of theories usually emphasize the differential effects of social factors such as poverty, economic inequality, and family structure in explicating the observed racial disparity in criminal offending (Stults & Swagar, 2018).

In contrast, conflict theory posits that the race of the criminal suspect is a relevant determining factor in a police officer's decision to effectuate an arrest for a given criminal offense. It is plausible that because Blacks are more likely than Whites to distrust police (Newport, 2014), they are more apt to show police officers disrespect (Correll et al., 2007) and ignore orders for compliance during citizen/police encounters (Skogan & Frydl, 2004). These factors can amplify the likelihood that a Black criminal suspect will be arrested by police because deference shown toward a police officer attenuates the probability of arrest (Smith & Visser, 1981). Black citizens may also have an enhanced likelihood of arrest because not only of their hesitancy to show deference to police, but they are perceived by many as being more dangerous and prone to criminality than other races. Survey research also shows that Whites frequently view Blacks in society as more violent and as being more inclined to partake in criminal behavior than other races (Quillian & Pager, 2001). Research also finds that Whites are more concerned with crime than other racial groups and that this fear is amplified when linked to Blacks in urban and local jurisdictions (Mears et al., 2009).

While deference theory is a plausible explanation for racial disparities in arrest, there remains mixed support for this theory in the criminal justice literature. In contrast to D. A. Smith and Visser (1981), several recent research studies find that Black criminal suspects are not necessarily impacted negatively by police actions (James et al., 2016; Klinger, 1996; Worrall et al., 2018). To illustrate, James et al. (2016) employed a within-subject, repeated-measures study design to better determine how police officers respond to realistic video scenarios where the use of deadly force

may be needed. Results showed that police officers on average took longer to discharge their weapons when the video depicted a Black rather than a White suspect. They also observed that officers were significantly more likely to shoot White than Black suspects in the potentially deadly video scenarios. While both the James et al. and Worrall et al. studies did not specifically address the decision to arrest, their findings are theoretically relevant because they suggest that the decisions made by police officers may not always be disadvantageous to Black criminal suspects.

Despite inconsistency in the findings generated in prior studies pertaining to the effect of a criminal suspect's demeanor on police decision-making, there is more consistent evidence for the existence of subconscious beliefs among many in the population that Black citizens are predisposed to criminal behavior and that they could pose a potential physical threat. Existing negative stereotypes also portray Blacks as emerging from broken homes in poverty-stricken neighborhoods and that they have a penchant for relying on public assistance (Mancini et al., 2015). Much of the negative perception of Black citizens can be attributed to their frequent portrayal in the media as criminal offenders and to news stories highlighting the race of the criminal offender (Mancini et al., 2015). For example, a survey of Los Angeles county adults showed that those individuals who were inundated with media depictions of Blacks as criminals were more apt to assume that they had a propensity for criminality (Dixon, 2008). Other research also finds that not only are people likely to express more favorable views of crime victims when the news media identifies the offender as Black, but that they are also more apt to experience emotional discomfort when images of Black criminal offenders appear on their television screens (Dixon & Maddox, 2005). In addition to the news media, movie portrayals of crime can amplify negative perceptions of Blacks particularly when the actor lacks typical Eurocentric features (Conrad et al., 2009).

Taken in their totality, these findings furnish tacit support for the position that some police officers may perceive Black citizens, especially young Black males, as being potentially dangerous and as having a propensity to partake in criminal activity. Empirical evidence from traffic incidents also shows that Black drivers are more likely than White drivers to be stopped and searched on local roads (Rojek et al., 2004, 2012; Smith & Petrocelli, 2001). However, while the findings generated in these studies support the significance of race in the decision to stop and arrest suspects for traffic or public order offenses, the likelihood of arrest for more serious violent offenses may be less influenced by a suspect's race.

Yet, while such a situation seems possible, it is rather surprising that empirical research examining the effect of a criminal suspect's race on the likelihood of arrest has yielded mixed results. Some studies find that an arrest is more apt to occur for crimes involving a Black criminal suspect (Andersen, 2015; Kochel et al., 2011). Others report that White rather than Black criminal suspects have a higher probability of arrest (D'Alessio & Stolzenberg, 2003; Stolzenberg et al., 2004). Still others find no substantive effect of a criminal suspect's race on the use of the arrest sanction (Austin & Ressler, 2017; Barnes et al., 2015; Bolger, 2018; Piquero et al., 2014). One possible reason for these inconsistent findings is that the relationship between a criminal

suspect's race and the likelihood of arrest may have been obfuscated by the different methodologies employed by researchers. Three divergent strategies have been utilized in prior research studies to investigate the association between race and arrest for a variety of different criminal offenses.

In the first strategy, researchers passively observe police officers during the performance of their normal law enforcement activities (Alpert et al., 2005; Brown & Frank, 2006; Johnson, 2007; Mastrofski & Parks, 1990; Smith et al., 1984). While advantageous in many respects, observational studies have a major weakness in that they may cause some police officers to behave differently than they would if their activities were not being monitored. This modification in police behavior due to being observed is referred to as "reactivity bias" and was originally documented in the Western Electric Company worker productivity studies (Landsberger, 1958). Researchers found that worker productivity increased substantially when the lighting at the Hawthorne Works factory in Cicero, IL, was intensified. However, when illumination was lessened, worker productivity unexpectedly rose. Additional research suggested that the amplification in worker productivity under dim lighting conditions resulted from workers recognizing that their activities were being scrutinized (Landsberger, 1958). While some question the existence of a Hawthorne effect on worker productivity (Jones, 1992), such an effect can still be useful in explaining police decision-making because serious civil and even criminal liability can result from the observations of police behavior documented by a third neutral party. A Hawthorne type effect has also been noted in survey research when people feel obligated to respond to survey questions in a manner that is consistent with prescribed norms or values (Cox et al., 2014).

The second research strategy involves the review of case files by criminal justice personnel (Ousey & Lee, 2008). The review of case files to obtain case-related data is advantageous because case files typically have information pertaining to the criminal suspect's demographics, the victim's demographics, the police officer's characteristics, and factors related to the criminal offense. Nevertheless, some argue that a sole reliance on case files may act to weaken the influence of a suspect's race on the likelihood of arrest because they are usually prepared by legal actors such as prosecutors and police officers who have a vested interest in how the information portrays their organization (Kochel et al., 2011).

Lastly, researchers have analyzed data obtained from crime victims to create a baseline from which to determine the likelihood of arrest for both Black and White criminal suspects (D'Alessio & Stolzenberg, 2003; Hindelang, 1981; Messner & South, 1988). These investigators maintain that if 50% of the Black offenders identified by crime victims were arrested by police for a given crime, then approximately 50% of the White suspects should also be arrested by police for the same crime. This racial equivalence in the likelihood of arrest is referred to as the equal probability hypothesis (D'Alessio & Stolzenberg, 2003). However, while victims are believed to be fairly accurate in their determination of a criminal suspect's race (Hindelang, 1981), some argue that the use of victim statements by police enhance the arresting of White criminal suspects because Black citizens distrust the police more than Whites

(Morin & Stepler, 2016) and because victim statements are usually reflective of victims who feel confident and comfortable in recounting their experience to law enforcement (Hagan & Albonetti, 1982). Since the police typically rely on the citizenry to help them solve crimes (Reisig & Lloyd, 2009) and most crimes are intra-racial in circumstance (Morgan, 2017), the unwillingness of many Black victims to assist law enforcement ultimately lowers the likelihood of arrest for Black criminal suspects.

In addition to the possibility that the dissimilar methodologies employed in prior research may have muddled the relationship between a criminal suspect's race and arrest, an alternative explanation for the conflicting findings reported in the literature is the persistent failure to account for relevant legal predictors of the arrest sanction. One important legal factor overlooked in previous research is the strength of the physical evidence gathered against the criminal suspect by the state. Although physical evidence pertaining to a criminal defendant's guilt has been found to be salient in influencing charging decisions (Eisenstein & Jacob, 1977), plea bargains (Smith, 1986), conviction likelihood (Peterson et al., 2010), and determining sentencing outcomes (Peterson et al., 2013), it has only been included in a few research studies examining the effect of a criminal suspect's race on the arrest decision.

Notwithstanding whether the data were obtained by observation, case files, or from crime victims, the principal analytic strategy adopted in most prior studies was the estimation of a multivariate equation predicting the likelihood of arrest in which the independent variables included the criminal suspect's race and other factors related to the offender, victim, and crime incident. If Black criminal suspects were found to be more likely than White suspects to be arrested by police, even after accounting for other relevant factors, it was adduced as evidence supporting the racial discrimination position. Conversely, if the coefficient for the criminal suspect's race variable was not substantive in the equation, it was taken as evidence against the racial discrimination argument. Of course, even if the coefficient for the criminal suspect's race was statistically substantive, such a finding would not necessarily substantiate the racial discrimination argument. The reason for this assertion is that an important legally relevant factor, the strength of physical evidence gathered against the criminal suspect, was usually omitted from most previous analyses because of data limitations. The exclusion of a relevant variable from an analysis, which is commonly referred to as omitted variable bias, is problematic because it can affect the variables included in the equation that are correlated with the omitted variable adversely. The stronger the correlation, the greater the bias.

Recognizing the importance of physical evidence in determining an individual's guilt, a few researchers have sought to determine whether the availability of physical evidence against the criminal suspect influences the likelihood of arrest. Petersilia (1983) investigated the influence of "evidentiary issues" on arrests and the dismissal of cases following an arrest. These evidentiary issues included whether physical evidence was present in the case and whether such evidence was collected properly by law enforcement. She found that Black criminal suspects were more apt than Whites to be arrested with less physical evidence implicating their guilt. Hepburn (1978) also

generated some support for the racial bias arrest thesis. He analyzed 28,235 adult arrests from a Midwestern city and found that warrant refusals by the prosecutor's office were significantly more likely for non-Whites than for Whites. The race effect was also conditioned by the age and sex of the defendant. Young, Black males had the highest incidence of warrant refusals. These findings furnished empirical support for the position that Black criminal suspects are more apt than White suspects to be arrested by police in cases lacking the necessary evidence for prosecutors to proceed with criminal charges.

In another study, Tasca et al. (2013) examined sexual assault cases in Arizona to determine whether race was a salient predictor of arrest. They found no evidence that a criminal suspect's race influenced the likelihood of arrest once physical evidence relating to the suspect's guilt was considered. Tasca and her associates also measured the effects of witnesses and victim cooperation, finding that race was no longer a predictor of arrest once these legal factors were controlled. The presence of forensic evidence in the case also substantially increased the probability that the police would arrest the criminal suspect, notwithstanding the suspect's race.

Other studies support these findings by showing that victims who fail to have post-assault examinations or who cannot recall details of the sexual offense due to intoxication are more likely to withdraw their complaints (Kelley & Campbell, 2013). These cases in turn are less apt to result in a formal investigation and the leveling of criminal charges. It was not readily apparent as to whether investigators encouraged these victims to withdraw their complaints or whether the victims made the decision independently. Kelley and Campbell (2013) also found that investigator effort was a strong predictor of case referral, even after accounting for the presence of physical evidence in the case. This finding suggests that the presence of physical evidence and the amount of investigator effort given to case have unique effects and should not be used as surrogates for each other.

Baskin and Sommers (2010) also studied the strength of physical evidence and its relationship with homicide case outcomes. They argued that despite the advances in forensic science, only a few studies have directly measured the effects of physical evidence on case outcomes. Their analysis included several decision points including arrest, referral to the district attorney's office, and the filing of charges. The rationale for including the strength of physical evidence as a main variable of interest as opposed to a control was to show its relationship to the strength of the case against a criminal defendant at various points throughout the course of a criminal investigation and trial. Most homicide cases had some type of physical evidence left behind, mostly consisting of biological and trace evidence. Autopsies were performed to collect any evidence that was not immediately apparent to police. Witness testimony, firearm evidence, and being an acquaintance to the victim were positively correlated with arrests, charges filed, and convictions (Baskin & Sommers, 2010). Race of the homicide suspect had little influence on the arrest decision. Baskin and Sommers' study underscores the importance of physical evidence in an officer's decision to make an arrest, as well as the relationship between physical evidence and the strength of the case against the homicide suspect.

Studies of homicide clearance rates have also controlled for physical evidence due to the increased use of forensic evidence in criminal trials. However, while much of the extant research has centered on victim and defendant characteristics, technological advances have amplified the relevance of forensic evidence. In a study of homicide cases drawn from the National Incident-Based Reporting System data set, Roberts (2007) found that the addition of physical evidence information to her analysis altered the results of victim and defendant characteristic comparisons. Cases that resulted in an arrest tended to have younger and female victims. However, once physical evidence was added as a control variable, the salience of the victim and defendant characteristics was no longer present.

The primary objective of this study is to further examine the relationship between a criminal suspect's race and the likelihood of arrest for the crime of homicide while controlling for the strength of physical evidence gathered in the case. In contrast to prior research that only measured physical evidence as being present or absent from a case (Peterson et al., 2010), this study considers both the unique effects of different types of physical evidence and the amount of physical evidence gathered by the state against the criminal suspect. The different types of physical evidence include whether any physical evidence was collected at the crime scene, the presence of latent prints, and firearm evidence among others. It is theorized that the more physical evidence gathered, the stronger the state's case against the criminal suspect. Research focusing on juror decisions and prosecutor filing decisions consistently shows that the more physical evidence gathered, the more likely a negative criminal justice outcome for the criminal defendant (Reskin & Visher, 1986; Spears & Spohn, 1997). While the decision to arrest is certainly different than jury verdicts or prosecutor filing decisions, it seems likely that the police will be similarly affected by an abundance of forensic evidence gathered against the criminal suspect. In addition to the type and amount of physical evidence collected against the criminal suspect, a variety of factors found in prior research to predict arrest are included in the analyses. These control variables help to attenuate the possibility of spurious or suppressed relationships.

Data and Method

The data set used in this study was obtained from the National Archive of Criminal Justice Data (NACJD). J. Peterson and Sommers (2010) collected these data for their National Institute of Justice (NIJ) funded study designed to investigate the role and impact of forensic science evidence on the criminal justice process. Their study utilized a prospective analysis of official record data that followed criminal cases in five jurisdictions (Los Angeles County, CA; Indianapolis, IN; Evansville, IN; Fort Wayne, IN; and South Bend, IN) from the time of the police incident report to the final criminal disposition. The data are based on a random sample of the population of reported crime incidents between 2003 and 2006, stratified by crime type and jurisdiction. A total of 4,205 cases were sampled including 859 aggravated assaults, 1,263 burglaries, 400 homicides, 602 rapes, and 1,081 robberies. Data were collected from three sources. These sources include police incident and investigation reports,

crime lab reports, and prosecutor case files. The data contain a total of 175 variables including study site, crime type, forensic variables, criminal offense variables, and crime dispositions variables.

Dependent and Independent Variables

The dependent variable is a dichotomy measure based on whether the police effectuated an arrest for a reported homicide. If the police made an arrest for a given homicide incident, the incident is coded 1, and 0 otherwise. Approximately 56% of the homicide crimes resulted in an arrest. Homicides cleared by exceptional means were not included in the sample. According to the National Incident-Based Reporting System, only about 5% of murder and nonnegligent manslaughter incidents are cleared exceptionally (NACJD, 2018). Thus, the omission of these cases should have a negligible impact on the findings.

The independent variable of theoretical interest is the race of the criminal suspect as determined by the police and/or by witnesses to the crime. Dummy-coded variables were used to represent the suspect's race (Black) and ethnicity (Latino). Asians were eliminated from the analysis because of insufficient cases ($N = 12$). This reduced the sample size from 400 to 388 homicide cases. Approximately 55% of the homicide suspects were Black, 29% Latino, and 16% White.

Physical evidence collected in each homicide case is also of theoretical interest in this study. We operationalize strength of physical evidence in two distinct ways. First, the type of physical evidence was measured by a series of dummy-coded variables representing nine categories of physical evidence collected by the state against the criminal suspect, including biological evidence, latent prints, pattern evidence, firearms/weapons, natural/synthetic materials, generic objects, electronic/printed data, trace evidence, and drugs. Most physical evidence (97%) was collected at the crime scene. We also examined whether this evidence links the suspect to the victim or crime scene. Second, the amount of physical evidence captures the sum of the physical evidence indicators and ranges from 0 (no physical evidence) to 7 different types of evidence. We recoded categories 6 and 7 to 5 to attenuate the skewness of the distribution. The strength of physical evidence gathered by the state against a criminal defendant is important because it is correlated strongly with criminal justice outcomes. The more physical evidence gathered, the stronger the case against the defendant. One might expect only a trivial relationship between the race of the criminal suspect and the likelihood of arrest once either the type or amount of physical evidence is considered.

Although we are primarily interested in the influence of a criminal suspect's race on the likelihood of arrest, while controlling for physical evidence linking the suspect to the homicide, several additional control variables were also included in the analysis. Notwithstanding the effects of physical evidence in the case, any observed relationship between a suspect's race and the likelihood of arrest for homicide may be spurious if these additional control variables are not taken into account. One group of control variables relate to the demographic characteristics of the homicide victim.

These demographic variables encompass the race of the victim, the ethnicity of the victim, the sex of the victim, the age of the victim, and the relationship of the victim to the offender. A second group of control variables pertain to witnesses to the homicide. These variables include whether there were witness reports, whether there were multiple eye witnesses to the crime, and whether the homicide victim was able to report the crime to authorities. It is important to note that not all homicide victims die at the crime scene or on arrival at the hospital. Approximately 16% of the homicide victims were able to report the incident to the police.

We also created several racial dyads as a third group of control variables, including suspect Black–victim White, suspect Black–victim Black, and suspect White–victim White to test for the possibility of interaction effects. Finally, we added a dummy-coded variable to the analysis to account for whether the homicide occurred in Los Angeles or Indiana jurisdictions. Table 1 provides a description of the variables used in the study.

Missing Data

The NACJD data set used in this study incorrectly assigned missing data as valid cases for several variables. To illustrate, the following variables used in our study have missing values but were not identified as missing in the dataset and codebook: suspect Black (20%), suspect Latino (20%), victim White (5%), victim Latino (5%), victim <20 years old (4%), victim 20–29 years old (4%), intimate victim (37%), and acquaintance victim (37%). These dummy variables coded both missing and valid values in the 0 category. Although J. Peterson et al. (2010) provide valid variable distributions in their NIJ report, they failed to mention the missing data. The NACJD identifies 13 publications that used the archived data set. We were able to identify and recode missing data by examining the variable distributions (e.g., those that did not add to 100%) and by comparing the corrected distributions to those indicated in the NIJ report.

We incorporated dummy controls for the independent variables with significant missing data in the models (suspect Black and acquaintance victim). Since the same cases are missing for suspect Latino and intimate victim, incorporating dummy controls for these variables would be redundant. The missing data variables were created following the method suggested by Cohen and Cohen (1983). This procedure assumes that if values on an independent variable are missing randomly, then the mean of the dependent variable for cases with missing values will be similar to the mean of valid cases. For each variable with missing data, we created a corresponding dummy variable that identified the missing cases (1 = *missing*, 0 = *observed*). We then recoded missing values on the variable to the mean of that variable so that variable would not be discarded from the analysis. The coefficients associated with the dummy-coded missing indicator variables (not shown) are available upon request.

Table 1. Description of Variables Included in the Study.

Variable	Proportion (Mean/SD)		
	Total (N = 388)	Arrested (N = 216)	Not Arrested (N = 172)
Suspect Black	0.55	0.58	0.52
Suspect Latino	0.29	0.24	0.36
Suspect male	0.95	0.93	0.98
Victim White	0.15	0.19	0.09
Victim Latino	0.33	0.26	0.43
Victim male	0.85	0.84	0.87
Victim <20 years old	0.25	0.27	0.22
Victim 20–29 years old	0.37	0.35	0.40
Multiple eye witnesses	0.13	0.15	0.12
Witness reports to police	0.67	0.68	0.66
Victim reports to police	0.16	0.13	0.19
Intimate victim	0.18	0.20	0.17
Acquaintance victim	0.26	0.31	0.19
Biological evidence collected	0.39	0.50	0.26
Latent prints collected	0.28	0.23	0.35
Pattern evidence collected	0.25	0.30	0.19
Firearms/weapons collected	0.84	0.80	0.89
Natural/synthetic materials collected	0.63	0.63	0.62
Generic objects collected	0.34	0.32	0.37
Electronic/printed data collected	0.11	0.11	0.11
Trace evidence collected	0.33	0.35	0.30
Drugs collected	0.11	0.11	0.10
Evidence links suspect to victim or crime scene	0.13	0.17	0.09
Los Angeles county	0.60	0.49	0.74
Amount of physical evidence	(3.23/1.33)	(3.29/1.36)	(3.14/1.30)
Suspect Black × Victim White	0.04	0.05	0.04
Suspect Black × Victim Black	0.41	0.45	0.35
Suspect White × Victim White	0.08	0.12	0.04

Note. All variables are dummy-coded except for the amount of physical evidence, which is interval and ranges from 0 to 5 categories. We created the amount of physical evidence variable based on the request of an anonymous reviewer.

Analysis

We used the logistic regression procedure in SPSS Version 25 (IBM Corp., 2017) to ascertain whether a criminal suspect's race influences the probability of arrest for the crime of homicide. Logistic regression is a suitable statistical procedure for analyzing a dichotomous dependent variable, and it allows for the utilization of both categorical and continuous exogenous variables. The direction of the relationship between an independent variable and the dependent variable is indicated by the sign attached to the coefficient. The coefficients generated in a logistic regression analysis can also be

readily translated into easily interpretable odds indicating the change in the likelihood of the dependent variable (probability of an arrest) given a one-unit shift in an independent variable. The percentage change in the odds ratio can also be computed using the following formula: $100 (e^b - 1)$. Positive values indicate a percentage change increase in the log odds in the endogenous variable while negative values imply a reduction. The .05 level of significance is employed for determining a salient relationship between an independent variable and the likelihood of arrest.

We also used the Firth logistic regression procedure in SPSS Version 25 to ascertain whether our models are robust, especially since a few of the independent variables included in the models had limited variation (e.g., those with proportions less than 10%). This procedure, which calculates the Firth variation of binary logistic regression (Firth, 1993), maximizes a penalized likelihood function that addresses the issue of complete or quasi-complete separation in the logistic model. It also reduces the finite-sample bias in the likelihood estimates.

Results

Table 2 shows the logistic regression model estimating the effect of a suspect's race, the types of physical evidence, and the other independent variables on the likelihood of arrest for the crime of homicide. Because of redundancies with the evidence categories, the amount of physical evidence had to be examined in a separate model (see Table 3). Tables 4 and 5 added the suspect–victim racial interactions in the equation with the types of physical evidence (see Table 4) and amount of physical evidence (see Table 5). Variance inflation factor (VIF) scores were examined to probe for the possibility of multicollinearity among the independent variables. An inspection of these scores indicated that multicollinearity did not vitiate our results. With one exception, the VIF score for Los Angeles county was 4.245, and all VIF scores were less than 4.0.

A visual examination of Table 2 fails to show a statistically discernible relationship between the race of the homicide suspect and the likelihood of arrest. This finding furnishes little support for the differential racial arrest hypothesis. A few other factors, however, directly impact the likelihood of arrest for homicide. One salient effect in the model is the relationship between the criminal suspect and homicide victim. When the victim and alleged offender are acquaintances, the probability of arrest is amplified. Acquaintances are nearly 4 times more likely to be arrested as compared to strangers. Another strong predictor of arrest is whether biological evidence was collected. The odds of arrest are 2.5 times greater in these cases. The presence of firearms/weapons also decreases the odds of arrest for homicide by about 70%. Finally, when the physical evidence links the suspect to the victim or crime scene, he or she is almost 3 times more likely to be arrested for homicide.

Table 3 presents the logistic regression results for the effect of the amount of physical evidence gathered by the state on the likelihood of arrest for homicide. A visual examination of Table 3 fails to show a statistically discernible relationship between the amount of physical evidence present in a case and the probability that a

Table 2. Logistic Regression Model Estimating the Likelihood of Arrest for Homicide (With Types of Physical Evidence).

Variable (Reference Group)	B	SE	Exp(B)
Suspect Black (White)	0.144	.517	1.155
Suspect Latino (White)	-0.465	.575	0.628
Suspect male	-0.517	.715	0.596
Victim White (Black)	0.541	.462	1.718
Victim Latino (Black)	0.279	.363	1.321
Victim male	0.160	.392	1.173
Victim <20 years old (30+)	0.411	.337	1.509
Victim 20–29 years old (30+)	-0.084	.302	0.919
Multiple eye witnesses	-0.149	.384	0.861
Witness reports to police	-0.196	.306	0.822
Victim reports to police	-0.283	.343	0.754
Intimate victim (stranger)	0.380	.458	1.463
Acquaintance victim (stranger)	1.301**	.444	3.671
Biological evidence collected	0.929*	.446	2.532
Latent prints collected	0.198	.345	1.219
Pattern evidence collected	0.349	.319	1.417
Firearms/weapons collected	-1.201**	.416	0.301
Natural/synthetic materials collected	0.152	.284	1.164
Generic objects collected	-0.079	.297	0.924
Electronic/printed data collected	-0.246	.399	0.782
Trace evidence collected	-0.231	.309	0.794
Drugs collected	0.159	.433	1.172
Evidence links suspect to victim or crime scene	1.084**	.443	2.956
Los Angeles county	0.503	.549	1.654
Constant	1.018		

Note. $N = 358$. Nagelkerke $R^2 = .344$.

* $p < .05$. ** $p \leq .01$ (two-tailed tests).

homicide suspect will be arrested by police. Homicides involving acquaintances and evidence linking the suspect to the victim or crime scene are again more likely to culminate in an arrest.

When one contemplates that several studies report the race of the victim is an important factor in determining severity of criminal sanction (Leiber & Blowers, 2003; Mitchell, 2005; Spohn & DeLone, 2000), we felt it prudent to assess whether a crime victim's race interacts with a suspect's race in predicting the probability of arrest. To determine whether the victim's race moderates the relationship between a homicide suspect's race and the likelihood of arrest, we added a series of product terms to the initially estimated models shown in Tables 2 and 3. The results for these analyses, which are reported in Tables 4 and 5, reveal no empirical evidence of a conditioning effect because none of the coefficients for the product terms reaches statistical significance in the equations. Black suspects are no more likely than White suspects to be arrested for homicide regardless of the race of the victim. This finding is

Table 3. Logistic Regression Model Estimating the Likelihood of Arrest for Homicide (With Amount of Physical Evidence).

Variable (Reference Group)	B	SE	Exp(B)
Suspect Black (White)	0.166	.496	1.180
Suspect Latino (White)	−0.310	.556	0.734
Suspect male	−0.733	.690	0.481
Victim White (Black)	0.474	.445	1.606
Victim Latino (Black)	0.175	.348	1.191
Victim male	0.132	.369	1.141
Victim <20 years old (30+)	0.216	.322	1.241
Victim 20–29 years old (30+)	−0.221	.289	0.802
Multiple eye witnesses	−0.108	.366	0.898
Witness reports to police	−0.075	.296	0.928
Victim reports to police	−0.321	.332	0.726
Intimate victim (stranger)	0.503	.441	1.654
Acquaintance victim (stranger)	1.231**	.428	3.424
Evidence links suspect to victim or crime scene	1.021**	.420	2.777
Los Angeles county	−0.211	.374	0.809
Amount of physical evidence	−0.021	.096	0.979
Constant	1.148		

Note. $N = 358$. Nagelkerke $R^2 = .295$.

* $p \leq .05$. ** $p \leq .01$ (two-tailed tests).

interesting because it runs counter to much of the literature suggesting that Blacks who criminally victimize Whites are more apt to be sanctioned severely by the state because of the elevated status of White victims in our society (Sampson & Lauritsen, 1997; Tonry, 2010).

The results generated using the Firth logistic regression procedure (not shown) are nearly identical to the results produced with standard logistic regression. Although the coefficients vary slightly, the same independent variables are statistically significant in Tables 2–5. We reported the standard logistic regression results because the Firth procedure does not allow continuous independent variables. Consequently, the interval variable measuring the amount of physical evidence was automatically converted to five dummy-coded variables. The Firth procedure also does not report a pseudo R^2 such as the Nagelkerke R^2 . The Firth logistic regression results are available upon request from the authors.

Conclusion

Spirited debate persists as to the effect of a criminal suspect's race on the likelihood of arrest. While a large and diverse body of research exists that examines the effect of a criminal suspect's race on the arrest decision, this research affords few definitive conclusions. On one hand, evidence suggests that Blacks are more likely than Whites to be arrested by police. Empirical work by Kochel et al. (2011) supports this

Table 4. Logistic Regression Model Estimating the Likelihood of Arrest for Homicide (With Types of Physical Evidence and Suspect–Victim Race Interactions).

Variable (Reference Group)	B	SE	Exp(B)
Suspect Latino (non-Latino)	−0.614	.480	0.541
Suspect male	−0.496	.722	0.609
Victim Latino (non-Latino)	0.113	.478	1.120
Victim male	0.152	.393	1.165
Victim <20 years old (30+)	0.397	.335	1.487
Victim 20–29 years old (30+)	−0.066	.303	0.937
Multiple eye witnesses	−0.178	.384	0.837
Witness reports to police	−0.191	.305	0.826
Victim reports to police	−0.287	.343	0.750
Intimate victim (stranger)	0.368	.457	1.445
Acquaintance victim (stranger)	1.254**	.440	3.504
Biological evidence collected	0.921*	.443	2.511
Latent prints collected	0.166	.345	1.181
Pattern evidence collected	0.344	.319	1.410
Firearms/weapons collected	−1.217**	.416	0.296
Natural/synthetic materials collected	0.129	.283	1.138
Generic objects collected	−0.040	.297	0.961
Electronic/printed data collected	−0.226	.396	0.798
Trace evidence collected	−0.215	.310	0.807
Drugs collected	0.168	.434	1.182
Evidence links suspect to victim or crime scene	1.116**	.444	3.053
Los Angeles county	0.483	.547	1.620
Suspect Black × Victim White (White × Black)	−0.614	.480	0.893
Suspect Black × Victim Black (White × Black)	−0.496	.722	0.854
Suspect White × Victim White (White × Black)	0.113	.478	1.385
Constant	1.343		

Note. $N = 358$. Nagelkerke $R^2 = .342$.

* $p \leq .05$. ** $p \leq .01$ (two-tailed tests).

view. On the other hand, some studies fail to discern convincing evidence of a race–arrest relationship (Austin & Ressler, 2017; Piquero et al., 2014). Still others find that Whites rather than Blacks have an enhanced proclivity to be arrested by police (D’Alessio & Stolzenberg, 2003; Stolzenberg et al., 2004). These inconsistencies in research findings may be the result of the different methodologies used by investigators.

One potential methodological concern broached in this study centers on accounting for all legally relevant factors that could impinge on the relationship between a criminal suspect’s race and the likelihood of arrest. Previous research typically estimated models that failed to include variables measuring the strength of physical evidence gathered by authorities relating to the criminal suspect’s guilt. Because most data sets fail to include this information, the question of salience that has remained unanswered to date is whether the exclusion of physical evidence variables from most

Table 5. Logistic Regression Model Estimating the Likelihood of Arrest for Homicide (With Amount of Physical Evidence and Suspect–Victim Race Interactions).

Variable (Reference Group)	B	SE	Exp(B)
Suspect Latino (non-Latino)	−0.464	.462	0.629
Suspect male	−0.734	.695	0.480
Victim Latino (non-Latino)	0.050	.460	1.051
Victim male	0.133	.369	1.143
Victim <20 years old (30+)	0.203	.321	1.225
Victim 20–29 years old (30+)	−0.213	.289	0.809
Multiple eye witnesses	−0.125	.366	0.883
Witness reports to police	−0.080	.295	0.923
Victim reports to police	−0.322	.332	0.725
Intimate victim (stranger)	0.493	.439	1.638
Acquaintance victim (stranger)	1.192**	.425	3.294
Evidence links suspect to victim or crime scene	1.041**	.421	2.833
Los Angeles county	−0.210	.373	0.810
Amount of physical evidence	−0.021	.097	0.979
Suspect Black × Victim White (White × Black)	0.065	.800	1.067
Suspect Black × Victim Black (White × Black)	−0.101	.580	0.904
Suspect White × Victim White (White × Black)	0.226	.731	1.253
Constant	1.435		

Note. $N = 358$. Nagelkerke $R^2 = .293$.

* $p \leq .05$. ** $p \leq .01$ (two-tailed tests).

prior analyses obfuscated the relationship between a suspect's race and the likelihood of arrest.

The results generated in this study fail to furnish empirical support for racial bias theory. Findings show that controlling for strength of physical evidence and other factors, the race of the homicide suspect does not play a noteworthy role in predicting the probability of arrest. The odds of arrest for a Black homicide suspect are not substantially higher than for a White suspect. Results also show that Black-on-White homicides are no more likely than other offender–victim racial combinations to result in an arrest. In addition to demonstrating a weak effect of a criminal suspect's race on the likelihood of arrest, our results only partially lend credence to the overall importance of physical evidence in influencing the arrest sanction. We argued previously that because physical evidence is a critical factor in determining a variety of criminal justice processing outcomes, the strength of physical evidence gathered by law enforcement officials should influence the likelihood of arrest. Our results only partially support this prediction because just two of the physical evidence variables, whether biological evidence was gathered by the state and the presence of firearm evidence, are statistically substantive in Tables 2 and 4. In contrast, the total amount of physical evidence collected has little impact on likelihood of arrest.

These findings suggest that variables other than the race of the suspect and the strength of physical evidence in the case may be influential in predicting whether the

police effectuate an arrest for a homicide. For instance, prior research finds that factors such as police investigation techniques (Pizarro et al., 2020) and police response time (Regoeczi et al., 2008; Regoeczi & Jarvis, 2013) are important in predicting the likelihood of arrest in homicide cases. Although it would have been desirable to include these variables in the analysis, limitations of the data set precluded such an undertaking. Future research might wish to consider these factors in tandem with physical evidence variables, but new data sets would need to be identified.

Although we were unable to unearth empirical evidence that Blacks have a higher likelihood of arrest than Whites for homicide, our findings should be qualified by the fact that we analyze only the crime of homicide and cannot say what the effect of a suspect's race on arrest might be for other offenses. We limited our study to homicide because it is in this type of crime that physical evidence is most often gathered by authorities (Schroeder & Elink-Schuurman-Laura, 2017). If other violent crimes such as rape, robbery, or aggravated assault were analyzed in this study, results might have been different. Results might also have been different if property crimes were analyzed. Additionally, our use of an ordinal variable to measure strength of physical evidence may be problematic to some degree because the scale is based on a raw count of each specific type of physical evidence assembled rather than the value of the physical evidence to investigators.

Contextual analyses are also necessary because it is plausible that the impact of a homicide suspect's race on the likelihood of arrest varies across social contexts. For example, research reports that the amount of social control experienced by Blacks in society is greatest in areas where the size of the Black population presents a serious challenge to the political, social, and economic power of Whites (Jacobs & Wood, 1999). Based on this research, we believe that future investigations should concentrate on multilevel studies in which police use of the arrest sanction is nested within differing social contexts.

By no means definitive, we have gained additional insight into the relationship between a homicide suspect's race and the likelihood of arrest by using data that afforded us the unique opportunity to measure the type and amount of physical evidence gathered by the state against the criminal suspect. While a suspect's race appears not to be relevant, our results do show that the strength of physical evidence collected by authorities is somewhat useful in explaining why the police make an arrest for the crime of homicide. That said, we do feel it necessary to emphasize that our study is only preliminary because the data set we analyze has limitations. Additional analyses with more comprehensive data should be conducted. However, despite the inadequacies associated with the data set, our study provides a launching point for future empirical research in this area.


Declaration of Conflicting Interests


The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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References

- Alpert, G. P., MacDonald, J. M., & Dunham, R. G. (2005). Police suspicion and discretionary decision-making during citizen stops. *Criminology*, *43*, 407–434.
- Andersen, T. S. (2015). Race, ethnicity, and structural variations in youth risk of arrest: Evidence from a national longitudinal sample. *Criminal Justice and Behavior*, *42*, 900–916.
- Austin, W., & Ressler, R. W. (2017). Who gets arrested for marijuana use? The perils of being poor and black. *Applied Economics Letters*, *24*, 211–213.
- Barnes, J. C., Jorgensen, C., Beaver, K. M., Boutwell, B. B., & Wright, J. P. (2015). Arrest prevalence in a national sample of adults: The role of sex and race/ethnicity. *American Journal of Criminal Justice*, *40*, 457–465.
- Baskin, D., & Sommers, I. (2010). The influence of forensic evidence on the case outcomes of homicide incidents. *Journal of Criminal Justice*, *38*, 1141–1149.
- Bolger, M. A. (2018). Predicting arrest probability across time: An exploration of competing risk perspectives. *Journal of Criminal Justice*, *59*, 92–109.
- Brown, R. A., & Frank, J. (2006). Race and officer decision making: Examining differences in arrest outcomes between Black and White officers. *Justice Quarterly*, *23*, 96–126.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum.
- Conrad, K., Dixon, T. L., & Zhang, Y. (2009). Controversial rap themes, gender portrayals and skin tone distortion: A content analysis of rap music videos. *Journal of Broadcasting & Electronic Media*, *53*, 134–156.
- Cooper, A., & Smith, E. L. (2011). *Homicide trends in the United States, 1980-2008*. Bureau of Justice Statistics.
- Correll, J., Park, B., Judd, C. M., Wittenbrink, B., Sadler, M. S., & Keesee, T. (2007). Across the thin blue line: Police officers and racial bias in the decision to shoot. *Journal of Personality and Social Psychology*, *92*, 1006.
- Cox, D., Jones, R. P., & Navarro-Rivera, J. (2014). *I know what you did last Sunday: Measuring social desirability bias in self-reported religious behavior, belief, and identity*. Public Religion Research Institute.
- D'Alessio, S., & Stolzenberg, L. (2003). Race and probability of arrest. *Social Forces*, *81*, 1371–1397.
- Dixon, T. L. (2008). Crime news and racialized beliefs: Understanding the relationship between local news viewing and perceptions of African Americans and crime. *Journal of Communication*, *58*, 106–125.

- Dixon, T. L., & Maddox, K. B. (2005). Skin tone, crime news, and social reality judgments: Priming the stereotype of the dark and dangerous black criminal. *Journal of Applied Social Psychology, 35*, 1555–1570.
- Eisenstein, J., & Jacob, H. (1977). *Felony justice: An organizational analysis of criminal courts*. Little, Brown.
- Firth, D. (1993). Bias reduction of maximum likelihood estimates. *Biometrika, 80*, 27–38.
- Hagan, J., & Albonetti, C. (1982). Race, class, and the perception of criminal injustice in America. *American Journal of Sociology, 88*, 329–355.
- Hepburn, J. R. (1978). Race and the decision to arrest: An analysis of warrants issued. *Journal of Research in Crime and Delinquency, 15*, 54–73.
- Hindelang, M. J. (1981). Variation in sex-race-age-specific rates of offending. *American Sociological Review, 46*, 461–474.
- IBM Corp. (2017). IBM SPSS Statistics for Windows (Version 25.0). Author.
- Jacobs, D., & Wood, K. (1999). Interracial conflict and interracial homicide: Do political and economic rivalries explain White killings of Blacks or Black killings of Whites? *American Journal of Sociology, 105*, 157–190.
- James, L., James, S. M., & Vila, B. J. (2016). The reverse racism effect: Are cops more hesitant to shoot black than white suspects? *Criminology & Public Policy, 15*, 457–479.
- Johnson, R. R. (2007). Race and police reliance on suspicious non-verbal cues. *Policing: An International Journal of Police Strategies & Management, 30*, 277–290.
- Jones, S. R. (1992). Was there a Hawthorne effect? *American Journal of Sociology, 98*, 451–468.
- Kelley, K. D., & Campbell, R. (2013). Moving on or dropping out: Police processing of adult sexual assault cases. *Women & Criminal Justice, 23*, 1–18.
- Klinger, D. A. (1996). More on demeanor and arrest in Dade County. *Criminology, 34*, 61–82.
- Kochel, T. R., Wilson, D. B., & Mastrofski, S. D. (2011). Effect of suspect race on officers' arrest decisions. *Criminology, 49*, 473–512.
- Landsberger, H. A. (1958). *Hawthorne revisited: Management and the worker, its critics, and developments in human relations in industry*. Cornell University Press.
- Leiber, M. J., & Blowers, A. N. (2003). Race and misdemeanor sentencing. *Criminal Justice Policy Review, 14*, 464–485.
- Mancini, C., Mears, D. P., Stewart, E. A., Beaver, K. M., & Pickett, J. T. (2015). Whites' perceptions about Black criminality: A closer look at the contact hypothesis. *Crime & Delinquency, 61*, 996–1022.
- Mastrofski, S., & Parks, R. B. (1990). Improving observational studies of police. *Criminology, 28*, 475–496.
- Mears, D. P., Mancini, C., & Stewart, E. A. (2009). Whites' concern about crime: The effects of interracial contact. *Journal of Research in Crime and Delinquency, 46*, 524–552.
- Messner, S. F., & South, S. J. (1988). Estimating race-specific offending rates: An intercity comparison of arrest data and victim reports. *Journal of Crime and Justice, 11*, 25–45.
- Mitchell, O. (2005). A meta-analysis of race and sentencing research: Explaining the inconsistencies. *Journal of Quantitative Criminology, 21*, 439–466.

- Morgan, R. E. (2017). *Race and Hispanic origin of victims and offenders, 2012-15*. Bureau of Justice Statistics.
- Morin, R., & Stepler, R. (2016). *The racial confidence gap in police performance*. Pew Research Center.
- National Archive of Criminal Justice Data. (2018). *National incident-based reporting system, 2016: Extract files*. Inter-university Consortium for Political and Social Research [distributor], 2018-08-17. <https://doi.org/10.3886/ICPSR37066.v1>
- Newport, F. (2014). *Gallup review: Black and White attitudes toward police*. <http://www.gallup.com/poll/175088/gallup-review-black-white-attitudes-toward-police.aspx>
- Ousey, G. C., & Lee, M. R. (2008). Racial disparity in formal social control: An investigation of alternative explanations of arrest rate inequality. *Journal of Research in Crime and Delinquency, 45*, 322–355.
- Petersilia, J. (1983). *Racial disparities in the criminal justice system*. Rand Corporation.
- Peterson, J., & Sommers, I. (2010). *Impact of forensic evidence on the criminal justice process in five sites in the United States, 2003-2006*. Inter-university Consortium for Political and Social Research [distributor], 2010-10-27. <https://doi.org/10.3886/ICPSR29203.v1>
- Peterson, J., Sommers, I., Baskin, D., & Johnson, D. (2010). *The role and impact of forensic evidence in the criminal justice process*. National Institute of Justice.
- Peterson, J. L., Hickman, M. J., Strom, K. J., & Johnson, D. J. (2013). Effect of forensic evidence on criminal justice case processing. *Journal of Forensic Sciences, 58*, S78–S90.
- Piquero, A. R., Schubert, C. A., & Brame, R. (2014). Comparing official and self-report records of offending across gender and race/ethnicity in a longitudinal study of serious youthful offenders. *Journal of Research in Crime and Delinquency, 51*, 526–554.
- Pizarro, J. M., Terrill, W., & LoFaso, C. A. (2020). The impact of investigation strategies and tactics on homicide clearance. *Homicide Studies, 24*, 3–24.
- Quillian, L., & Pager, D. (2001). Black neighbors, higher crime? The role of racial stereotypes in evaluations of neighborhood crime. *American Journal of Sociology, 107*, 717–767.
- Regoeczi, W. C., & Jarvis, J. P. (2013). Beyond the social production of homicide rates: Extending social disorganization theory to explain homicide case outcomes. *Justice Quarterly, 30*, 983–1014.
- Regoeczi, W. C., Jarvis, J., & Riedel, M. (2008). Clearing murders: Is it about time? *Journal of Research in Crime and Delinquency, 45*, 142–162.
- Reisig, M. D., & Lloyd, C. (2009). Procedural justice, police legitimacy, and helping the police fight crime: Results from a survey of Jamaican adolescents. *Police Quarterly, 12*, 42–62.
- Reskin, B. F., & Visher, C. A. (1986). The impacts of evidence and extralegal factors in jurors' decisions. *Law and Society Review, 20*, 423–438.
- Roberts, A. (2007). Predictors of homicide clearance by arrest: An event history analysis of NIBRS incidents. *Homicide Studies, 11*, 82–93.
- Rojek, J., Rosenfeld, R., & Decker, S. (2004). The influence of driver's race on traffic stops in Missouri. *Police Quarterly, 7*, 126–147.
- Rojek, J., Rosenfeld, R., & Decker, S. (2012). Policing race: The racial stratification of searches in police traffic stops. *Criminology, 50*, 993–1024.

- Sampson, R. J., & Lauritsen, J. L. (1997). Racial and ethnic disparities in crime and criminal justice in the United States. *Crime and Justice*, 21, 311–374.
- Schroeder, D., & Elink-Schuurman-Laura, K. (2017). *The impact of forensic evidence on arrest and prosecution*. National Institute of Justice.
- Skogan, W. G., & Frydl, K. (2004). *Fairness and effectiveness in policing: The evidence*. National Academy of Sciences.
- Smith, D. A. (1986). Plea bargaining controversy. *Journal of Criminal Law and Criminology*, 77, 949–968.
- Smith, D. A., & Visher, C. A. (1981). Street-level justice: Situational determinants of police arrest decisions. *Social Problems*, 29, 167–177.
- Smith, D. A., Visher, C. A., & Davidson, L. A. (1984). Equity and discretionary justice: The influence of race on police arrest decisions. *Journal of Criminal Law and Criminology*, 75, 234–249.
- Smith, M. R., & Petrocelli, M. (2001). Racial profiling? A multivariate analysis of police traffic stop data. *Police Quarterly*, 4, 4–27.
- Spears, J. W., & Spohn, C. C. (1997). The effect of evidence factors and victim characteristics on prosecutors' charging decisions in sexual assault cases. *Justice Quarterly*, 14, 501–524.
- Spohn, C., & DeLone, M. (2000). When does race matter? In J. Ulmer (Ed.), *Sociology of crime, law and deviance* (pp. 3–37). Emerald Group.
- Stolzenberg, L., D'Alessio, S. J., & Eitle, D. (2004). A multilevel test of racial threat theory. *Criminology*, 42, 673–698.
- Stults, B. J., & Swagar, N. (2018). Racial and ethnic threat: Theory, research, and new directions. In R. Martínez Jr., M. E. Hollis, & J. I. Stowell (Eds.), *The handbook of race, ethnicity, crime, and justice* (pp. 147–171). Wiley.
- Tasca, M., Rodriguez, N., Spohn, C., & Koss, M. P. (2013). Police decision making in sexual assault cases: Predictors of suspect identification and arrest. *Journal of Interpersonal Violence*, 28, 1157–1177.
- Tonry, M. (2010). The social, psychological, and political causes of racial disparities in the American criminal justice system. *Crime and Justice*, 39, 273–312.
- Uniform Crime Report. (2018). *Crime in the United States, 2017*. Federal Bureau of Investigation.
- U.S. Census Bureau. (2018). *Quick facts*. Author. <https://www.census.gov/quickfacts/fact/table/US/PST045218>
- Worrall, J. L., Bishopp, S. A., Zinser, S. C., Wheeler, A. P., & Phillips, S. W. (2018). Exploring bias in police shooting decisions with real shoot/don't shoot cases. *Crime & Delinquency*, 64, 1171–1192.

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