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What If They Were White? The Differential Arrest Consequences of Victim Characteristics for Black and White Co-offenders

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Abstract

A substantial body of research focuses on racial disparity in the criminal justice system, with mixed results due to difficulty in disentangling differential offending from racial bias. Additionally, some research has demonstrated that victim characteristics can exacerbate racial disparity in outcomes for offenders, but little research has focused on the arrest stage. We use a quasi-experimental approach that examines incidents involving co-offending pairs to isolate the influence of offender race on arrest, beyond any characteristics of the incident itself, and we test for moderating effects of victim race and sex on racial disparities in arrest. Our findings reveal that, on average, when two offenders are significantly more likely to be arrested than their White co-offending partners, especially for assault offenses. More importantly, this effect—for both assaults and homicides—is particularly strong when the victim is a White woman. Because these differences are between two offenders who commit the same offense together, we argue that the most plausible explanation for the differences is the presence of racial bias or discrimination.

Keywords

race; discrimination; criminal justice; arrest; victim

On July 6, 2016, a 32-year-old Black man named Philando Castile was shot and killed by a police officer in Saint Paul, Minnesota, during a traffic stop. In the wake of the shooting, which gripped national headlines and incited outrage among the public, Minnesota Governor Mark Dayton confronted the alleged racism behind the incident, asking, "[W]ould this have happened if those passengers, the driver and the passengers were White?" (Chan 2016). Intentionally or not, Governor Dayton was referring to a fundamental difficulty in the estimation of racial bias in the criminal justice system: the lack of a counterfactual observation due to unobserved differences between incidents. While Dayton was referencing police use of deadly force, similar questions apply to other aspects of the criminal justice system as well. For example, would a Black arrestee have been arrested for the offense if he or she were White?

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Despite decades of research on the association between offender race and arrest, empirical research on racial bias at the arrest stage has been largely inconclusive, with some research finding preferential treatment for White individuals, some finding preferential treatment for Black individuals, and some finding no effect of race after accounting for legal factors (Kochel, Wilson, and Mastrofski 2011; Skogan and Frydl 2004). Further, although research examining prosecution and sentencing has revealed victim characteristics to be important moderators in explaining racial disparities, very little research has focused on the potential influence of victim characteristics on racial disparity in arrest. Compounding these limitations is the difficulty of isolating racial bias, in particular, as the cause of racial disparity. Put simply, differential rates of arrest by race are not proof positive of racial bias, because such differences could result from differential selection into offending, wherein Black individuals have higher rates of arrest because they have higher rates of offending.

The current study builds upon previous research, which posits that the criminological phenomenon of co-offending, or committing an offense with another person, can be used to isolate racial differences in offense outcomes (Lantz and Wenger 2020). When two offenders commit an offense together, the associated incident characteristics, both measured and unmeasured, are the same for both offenders and are thus removed as possible confounders. Additionally, as both offenders were involved in the same incident, both have already selected into the same offense, thereby reducing selection bias. While recent research by Lantz and Wenger (2020) found modest racial differences within co-offending partnerships, such that Black offenders are more likely to be arrested than White offenders, their analyses did not examine variation in these differences according to incident characteristics. In other words, it is possible that these differences are larger, smaller, or even negative in some circumstances. To that end, prior research has indicated that victim characteristics impact disparities at later stages in the criminal justice system; this study thus builds on this previous research by examining within-incident racial differences in arrest according to victim characteristics.

RACIAL DISPARITIES IN THE CRIMINAL JUSTICE SYSTEM

Racial stratification is one of the most consequential social problems in American society, and racial disparities in the criminal justice system, in particular, have a long history of interest among sociologists and criminologists (Tonry 1995). And, while researchers have spent a great deal of time investigating racial inequalities in sentencing and incarceration, entry into the criminal justice system typically begins with the decision by a law enforcement officer to make an arrest, making this decision one of the most consequential points in the criminal justice system (Walker 1993). Even more importantly, the arrest decision also involves a high degree of police discretion, in that the law rarely states that a police officer must make an arrest. In many cases, officers choose not to make any arrest at all (Black 1980). This discretion is not inherently problematic unless differences in the decision to arrest are based on extralegal factors, such as racial discrimination or racial bias (Sunshine and Tyler 2003).

On average, research on racial differences in the criminal justice system indicates that Black people are, indeed, overrepresented at every decision point (e.g., arrest, sentencing). At

the front end of the criminal justice process, Black individuals are arrested at rates that far exceed those of Whites. Over three decades ago, Tillman (1987) estimated that nearly one-third of Black women and nearly two-thirds of Black men were arrested before the age of 30. More recently, Brame et al. (2012) estimated that roughly 49 percent of Black men were arrested by age 23, compared to just 38 percent of White men. Additionally, while Black individuals account for only 13.4 percent of the total U.S. population, roughly 27.2 percent of arrests in 2017 involved Black suspects (DOJ 2018). These disparities have significant consequences and are only compounded by substantial disparities in sentencing and imprisonment rates later on in the criminal justice process (e.g., Blumstein 1982; Western 2006); together, these racial inequities negatively impact a number of other outcomes, including education, employment, and social capital (Kirk and Sampson 2013; Pager 2003; Western and Pettit 2005; Western et al. 2015). Differential treatment can also foster legal cynicism and police distrust (Kirk and Papachristos 2011; Tyler 1990).

Proposed Explanations for Racial Disparities

Within this context, extant research has suggested two primary explanations for the overrepresentation of Black individuals in the criminal justice system. The first explanation, differential offending, argues that Black people engage in more crime relative to Whites and are thus represented in the criminal justice system at a rate commensurate with these differential offending rates. Put simply, according to this explanation, the Black population is over-represented in the criminal justice system because Black individuals engage in more crime than White individuals do (e.g., Hawkins et al. 2000). While early research primarily located these proposed differences within subcultural explanations (e.g., Wolfgang and Ferracuti 1967), more recent research has attended to structural influences (e.g., Sampson and Wilson 1995), highlighting the disadvantages in which Black individuals, relative to White individuals, are disproportionately embedded (LaFree, Baumer, and O'Brien 2010; Sampson and Bean 2006).

Essentially, the logical conclusion of the differential offending explanation is what D'Alessio and Stolzenberg (2003) referred to as the *equiprobability hypothesis*, which posits that, after controlling for variation in offending probability, the likelihood of arrest should be roughly equal for both Black and White offenders. Some research has supported this hypothesis. Early research by Hindelang (1978) compared data from the Uniform Crime Reports (UCR) and National Crime Victimization Survey (NCVS) in order to assess the extent to which arrest data (i.e., UCR) converged with victimization data (i.e., NCVS). Reasoning that overrepresentation in arrest records relative to victimization data would evidence racial biases, he found that Black people were overrepresented by about ten percent for assault offenses. However, when Hindelang analyzed differential victim reporting trends, he found that victims were less likely to report Black offenders to the police, relative to White offenders; he concluded that the discrepancies in victim reporting partially explained the differences between data sources. More recently, D'Alessio and Stolzenberg (2003) analyzed data from the National Incident-Based Reporting System (NIBRS) and found that the likelihood of arrest for robbery and assault was actually higher for White offenders than for Black offenders; they found no race differences for instances of sexual assault. In light of their findings, they concluded that the overrepresentation of Black offenders in

the criminal justice system, relative to White offenders, was "most likely attributable to differential involvement in reported crime rather than to racially biased law enforcement practices" (D'Alessio and Stolzenberg 2003:1381).

The second explanation, frequently grounded in conflict theory, is that law enforcement officers racially discriminate against Black offenders and thus are more likely to exercise formal social control against the Black population than the White population. Conflict theory posits that society consists of groups with conflicting values and is thus organized to represent the interests of the wealthy and powerful (i.e., Whites). Criminal law, therefore, is an instrument used to protect the interests of the powerful; as a result, criminal sanctions are more likely and more severe for the less powerful and influential (i.e., racial minorities) (Chambliss and Seidman 1971; Turk 1969). According to this explanation, Black offenders are more likely to be arrested and punished for criminal behavior than White offenders because of racial discrimination, rather than any difference in offending (Chambliss 1969; Greenberg, Kessler, and Loftin 1985).

Some prior research has found indirect support for racial discrimination, demonstrating significant differences in support for law enforcement officers by race (Withrow 2006), and higher rates of dissatisfaction with police among Black citizens, compared to White citizens (Ramirez, Farrell, and McDevitt 2000). Weitzer and Tuch (2005), for example, found that 37 percent of Black respondents believed they were treated unfairly by police because of their race, compared to only one percent of Whites (see also Brunson 2007). It is more difficult, however, to directly assess racial bias; research conducted by Eberhardt and colleagues (2004), for example, found that when officers were given photos of people and asked to judge whether they appeared to be criminal, police more frequently identified Black individuals as criminals than White individuals. Black individuals are also more likely to be perceived as delinquent and as aggressive or violent (e.g., Gibbs 1988; Tittle and Curran 1988); these stereotypes may, in turn, increase police motivations to monitor, control, and arrest Black citizens, relative to White citizens.

Yet, despite this indirect support, research efforts to directly assess the role of bias in producing racial disparities in arrest have been somewhat mixed in their conclusions. On the one hand, a number of empirical studies have found that race is not related to arrest or police contact (D'Alessio and Stolzenberg 2003; Lundman and Kowalski 2009; Pope and Snyder 2003). On the other hand, several studies have demonstrated a significant relationship between race and arrest, even after accounting for legal factors which could explain these differences (Ousey and Lee 2008; Shannon et al. 1988; White 2015). Given these mixed findings, reviews have largely declared research on the subject to be inconclusive, calling for more research (Riksheim and Chermak 1993; Sherman 1980; Smith et al. 2017). In an effort to synthesize this research, two major investigations have occurred. The first, conducted by the National Research Council's Committee to Review Research on Police Policy and Practices, revealed that some studies found bias against minorities, some found bias in favor of minorities, and some found no race effect (Skogan and Frydl 2004). They concluded that the evidence was too mixed to warrant definitive conclusions and that establishing the influence of race in police practice should be a top research priority moving forward. The

second review, conducted by a panel of 45 social scientists from the American Sociological Association, drew similar conclusions (Rosich 2007).

More recently, Kochel et al. (2011) conducted a meta-analysis examining the relationship between race and arrest and found that, on average, minority suspects were slightly more likely to be arrested than White suspects (see also Lytle 2014). The effect was relatively small, but robust. As a result, they concluded that prior research indicated that there is racial disparity in arrest likelihood, such that Black offenders are more likely to be arrested than White offenders. In an effort to account for unobserved differences between White and Black offenders, Lantz and Wenger (2020) examined within-incident differences in arrest and found similar results; because the differences that they observed were between cooffending partners, they suggested the results were likely partially attributable to racial bias. They acknowledged, however, that the arrest disparity could vary by incident characteristics, including demographic characteristics of the victim. Kochel and colleagues (2011) similarly noted that the strength of the relationship between race and arrest varied significantly across studies, arguing that "it should stimulate criminologists to develop empirical research that moves beyond just testing for race effects to research that accounts for variation in them" (Kochel et al. 2011:499). In this regard, they argued that a particularly promising avenue for future research into this variation was who was being served by the arrest (i.e., the victim). In other words, police arrest decisions may in part be driven by who suffers from an offense; following this, modeling the impact of victim characteristics may be an important step toward further understanding racial disparities in arrest.

Victim Characteristics, Race, and Arrest

While a significant body of research has examined racial inequities in the criminal justice system according to victim characteristics, the majority of this research has focused on prosecutorial and sentencing disparities (e.g., Kingsnorth et al. 1998; Spohn and Holleran 2001; Tellis and Spohn 2008); only a limited number of studies have examined arrest (O'Neal, Beckman, and Spohn 2019; Tasca et al. 2012). Research in these other areas, however, has revealed the importance of victim race, with findings largely indicating that offenders who murder White victims are more likely to be punished, generally, and to receive the death penalty, specifically (e.g., Garfinkel 1949; Hawkins 1987; Kleck 1981; Spohn 1994; Ulmer, Kramer, and Zajac 2019). Research in this regard has also demonstrated the important conditioning effect of victim gender on these relationships (e.g., Baumer, Messner, and Felson 2000; Curry 2010). While this prior research on the impact of victim race and gender on racial disparities in criminal justice outcomes has been integral, sentencing decisions represent one of the final decision points in the criminal justice system. The decision to arrest, on the other hand, is one of the earliest stages in the criminal justice system, meaning that it also has the potential to impact the greatest number of people. If, for example, White individuals are less likely than Black individuals to be arrested for similar offenses, then Whites would not only be under-represented at the arrest stage, but also at later stages of the criminal justice system by default. As a result, research on sentencing might actually be observing only attenuated racial differences because of the bias occurring at earlier stages, leading us to believe that racial disparities—in the system as a whole—are smaller than they actually are (King and Light 2019).

While research on the arrest stage has been limited, research on prosecutorial decisionmaking and sentencing outcomes can be informative. In this regard, several scholars have suggested that victim race and sex may affect criminal justice outcomes by influencing attributions of responsibility and harm (Baumer et al. 2000). An early review of the relationship between race and sentencing by Kleck (1981) concluded that Black offenders might receive harsher sentences than Whites in some situations, but may also receive more lenient sentences in other situations. Peterson and Hagan (1984:56) subsequently pointed to the need to address these "anomalous" results. Hawkins (1987) responded by applying concepts borrowed from conflict theory to sentencing processes, positing that sentences are determined by crime seriousness, wherein seriousness is dictated by the differential social value placed on crime victims. This social value is determined, in large part, by victim characteristics such as race, in which Black crime victims are devalued relative to White crime victims; thus, crimes against Black victims are perceived as less serious and less threatening to the social status quo. Therefore, offenders who victimize Black people should be expected to be punished less severely than those who victimize Whites. Moreover, the increased punitiveness associated with the victimization of Whites should be even greater when offenders are Black, compared to White, because such crimes represent a social threat to White privilege and violate social norms.

In the decades to follow, sentencing researchers continued to explore racial effects through the theoretical lens of similar related concepts, such as focal concerns (e.g., Steffensmeier, Kramer, and Streifel 1993) and the attribution of blameworthiness (e.g., Baumer et al. 2000). This research argued that, when making sentencing decisions, judges rarely have complete information and thus must manage uncertainty. Within this context, a number of researchers found that Black offenders were likely to be punished more severely than White offenders for similar crimes. Steffensmeier et al. (1993), for example, argued that judicial focal concerns, guided by perceptions that Black individuals are more blameworthy, and that the community is in greater need of protection from Black offenders, resulted in more punitive sentences for Black offenders (see also Albonetti 1991; Ulmer and Johnson 2004). These attributions may be particularly influential, however, when the victim of the crime is White. Scholars have consistently noted that White lives may be valued more highly than Black lives in American society (Hawkins 1987; LaFree 1980). This exaggerated value of White life, and the corresponding devaluing of Black lives, may mean that assaults directed at White victims are perceived as more harmful than assaults directed at Black victims. Baumer et al. (2000) also suggested that stereotypes regarding Black criminality and Black offending may lead to increased attributions of blame for Black victims of violence. Both of these processes suggest that violence against White victims may be treated more seriously, and that violence against Black victims may be treated less seriously, all else being equal.

Findings from research on homicide are consistent with this pattern; offenders suspected of homicide are more likely to be prosecuted when the victim is White, compared to non-White (Boris 1979). Even when defendants are prosecuted, they are less likely to be convicted (Beaulieu and Messner 1999) and less likely to receive the death penalty when the victim is non-White than when the victim is White (e.g., Baldus, Pulaski, and Woodworth 1983; Bowers and Pierce 1980; Garfinkel 1949; Paternoster 1984). Baumer and colleagues (2000) found that those offenders who killed non-White victims were more likely than those

who killed White victims to receive a charge reduction. Similarly, Curry (2010) found that offenders who killed Whites typically received more punitive sentences than those who victimized non-Whites. Taken together, this research has largely indicated that offenders tend to be punished less severely when the victim is non-White, compared to White (Baldus and Woodworth 1998; Hawkins 1987; LaFree 1980).

Turning to victim sex, scholars have noted that legal outcomes are frequently more likely and severe when the victim of a crime is a woman (e.g., Curry 2010; Curry, Lee, and Rodriguez 2004; Williams, Demuth, and Holcomb 2007). Myers (1979), for example, observed that prison sentences were more likely when incidents involved female victims. Beaulieu and Messner (1999) noted that defendants accused of victimizing women were less likely than those who victimized men to receive a charge reduction. Baumer et al. (2000) also found that offenders who murdered female victims were more likely than other offenders to be prosecuted and less likely to have a charge reduction. Again, these sex discrepancies may be attributable, in large part, to differential attributions of blameworthiness and focal concerns that frame women as less blameworthy for their own victimization. The chivalry hypothesis, moreover, argues that women are perceived as passive and dependent upon men for safety. In this context, women are considered as innocent and defenseless (Farrell and Swigert 1986; Gross and Mauro 1989). Thus, men can display chivalry by protecting women and responding in kind when they are harmed; a criminal justice system dominated by male actors, then, may seek to protect women by punishing those who victimize them forcefully and punitively (Curry et al. 2004). Offenders who victimize women then, might be expected to be more likely to be punished than other offenders, given that the victimization of women is perceived as more serious than the victimization of men.

The "White Female" Effect

Taken together, if White victimization is likely to be treated more severely than other victimization, and female victims are likely to be responded to with protection, relative to male victims, it follows that White female victimization may be reacted to with especially intensive sanctions, or punitiveness. Historically, with the notable exception of spousal assault, the sexual assault of White women has been treated more seriously than other sexual assaults (Kleck 1981; LaFree 1989). Holcomb, Williams, and Demuth (2004), in particular, argued that crimes against White female victims would be punished especially severely relative to crimes against other race-gender dyads for three reasons. First, White women are generally granted special societal protection because of both their privileged racial status and chivalrous orientations toward their sex. In other words, White women are perceived as more in need of the protection of the criminal justice system than other victims. Second, White women are accorded special protection because, as a group, they are more strongly associated with traditional gendered familial roles and responsibilities than other social groups (Daly 1987, 1994). Perceptions of White women as filling these roles likely contribute, in turn, to perceptions of White female victimization as harmful and threatening to community safety. Finally, White women are generally perceived as less criminal than other groups and thus less blameworthy and less responsible for their own victimization. Black women, Black men, and White men all possess at least one devalued characteristic,

and thus are all more likely than White women to be seen as threatening or as contributing to their own victimization (Holcomb et al. 2004; see also Baumer et al. 2000).

Thus, when taken together, prior research indicates that punishment should be most likely —and most severe—when the victim of violence is both White and female. Importantly, however, prior research also suggests that the effects of victim race and sex likely vary by offender race (Bowers and Pierce 1980; LaFree 1980; Spohn and Spears 1996). Specifically, interracial violence committed by Black offenders against White victims may be perceived as more harmful than other offenses because of the crossing of racial barriers (Hawkins 1987; Holcomb et al. 2004; LaFree 1989; Spohn 1994). In other words, from a conflict perspective, Black-perpetrated interracial violence is a severe deviation from social norms regarding interracial relations. As such, these violations may be more likely to invoke a formal criminal justice response. Again, research on sentencing outcomes has found that case outcomes are more severe, relative to other cases, when an incident involves both a White victim and a Black defendant (Baldus et al. 1983; Farrell and Swigert 1986; Garfinkel 1949; Myers 1980; Paternoster 1984; Spohn 1994). Again, however, the majority of research on offender/victim race and sex combinations has examined sentencing differences and sexual assaults through the framework of the sexual stratification hypothesis, which posits that Black men who assault White women are disruptive to the power hierarchy and, thus, are likely to be punished more harshly than other offenders (LaFree 1980; Spohn and Spears 1996; Tellis and Spohn 2008). Given the important role that arrest disparities may play in structuring disparities at later stages of the criminal justice system, however, it is critical that we begin to understand the role that these factors might play in the structuring of racially discriminatory arrest practices as well.

CURRENT STUDY

While prior studies on racial disparity in arrest have represented important steps forward in understanding racial discrimination in the criminal justice system, the correlational nature of these studies means that we cannot definitively say-based on these studies-whether Black offenders are more likely than White offenders to be arrested for similar crimes due to racial bias. The key issue at hand when seeking to determine the cause of racial disparities in arrest is determining whether racial differences in arrest rates are warranted or unwarranted, and researchers must often make this determination by attempting to measure and control for things that might justify disparities, such as differences in crime type, offense severity, and other offense characteristics. But, in the current study, we follow prior research by Lantz and Wenger (2020) and examine racial disparities in arrest within co-offending partnerships, focusing on variation in arrest likelihood according to victim race and sex.¹ In an ideal scenario, one would examine the likelihood of arrest following an offense given that the offender is White, and the likelihood of arrest following an offense given that the offender is Black. However, as we cannot experimentally vary offender race, we use co-offending dyads as approximations of a counterfactual. Put simply, when two offenders decide to co-offend with one another, they select into the same offense against the exact same victim(s), allowing

¹While a complete description of this counterfactual estimation approach, as applied to co-offenders, is beyond the scope of the current research, interested readers should consult Lantz and Wenger (2020) for a more detailed description of this methodology.

for a closer approximation of racial differences. As such, an analysis of differences in outcomes within these dyadic partnerships accounts for potential confounding characteristics that are not related to the offender; these characteristics are the same for both offenders, whether they are measured or unmeasured, obviating the need to control for them when comparing outcomes for co-offenders.

Within this framework, we follow Lantz and Wenger (2020) and predict that—overall— Black offenders will be slightly more likely to be arrested than White offenders, for the same offense (Hypothesis 1). Put simply, if the primary explanation for racial disparities is differential selection into offending, then we should not observe measurable racial differences in the likelihood of arrest when two offenders of different races commit the same offense together because in all cases both co-offenders have selected into offending. If, however, there are measurable racial differences in arrest when two offenders of different races commit the exact same offense together, then the observed differences are likely unwarranted and the most plausible explanation for these differences is the presence of racial bias or discrimination. Importantly, however, while this analytic approach can account for unmeasured and measured differences that are not associated with offender characteristics, they cannot control for the influence of factors that also vary by offender race. We argue that one of the most plausible factors that might account for variation in this regard is victim characteristics. Thus, we explicitly examine the influence of victim characteristics on racial disparity in arrest. Based on prior research at the sentencing phase of the criminal justice system, we predict that arrest likelihood will be greater for those who victimize White women, compared to other victims (Hypothesis 2) and that the effect of victimizing White women will be even greater when the offender is Black (Hypothesis 3). We further expect that arrest likelihood will be greater for Black male offenders, compared to other offenders (Hypothesis 4), and greatest when the offender is both Black and male, and the victim is both White and female (Hypothesis 5).

DATA AND METHODS

We test these hypotheses using data on non-lethal assaults and homicides from the National Incident-Based Reporting System (NIBRS) for 2003–2012.² We focus on arrest differences for these two offenses because prior research has primarily focused on lethal violence and sexual assault, while suffering from a lack of attention to racial disparity (a) for less serious violent crimes, like assault (see Spohn 1994 for an exception) and (b) at earlier stages in the criminal justice process. As such, prior research is largely generalizable only to the most serious forms of violence, and is most applicable to sentencing and punishment outcomes. Including homicide as an offense allows us to both make comparisons to prior research on lethal violence, while also examining disparities in homicide outcomes at the earlier arrest stage. Including assault as an offense, moreover, allows for the examination of these same differences for less serious violence. In this regard, a conflict perspective would suggest that racial discrimination against Black offenders will be greater for more serious violence (e.g., homicide), because such crimes represent the greatest threat to the normative order,

 $^{^{2}}$ All data used to generate the samples analyzed in the current study are available for download from the Inter-University Consortium for Political and Social Research (ICPSR) data repository.

or status quo (e.g., Hawkins 1987). On the other hand, other theories like liberation theory would posit that such racial discrimination should be greater for less serious crimes (e.g., non-lethal assault) because there are fewer limitations on criminal justice actors' discretion (e.g., Spohn and Cederblom 1991). We also elected to focus specifically on these violent offenses because the focus of this research is on victim characteristics, which are less relevant to property offending.³ It is also important to note that these data are based on official statistics. But, while these data are limited to only those offenses that come to the attention of the police, such data are appropriate for assessing racially discriminatory practices in police because the police can exercise racial bias in responding to criminal behavior only for those offenses that actually come to their attention.

The NIBRS data are especially useful for the current analyses because they include detailed incident-level information on offenders and victims, as well as individual clearance data on arrest (Lantz 2021). More important for the current research, the NIBRS data are organized into different data segments which can be restructured hierarchically to examine within-partnership differences in arrest. In the current study we use data from the offender, victim, arrestee, and offense segments of NIBRS. A detailed description of how these data are restructured in this way is presented elsewhere (Lantz and Wenger 2020), and so we present only a brief explanation here.

We capitalize on variation in race and sex in both the offender and arrestee segments, within incident, and match cases based on this variation. For example, if the offender segment includes two records, one for a Black offender and one for a White offender, and the arrestee segment includes only one record for a White arrestee, we assume that it was the White offender from the offender segment who was arrested and that the Black offender from the offender segment was not arrested. In this way, we match offenders in the offender file to offenders in the arrestee file using offender and arrestee race and sex. While racial differences are the primary focus of the current research, we match cases based on sex as well in order to maximize variation and avoid further reducing the sample size and potential generalizability of the sample.⁴ However, we can do this only by first limiting the sample to incidents involving exactly two co-offenders and then limiting the sample to those co-offending partnerships that are either mixed race or mixed gender.⁵ Altogether, roughly 13 percent of assaults involve co-offending (N=1,297,618) and approximately 34 percent of these assaults involve mixed race- or mixed-gender partnerships (N = 438,262). Further, roughly 24 percent of homicides involve co-offending (N = 7,932) and approximately 13 percent of these incidents involve similarly mixed partnerships (N= 1,067).

Although these data and analytic choices have the potential to limit the generalizability of our findings, doing so is necessary in order to isolate variation in partnerships to facilitate

³Further, sexual assault offenses, while important for the consideration of racial disparities (e.g., LaFree 1980), are excluded from the analyses because sexual assaults involve relatively low rates of co-offending, and are especially unlikely to involve both interracial co-offending and interracial victimization; the rarity of such cases—and subsequent reduced statistical power—increases the relative risk of a Type II statistical error. The sample of assault offenses, however, includes 438,262 co-offending partnerships, 20.1 percent of which are interracial; the sample of homicide offenses includes 1,067 co-offending partnerships, 25.2 percent of which are interracial. ⁴Because this data matching strategy selects co-offending partnerships which are either mixed race or mixed gender, it is worth noting that the final sample essentially includes an oversampling of female and minority offenders relative to the overall NIBRS sample. ⁵Using this method, only a very small number of offender and arrestee segments could not be matched (<.01 percent) because the demographic information in each file did not match. These cases were removed from the sample.

matching; we think this reduction in external validity is a worthwhile compromise, however, given the high internal validity generated by being able to compare arrest likelihood within incident by offender race. Matching offender and arrestee records in this way allows us to create a level-one data file of co-offenders including demographic characteristics and whether the offender was arrested.⁶ These data are then nested in a level-two dataset containing information on the co-offending partnership, incident, and victim characteristics. After listwise deletion, our final sample for homicide analyses entails 2,120 co-offenders nested within 1,060 incidents and our final sample for assault analyses entails 865,280 co-offenders within 432,640 incidents.

Measures

The primary dependent variable for all analyses is arrest. Arrest is coded as a dichotomous measure at the offender level (i.e., within incident) indicating whether the offender was arrested (1 = yes). Because offenders appear in the arrestee segment only if they were, in fact, arrested, offenders not matched to a record in the arrestee segment are coded as no arrest.

Offender race is coded into three dichotomous measures at the offender level indicating whether an offender was White (1 = yes), Black (1 = yes), or other race (1 = yes), with White serving as the reference category in models. Because other race offenders are statistically rare (two percent of assaults; three percent of homicides), our results primarily focus on differences between White and Black co-offenders, while controlling for the presence of other race offenders when necessary. Offender sex is coded as a dummy measure at the offender level indicating whether an offender was male (1 = yes). An interaction term between Black and male is also created in order to assess the multiplicative impact of these offender characteristics. We also examine variation by victim characteristics. Incidents in the NIBRS data may include multiple victims, and a non-trivial proportion of cases involve more than one victim. Additionally, our primary interest is in the "White Female" effect. As such, victim race and sex is measured using a proportion measure indicating the proportion of victims who are both White (compared to non-White) and female (compared to male). When the incident involves only one victim, it is coded dichotomously with a value of 1 if the victim is a White female and a value of 0 otherwise. In order to account for this measurement difference, a continuous measure indicating the number of victims involved in an offense is also included at the incident-level in all models.

We also include several control measures that allow for the adjustment of characteristics that may remain imbalanced, or plausibly still be related to variation in arrest, after restricting the analysis to within-partnership differences. At the offender level, we account for age, which is coded as a continuous indicator of age at the time of the offense. At the incident-level, we control for the demographic composition of the partnership to account for the possibility that the relationship between offender race and arrest might vary according to the characteristics of the co-offending partner and to ensure that the

⁶While it is also possible for cases to be cleared exceptionally, we note that exceptional clearances occur at the incident-level. Moreover, incidents cannot be cleared both exceptionally and by arrest. As such, they only vary between-incident, do not vary within-incident, and cannot explain the within-incident patterns we observe in this research.

level-one coefficient for offender race represents only a within-incident effect. Dyad race is coded into three different measures indicating the proportion of offenders that are White, Black, and other race (with White serving as the reference). Dyad sex is measured similarly using an indicator of the proportion of offenders in the offense that are male (ranging from 0 to 1). The mean age of the dyad is also included. Further, we control for offense characteristics, including whether a weapon was involved in the offense (1=yes), whether the victim(s) were injured in the course of the offense (1=yes), and whether the offense involved alcohol use (1=yes), drug use (1=yes), or suspected gang activity (1=yes). For the assault sample, we further control for the type of assault, including dummy measures to account for whether the incident was an aggravated assault (1=yes); a simple assault (1=yes); or intimidation (1=yes). Importantly, as the NIBRS data do not use a hierarchy rule for determining offense type, an assault incident could involve multiple types of assault (e.g., aggravated and simple). As such, these dummy variables are not mutually exclusive. However, we treat intimidation as the reference category. Finally, we account for additional characteristics of the victim(s). In this regard, victim age is coded as the mean age of all victims. Proportion measures are also created for the proportion of victims who were Hispanic ethnicity (compared to non-Hispanic) and a resident of the municipality in which the offense occurred (compared to non-resident). Lastly, a dummy measure is created to capture the victim-offender relationship, indicating whether the victim(s) are known to the offenders in any way. When no victim(s) were known to the offenders, the incident is coded as involving strangers.

Analytic Strategy

The analysis proceeds as follows. First, we follow Lantz and Wenger (2020) and leverage the naturally occurring phenomenon of co-offending by creating hierarchical models wherein we examine differences in arrest likelihood between Black and White offenders within the same dyadic co-offending partnership (Hypothesis 1).⁷ We conduct all analyses separately for assault and homicide offenses, with offender characteristics at level one and incident characteristics at level two. Because HLM analyses include separate residual variance terms for level one and level two, the level one coefficient of race represents the pooled within-group effect of race on arrest, separate from the influence of any difference in dyad racial composition across incidents (Raudenbush and Bryk 2002). By estimating differences in this way, co-offenders serve as counterfactual observations to each other and our models remove the effects of any correlates of arrest that potentially confound the relationship between race and arrest that do not vary according to the characteristics of the offender because these correlates are identical for both co-offenders in the dyad. This approach, which is essentially analogous to a "fixed-effects" analysis wherein the higher level of analysis is the incident rather than the individual, balances cases on both observables and unobservables at the offense/victim level. We also include controls at the offender level to further balance observations; the only confounding unmeasured variables that we cannot account for are those that vary by level-one units (offender).

⁷Because sample size in multilevel modeling is determined by the total number of units at each level, a low average number of level-one units per level-two grouping does not negatively influence statistical power for testing regression coefficients (Snijders 2005). As such, the examination of two offenders per higher-level unit is not problematic.

Although level-two incident characteristics do not vary by offenders within incident, they have the potential to moderate the effect of level-one variables. In other words, the level-one association between race and arrest has the potential to vary by level-two characteristics. Therefore, in the second step of the analyses, we assess the extent to which the overall relationship between race and arrest varies according to victim characteristics by first estimating the effect of victimizing a White female on overall odds of arrest (Hypothesis 2). Next, we incorporate cross-level interaction terms between victim White female and offender race to examine variation in racial disparity according to whether the victim of the offense was a White female (Hypothesis 3). Fourth, we incorporate an interaction term between Black and male at the offender level to examine whether arrest risk is particularly high for Black men (Hypothesis 4). Finally, we conclude by including a three-way cross-level interaction term between victim White female (level one) in order to assess whether the Black male estimate of arrest likelihood varies according to whether the victim of the offense was a White female the victim of the offense was a White female to assess whether the Black male estimate of arrest likelihood varies according to whether the victim of the offense was a White female the victim of the offense was a White female (level one) in order to assess whether the Black male estimate of arrest likelihood varies according to whether the victim of the offense was a White female (Hypothesis 5)⁸. All analyses are estimated in HLM 7.0.

RESULTS

Descriptive statistics for all analytic variables, by crime type, are presented in Table 1. The first panel of the table contains descriptive information for the level-one (i.e. offender) variables. Perhaps unsurprisingly, the arrest rate for homicides (68 percent) is nearly twice as high as for assaults (36 percent). However, the demographic characteristics of offenders are much more similar across crime type. For assault, 35 percent of offenders are Black, 63 percent are White, and only two percent are of another race; the corresponding percentages for homicide are 39 percent, 59 percent, and 3 percent. Further, the mean age of assault offenders is 30.4, while the mean age for homicide offenders are male. It is important to note that the increased representation of female homicide offenders is in part a byproduct of the data matching strategy, which essentially oversamples women and minority offenders by matching mixed-gender and mixed-race co-offending groups.

Assault, Race, and Arrest

We turn now to our multilevel models predicting arrest likelihood within co-offending partnerships. We begin with assault offenses; results are presented in Table 2. We first estimate the overall association between offender race and arrest to test Hypothesis 1 that Black offenders are more likely to be arrested than White offenders. As shown in Model 1, the odds ratio for offender Black is significant at the p < .001 level, indicating that Black offenders are associated with about a four percent increase in the odds of arrest in comparison to White offenders when an assault occurs. While this odds ratio may seem small in magnitude, it is important to note that, because of the approach taken here, the

⁸Although we considered including victim White and victim female as separate measures, our theoretical interest lies in how White women, in particular, are protected in comparison to all other victims. Additionally, including these characteristics as separate measures would necessitate the inclusion of 23 separate terms to represent our final interaction. Such a model would be not only statistically and substantively cumbersome, but it would also be statistically unsound among the smaller sample of homicide offenses.

observed four percent difference represents the difference in likelihood of being arrested for the exact same crime for a Black offender in comparison to a White offender.⁹

Having established this baseline degree of racial disparity in arrest likelihood for assault, we add the victim White female variable in order to test our second hypothesis that, on average, arrest likelihood will be greater for those who victimize White women, compared to other victims. As shown in Model 2 of Table 2, the odds ratio is significant, but negative. In other words, on average, offenders are actually less likely to be arrested when they victimize White women. While this result runs counter to our second hypothesis, we proceed with an interaction between victim White female and offender race to examine whether the negative effect of White female victimization is dependent on offender race. Contrary to our expectation, the interaction was not significant. In other words, the racial disparity in arrest is not different when the victim is a White woman.

To test our fourth hypothesis that arrest risk is particularly high for Black men, we first remove the interaction involving White female victimization and instead introduce an interaction between offender sex and offender race. As seen in Model 4 of Table 3, this interaction is not significant either. In other words, on average, being male does not make a Black offender more (or less) likely to be arrested. However, in Model 5 we introduce an interaction between victim White female, offender sex, and offender race. Results from this model reveal a significant three-way interaction such that victim sex, victim race, and offender sex all interact to influence the relationship between offender race and arrest, providing support for Hypothesis 5. To make these interaction terms more interpretable, we calculated predicted probabilities of arrest for offender race-sex dyads depending on whether the victim is a White woman or not, with all other analytic variables held at their mean;¹⁰ these predicted probabilities are displayed in Figure 1. As seen in the figure, when the victim is not a White woman, there is limited variation in arrest probability by race, with (a) White and Black women having similar probabilities of arrest and (b) White and Black men having similar probabilities of arrest. However, when the victim is a White woman, Black men have an extremely high probability of arrest for assault (37.4 percent), especially in comparison to other offenders.

Homicide, Race, and Arrest

To examine whether the results for assault are similar for homicide, we replicate these model progressions in Table 4. As seen in Model 1 of Table 4, we do not find a significant difference in arrest likelihood for Black and White co-offenders who commit homicide together. Further, Model 2 reveals that offenders who murder White women are not significantly more likely to be arrested than offenders who murder other victims. Therefore, in contrast to assault, offender race, victim race, and victim sex do not influence arrest

⁹It is also important to note that, while the total race effect in the model would be the combination of the level-one and level-two race estimates, according to the counterfactual framework used here, the primary coefficient of interest is the level-one estimate. In other words, the level-one estimate represents the within-incident race difference, the level-two estimate is best considered a control measure for the impact of co-offending partner race, and the two estimates are best considered independently. ¹⁰For victim White female, values of 0 or 1 were used to calculate predicted values. Because multiple victims can be involved in an

¹⁰For victim White female, values of 0 or 1 were used to calculate predicted values. Because multiple victims can be involved in an incident, a value of 0 represents incidents in which none of the victims were White women and a value of 1 indicates that all of the victims (even if there was only one) were White women. We refer to victim as a singular noun in the text for ease of discussion.

likelihood for homicide independently. However, the significant interaction between victim White female and offender race in Model 3 reveals that offender race *does* influence arrest likelihood when the victim is a White woman. To provide a visual representation of this interaction, we calculated predicted probabilities of arrest by offender race when the victim is and is not a White woman. As shown in Figure 2, when the victim is not a White woman, there is no racial disparity in arrest.¹¹ However, when the victim is a White woman, Black offenders have an 82.6 percent probability of arrest while White offenders have an arrest probability of only 66.1 percent; this difference is both statistically significant and substantial.

We also conducted analyses to look at interactions between offender race and sex, and between offender race, offender sex, and victim White Female to mirror those for assault in Table 3. However, neither of the interactions were significant and we do not present results here for the sake of brevity.

DISCUSSION

Official arrest statistics indicate that, on average, Black people are overrepresented at every stage of the criminal justice system. In 2018, despite accounting for only about 13 percent of the total population, Black suspects accounted for more than 29 percent of arrests (DOJ 2018). Yet, while a wealth of research has examined these racial inequities in policing, "from a social science standpoint ... almost all of the current studies that have reported racial disparities in the exercise of police authority lack the methodological rigor or statistical precision to draw cause and effect inferences" (Smith et al. 2017:176). After all, demonstrating racial differences does not itself establish that racial bias is the causal mechanism behind the observed differences. Leveraging the naturally occurring phenomenon of co-offending, this article sought to advance our understanding of racial bias in policing-and variation in race effects-by addressing these issues. Overall, the weight of the analyses presented in the current research indicate that Black offenders are more likely to be arrested than their White co-offending partners, especially for assault offenses. Examined through the lens of the counterfactual, the evidence presented here indicates that the answer to the hypothetical question posed at the beginning of this research (i.e., "what if they were White?") would unequivocally be that "they" would have been less likely to have been arrested.

Importantly, however, our results can also speak to potential explanations for these differences. In general, scholars have offered two potential explanations for these patterns: (1) differential selection into offending by race and (2) differential treatment by law enforcement due to racial discrimination. Given that our analyses examine differences between offenders who select into the same offense, and that these results still point to measurable within-incident racial differences, our findings indicate that differential selection into offending alone cannot explain the overrepresentation of the Black population in official arrest statistics. Instead, the totality of our findings point to racial bias as the most likely

¹¹While the bars for White and Black offenders in Figure 2 when the victim is not a White woman may look slightly different, they are not significantly different based on the non-significant conditional effect of Black in Model 8.

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explanation for within-incident differences. After controlling for a host of characteristics, and examining differences between offenders who commit the exact same offense together, Black offenders are more likely to be arrested than their White co-offenders. The most plausible conclusion is that the disparities are unwarranted.

These findings suggest differential offending is not the *sole* explanation for racial disparities in the criminal justice system. That said, it is important to note that we cannot rule out the possibility that differential offending further exacerbates arrest disparities beyond those we have accounted for here. That is, while differential selection is an implausible explanation for the within-incident differences observed here, it may still contribute to overall racial differences. In this regard, past research on racial disparities in offending has actually suggested that experiences with racial discrimination can increase individual risks of offending (Burt, Simons, and Gibbons 2012), and we argue that it is important to consider our findings in this context. Given that our results suggest racial bias in the police decision to arrest, it is especially alarming to consider the fact that racial discrimination and racism on the part of police officers may also increase subsequent offending. Taken together, it is not implausible to suggest that the current treatment of the criminal justice system toward the Black population as a whole subjects them to a cycle of discrimination and offending that is perpetually exacerbated by racially discriminatory treatment, which leads only to further overrepresentation of Black individuals in the criminal justice system and further Black offending.

Our findings also point to differences in the race-arrest relationship across offense types. Past research on the "liberation hypothesis" has argued that criminal justice actors exercise more discretion, and are thus more influenced by extralegal case factors, when they are more "liberated" from the law, or when cases are less serious (Black 1989; Spears and Spohn 1997). The overall patterns we observe suggest some support for this hypothesis, such that extralegal factors—such as offender and victim demographic characteristics—are more consistently related to arrest likelihood for assault offenses than they are to homicide offenses. That said, while there are racial differences in arrest for both assault and homicide, these disparities are especially pronounced for homicide offenses involving White women such that the predicted likelihood of arrest for a Black offender who kills a White female is roughly 25 percent greater than the predicted likelihood of arrest for a White offender who kills a White female. These results are largely consistent with a conflict theory explanation. Because homicide is a more serious form of violence than assault, homicides may represent a greater threat to the normative social order (Hawkins 1987), leading Black offenders who commit homicide against White women to be treated more punitively than even their White co-offending partners.

While a substantial body of research has indicated the presence of a "White female" effect at the punishment and sentencing phase of the criminal justice system, our results indicate that the same effect impacts racial disparities at the arrest stage as well. Briefly, our findings indicate that (a) Black men who assault White women are more likely to be arrested for the offense than any other offender race-sex combination; and (b) Black offenders, male or female, who murder White women are more likely to be arrested than any other offender-victim combination. This "White female" effect is likely a reflection of

the increased punitiveness associated with the perceived harm of crossing racial barriers, as well as the combined effect of (a) perceptions of Black people, and Black men in particular, as more dangerous than other offenders; and (b) perceptions of White women as more in need of the protection of the criminal justice system than other victims (Holcomb et al. 2004). Interestingly, Black offenders who murder White female victims are more likely than others to be arrested regardless of sex. We posit that this observed effect might represent the combined result of the severity of the violence committed and the relative societal devaluation of Black women, compared to White women and White men. In this way, the murder of a White woman by a Black offender may represent a serious enough violation to the normative order that the sex of the Black offender is no longer a factor in the relative punitiveness associated with the offense. Put simply, it matters only that a Black offender murdered a White woman and not whether that Black offender was male or female.

More generally, in demonstrating the relative conditioning effects of victim characteristics on the offender race-arrest relationship, our findings point to the importance of considering situational factors that may account for variation in the relationship (Kochel et al. 2011). That is, these results suggest that empirical research on racial disparities in the criminal justice system that fails to consider the important interactive effects of offender and victim characteristics may be missing important nuances that are unobserved when these characteristics are not considered jointly. Over three decades ago, Peterson and Hagan (1984) argued that theoretical explanations for racial disparities must explain why the criminal justice system does not always work against non-White offenders. The current research indicates that accounting for the characteristics of the victim is an important factor in accounting for previous "anomalous findings." In this regard, this research indicated that the relative punitive effect of being Black was much smaller, or non-existent, when the victim was also Black, a finding supportive of what Liska and Chamlin (1984) refer to as "benign neglect." In other words, Black offenders are punished less severely when their victims are also Black, likely because Black lives are devalued. These results speak to the importance of examining variation in racial effects by victim characteristics when attempting to measure disparities in the criminal justice system.

Taken together, we view our findings as presenting significant evidence for the presence of racial bias against Black actors in the criminal justice system, especially within certain situational contexts (i.e., those involving a White female victim). Moreover, the methodological approach that we employ suggests an important question: what possible explanation is there, other than racial bias, for our finding that a Black offender is significantly more likely than a White offender to be arrested for the same offense? Alternative explanations are certainly limited. Because the analyses are conducted within dyads, characteristics of the offense, like offense seriousness, are eliminated as potential confounding influences. Within these constraints, we can think of two plausible alternative explanations that we cannot entirely rule out, given the limitations of our data. First, it is possible that the observed race-arrest relationship may potentially be related to offender demeanor or to the role that offenders play during an incident. It is possible, for example, for one offender to use a weapon—such as a gun—while the other does not. In this regard, however, it is important to note that the inclusion criteria for NIBRS necessitates that, in order for the offenders to be recorded within the same incident, each offender must play

an active role in the offense; otherwise, the offense is listed as a *separate* incident. In other words, both members of the co-offending partnerships examined in the current study played an active role, and were not merely bystanders, in the corresponding assault or homicide. Someone who stood passively by while another "pulled the trigger," for example, would thus be unlikely to be listed within the same incident—at least according to FBI criteria for NIBRS data collection.

Unfortunately, because these data are based on official records, we do not have indicators of offender role or demeanor, including which offender may or may not have used a weapon.¹² We have, however, attempted to reduce the potential influence of offender role by focusing specifically on assault and homicide offenses. While past research has demonstrated significant role variation for other offenses with high co-offending rates-such as robbery and burglary (e.g., Hochstetler 2001)-there is less clear role differentiation in the case of assaults, which are typically less likely to be instrumental in nature, and thus less likely to be planned. Furthermore, if differences in offender role are impacting the results, we consider this alternative explanation most plausible for the assault disparities, and less applicable to our findings concerning homicide disparities. While it is theoretically possible for an officer to exercise discretion in arresting an offender for an assault based on the demeanor or role of the offender, for example, we think it considerably less likely that such factors play a role in the decision to arrest someone for homicide. In the case of homicide, these results suggest that when a Black offender and White offender murder a White woman together, the Black offender is more likely to be arrested and the White offender is more likely to "get away with it," and we find it highly unlikely that such differences may be attributable only to differential roles in committing the homicide. Additionally, even if racial differences in demeanor partially explain racial disparity in arrest, negative demeanor alone is not a legal justification for arrest. Further, racial differences in demeanor are likely linked to perceptions of (un)fairness and procedural justice, which "may in fact be anchored in a larger race-based story" (Skogan and Frydl 2004:124). Finally, differences in offender role may come into play at later points in the criminal justice process, as prosecutors consider plea deals and charge severity, but these differences are unlikely to factor as substantially into the decision to arrest each offender in the first place.

Second, and again as a result of the official nature of these data, we cannot control for what happens after the offense. And, while the offense is the same for both offenders, the behavior of each offender during and after the offense is not necessarily identical. Black offenders may be more likely to come to the attention of the police for a number of reasons, including disparate patrol practices in predominantly Black neighborhoods.¹³ That said, such an explanation (e.g., over-policing) is also arguably a product of racially discriminatory policing. As such, we do not necessarily view the plausibility of this explanation as counter to the primary takeaway of our findings that the racial differences we observe

¹²Regarding firearm use, specifically, it is also important to note that, while many homicides do involve guns, the majority of incidents in the data do not (57.5 percent). Moreover, only 2.2 percent of assault incidents involve gun use (N=9,547). ¹³It is, however, important to note that—for assault offenses—roughly 21 percent of arrests are "on-view", indicating that an officer made an arrest after directly observing or viewing the offense, and roughly 58 percent of arrests occurred on the same day as the offense; differential behavior after the offense is unlikely to significantly impact such cases. Moreover, while these numbers are lower for homicide offenses (3.03 percent on-view, 11.44 percent same-day), we believe such explanations to be less applicable to the observed homicide differences, given the severity of the crime.

are attributable to racial bias in policing. It is also important to note that, while such explanations may plausibly account for some of the observed racial differences, it is less clear that they could account for the observed differences in arrest likelihood *by victim race*. In other words, while it is possible that Black offenders and White offenders may behave differently following an offense in ways that impact arrest likelihood, it is unlikely that such behavior also varies by the race of the victim.

That said, our contributions here must be considered in the context of other limitations as well. First, while no nationally representative data sources exist in which these analyses could be conducted, it is important to note that the NIBRS data used here are not necessarily generalizable to the entire population (Addington 2004). Specifically, these data currently cover roughly 29.3 percent of the population, representing about 28 percent of crime in the United States (McCormack, Pattavina, and Tracy 2017). As a result, it is possible that the patterns we observe here are not necessarily generalizable to those offenses, including assault and homicide offenses, not recorded in the NIBRS data. Moreover, while co-offending partners represent a methodologically useful counterfactual, the sample restriction criterion could limit the generalizability of these results. That said, as is often the case with such research, strong internal validity often comes at the expense of some external validity. But, while each of these sample restrictions reduces the generalizability of findings, they increase confidence that the observed estimates are a true reflection of the relationship between race and arrest in co-offending partnerships within the population covered. Therefore, the reduced external validity is worthwhile for the added internal validity gained by looking at racial disparity within co-offending dyads.

Second, the sample used here consists of non-lethal assault and lethal homicide offenses. While an analysis of these relationships for all offense types would be beyond the scope of a single study, and we assume that the observed processes are likely not limited only to these offenses, we cannot say with certainty whether they are. Future research should consider extending the approach used in the current study to other offense types and other contexts. Finally, it is important to acknowledge that some researchers have argued that conflict theory may be differentially applicable to those of Hispanic ethnicity, compared to White and Black individuals who are not of Hispanic ethnicity (Hagan, Shedd, and Payne 2005). Although the data used in the current study do not allow us to directly examine the impact of ethnicity on arrest likelihood because offender ethnicity was not formerly available in the NIBRS data, we should note that this information has been added to the most recent collection years of NIBRS data. While the limited observations available at this point do not yet facilitate an analysis like that undertaken here, future research should consider re-examining these relationships while accounting for offender ethnicity once sufficient data are available to conduct these analyses.

Future research should also consider variation in these relationships across social contexts. A number of scholars have noted, for example, that punitiveness and formal social control may be greater against Black individuals where the Black population is larger and more threatening to the economic and political power of the White population (e.g., Blalock 1967; Jacobs and Wood 1999; King and Wheelock 2007). Relatedly, conflict theorists have also noted that police surveillance is greater in majority Black neighborhoods, relative

to White neighborhoods, contributing to differences in formal sanctions for White and Black offenders (e.g., Chambliss 1999). Inclusion and analysis of the characteristics of the communities in which these incidents occur are beyond the scope of the current study; future research should attend to these potential moderators.

Despite these limitations, the present study contributes in important ways to our sociological understanding of racial disparities in arrest, variation in these disparities, and likely explanations for these disparities. Most importantly, findings from this investigation demonstrate the foundational influence of racial bias directed against Black individuals at the earliest stage of the criminal justice system. Given that extant research has demonstrated similar differences—albeit predominantly correlational—at later stages of the criminal justice system, the potential cumulative effects of the discriminatory differences observed here cannot be ignored. Black offenders are more likely to be arrested than White offenders, especially when the victim is a White female, and these discriminatory arrest practices likely contribute to more serious criminal records, more punitive sentences, more time imprisoned, and more intensive post-release supervision (Bushway and Piehl 2007; Frase 2009; Petersilia and Turner 1993). That is, while these results suggest that racial bias may play an important role in arrest decisions, this decision ultimately determines who is filtered into other components of the system, thereby perpetuating racial inequalities throughout the criminal justice system.

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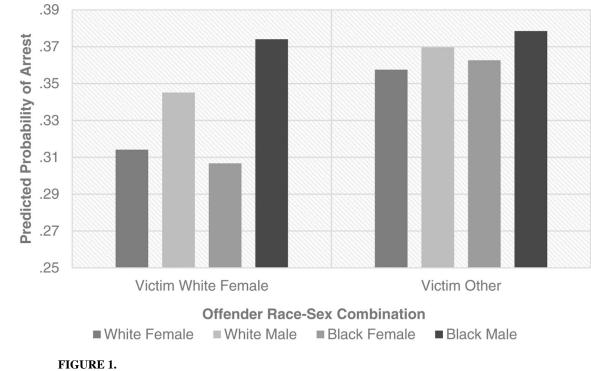
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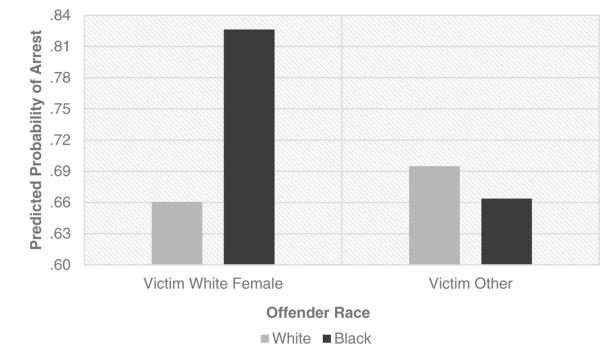
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Predicted Probability of Arrest for Assault, by Offender/Victim Race and Sex

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Predicted Probability of Arrest for Homicide, by Offender Race and Victim Race/Sex

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Table 1.

Sample Descriptive Statistics: Means (Standard Deviation)^a

Variable	As	sault	Homicide		
Variable	Mean	(SD)	Mean	(SD)	
Level 1: Offender Characterist	ics				
Arrest	.36	-	.68	-	
Black	.35	-	.39	-	
White	.63	-	.59	-	
Other Race	.02	-	.03	-	
Age	30.40	(11.77)	29.33	(10.32)	
Male	.53	-	.58	-	
Ν	876	5,524	2,134		
Level 2: Incident Characteristic	cs				
Co-offender Characteristics					
Mean Age	30.38	(10.56)	29.32	(8.91)	
Proportion Male	.53	(.17)	.58	(.19)	
Proportion White	.63	(.43)	.59	(.43)	
Proportion Black	.35	(.43)	.39	(.42)	
Proportion Other Race	.02	(.11)	.03	(.14)	
Offense Characteristics					
Weapon	.15	-	.76	-	
Alcohol	.14	-	.07	-	
Drug use	.02	-	.09	-	
Gang	.00	-	.01	-	
Aggravated assault ^b	.14	-	-	-	
Simple Assault	.76	_	-	-	
Intimidation	.13	-	-	-	
Victim Characteristics					
Number	1.77	(.61)	1.37	(.74)	
Mean Age	30.10	(11.99)	32.09	(20.56)	
Proportion White Female	.33	(.34)	.18	(.35)	
Proportion Hispanic	.09	(.37)	.07	(.24)	
Proportion Resident	.78	(.38)	.71	(.43)	
Injury	.51	-	-	-	
Stranger	.05	-	.11	-	
Ν	438	438,262		1,067	

Note: SD=Standard deviation (omitted for dummy variables)

 a Means for dummy measures can be interpreted as the proportion of the sample coded 1 on that variable.

^bBecause the NIBRS data do not use a hierarchy rule when recording offense type, offense categories are not mutually exclusive and may sum to a proportion greater than 1.

Table 2.

Likelihood of Arrest for Assault Offenses for Black and White Co-offenders, by Victim Race and Sex

	Model 1		Model 2		Model 3	
	Odds Ratio	Confidence Interval	Odds Ratio	Confidence Interval	Odds Ratio	Confidence Interval
Offender Characteristics						
Age	.999 ***	.998–.999	.999 ***	.998–.999	.999 ***	.998–.999
Male	1.096***	1.091-1.101	1.096***	1.091-1.101	1.096***	1.091-1.101
Black	1.039 ***	1.028-1.051	1.039 ***	1.028-1.051	1.041 ***	1.029-1.053
Other Race	1.011	.980-1.043	1.011	.980-1.043	1.034*	1.000-1.070
Incident Characteristics						
Co-offender Characteristics						
Age	.992 ***	.992–.993	.992 ***	.991–.993	.992 ***	.992–.993
Male	.837 ***	.808866	.793 ***	.765823	.795 ***	.767–.825
Black	711 ***	.698–.723	.668 ***	.654–.682	.669 ***	.655–.683
Other Race	1.222 ***	1.152-1.297	1.153 ***	1.086-1.225	1.168 ***	1.099-1.241
Offense Characteristics						
Weapon	1.052 ***	1.028-1.075	1.048 ***	1.025-1.072	1.048 ***	1.025-1.072
Aggravated Assault	2.086***	2.029-2.144	2.075 ***	2.019-2.133	2.075 ***	2.019-2.133
Simple Assault	1.761 ***	1.728-1.795	1.756***	1.723-1.789	1.756***	1.723-1.790
Alcohol	1.401 ***	1.378-1.425	1.400 ***	1.376-1.423	1.400 ***	1.376-1.423
Drug Use	1.683 ***	1.616-1.753	1.683 ***	1.615-1.753	1.682 ***	1.615–1.752
Gang	.989	.848-1.155	.987	.845-1.152	.987	.846-1.152
Victim Characteristics						
Age	1.006***	1.005 - 1.007	1.006***	1.005 - 1.007	1.006 ***	1.005-1.007
Number	1.310***	1.297-1.323	1.304 ***	1.291-1.317	1.304 ***	1.291-1.317
Hispanic	1.276***	1.240-1.313	1.283 ***	1.246-1.320	1.282 ***	1.245-1.319
Resident	.942 ***	.928–.957	.942 ***	.928–.956	.942 ***	.928–.957
Injury	1.747 ***	1.726-1.769	1.748 ***	1.727-1.770	1.748 ***	1.727-1.770
Stranger	1.281 ***	1.246-1.316	1.273 ***	1.239-1.308	1.271 ***	1.236-1.306
White Female			.872 ***	.853–.891	.875 ***	.856–.895
Interactions						
White Female \times Black					1.027	.992-1.064
White Female \times Other Race					1.218 ***	1.102-1.347
Intercept	.550 ***	.547–.554	.550 ***	.547–.553	.552 ***	.548–.555

Note:

*** p<.001,

** p<.01;

N=865,280 co-offenders nested within 432,640 co-offending partnerships

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Table 3.

Likelihood of Arrest for Assault Offenses for Black and White Co-offenders, by Victim/Offender Race and Sex

Offender Characteristics Age .999 *** .998999 .999 .998999 Male 1.099 *** 1.092-1.105 1.085 1.077-1.092 Black 1.045 *** 1.032-1.058 1.003 .989-1.018 Other Race 1.003 .963-1.045 1.000 .959-1.043		Model 4		Model 5		
Age 999^{***} $.998999$ $.999$ $.998999$ Male 1.099^{***} $1.092 - 1.105$ 1.085 $1.077 - 1.092$ Black 1.045^{***} $1.032 - 1.058$ 1.000 $.989 - 1.018$ Other Race 1.003 $.963 - 1.045$ 1.000 $.959 - 1.043$ Incident Characteristics $.003$ $.991993$ $.992^{***}$ $.991993$ Male $.794^{***}$ $.766823$ $.789^{***}$ $.761819$ Black $.667^{***}$ $.654681$ $.669^{***}$ $.656684$ Other Race 1.154^{***} $1.086 - 1.225$ 1.180^{***} $1.110 - 1.254$ Offense Characteristics $$		Odds Ratio	Confidence Interval	Odds Ratio	Confidence Interval	
Male 1.099*** 1.092-1.105 1.085 1.077-1.092 Black 1.045*** 1.032-1.058 1.003 .989-1.018 Other Race 1.003 .963-1.045 1.000 .959-1.043 Incident Characteristics . . .991993 .992*** .991993 .992*** .991993 Male .794*** .766823 .789*** .761819 Black .667*** .654681 .669*** .656684 Other Race .1.154*** 1.086-1.225 1.180*** .1025-1.071 Aggrovated Assault 2.075*** 2.019-2.133 2.076*** 2.020-2.134 Simple Assault 1.756*** 1.723-1.789 1.757*** 1.724-1.791 Alcohol 1.400*** 1.376-1.423 1.399*** 1.376-1.423 Drug Use 1.683*** 1.615-1.753 1.680*** 1.613-1.750 Gang .987 .821-1.152 .990 .848-1.155 Victim Characteristics	Offender Characteristics					
Black 1.045*** 1.032-1.058 1.003 .989-1.018 Other Race 1.003 .963-1.045 1.000 .959-1.043 Incident Characteristics	Age	.999 ***	.998–.999	.999	.998–.999	
Other Race 1.003 .963–1.045 1.000 .959–1.043 Incident Characteristics Co-offender Characteristics	Male	1.099 ***	1.092-1.105	1.085	1.077-1.092	
Other Race 1.003 .963–1.045 1.000 .959–1.043 Incident Characteristics Co-offender Characteristics	Black	1.045 ***	1.032-1.058	1.003	.989–1.018	
Co-offender Characteristics Age 992 *** 991-993 992 *** 991-993 Male .794 *** .766823 .789 *** .761819 Black .667 *** .654681 .669 *** .656684 Other Race .1.54 *** .1086-1.225 .1.80 *** .1.10-1.254 Offense Characteristics	Other Race		.963-1.045	1.000	.959–1.043	
Age $.992^{***}$ $.991993$ $.992^{***}$ $.991993$ Male $.794^{***}$ $.766823$ $.789^{***}$ $.761819$ Black $.667^{***}$ $.654681$ $.669^{***}$ $.656684$ Other Race 1.154^{***} $1.086-1.225$ 1.180^{***} $1.110-1.254$ Offense Characteristics $$	Incident Characteristics					
Male .794 *** .766823 .789 *** .761819 Black .667 *** .654681 .669 *** .656684 Other Race 1.154 *** 1.086-1.225 1.180 *** 1.110-1.254 Offense Characteristics	Co-offender Characteristics					
Black	Age	.992 ***	.991–.993	.992 ***	.991–.993	
Other Race 1.154 *** 1.086-1.225 1.180 *** 1.110-1.254 Offense Characteristics	Male	.794 ***	.766–.823	.789 ***	.761–.819	
Offense Characteristics Neapon 1.048 *** 1.025-1.072 1.048 *** 1.025-1.071 Aggravated Assault 2.075 *** 2.019-2.133 2.076 *** 2.020-2.134 Simple Assault 1.756 *** 1.723-1.789 1.757 *** 1.724-1.791 Alcohol 1.400 *** 1.376-1.423 1.399 *** 1.376-1.423 Drug Use 1.683 *** 1.615-1.753 1.680 *** 1.613-1.750 Gang .987 .845-1.152 .990 .848-1.155 Victim Characteristics .990 .848-1.155 .990 .848-1.157 Number 1.304 *** 1.291-1.317 1.006 *** 1.005-1.007 Number 1.304 *** 1.291-1.317 1.304 *** 1.291-1.317 Hispanic 1.283 *** 1.246-1.320 1.283 *** 1.247-1.321 Resident .942 *** .928956 .942 *** .928956 Injury 1.748 *** 1.727-1.770 1.749 *** 1.237-1.771 Stranger 1.273 *** .853891 .873 *** .854893 Interactions .922 .982-1.002 1.066 ***	Black	.667***	.654–.681	.669 ***	.656–.684	
Weapon 1.048^{***} $1.025-1.072$ 1.048^{***} $1.025-1.071$ Aggravated Assault 2.075^{***} $2.019-2.133$ 2.076^{***} $2.020-2.134$ Simple Assault 1.756^{***} $1.723-1.789$ 1.757^{***} $1.724-1.791$ Alcohol 1.400^{***} $1.376-1.423$ 1.399^{***} $1.376-1.423$ Drug Use 1.683^{***} $1.615-1.753$ 1.680^{***} $1.613-1.750$ Gang $.987$ $.845-1.152$ $.990$ $.848-1.155$ Victim Characteristics $.987$ $.845-1.152$ $.990$ $.848-1.157$ Number 1.304^{***} $1.291-1.317$ 1.005^{***} $1.005-1.007$ Number 1.304^{***} $1.291-1.317$ 1.304^{***} $1.291-1.317$ Hispanic 1.283^{***} $1.246-1.320$ 1.283^{***} $1.247-1.321$ Resident $.942^{***}$ $.928956$ $.942^{***}$ $.928956$ Injury 1.748^{***} $1.727-1.770$ 1.749^{***} $1.727-1.771$ Stranger 1.273^{***} $.853891$ $.873^{***}$ $.854893$ InteractionsInteractionsInteractionsInteractionsBlack × Male $.992$ $.982-1.002$ 1.066^{***} $1.048-1.083$ Other Race × Male 1.014 $.968-1.061$ 1.057 $.996-1.121$ White Female × Black $.945^{*}$ $.925^{*}$ $.925989$ White Female × Male $.104$ $.968-1.061$ 1.057 $.903989$ White Female × Male $.104$ $.968-1.061$ <	Other Race	1.154 ***	1.086-1.225	1.180***	1.110-1.254	
Aggravated Assault 2.075 *** 2.019–2.133 2.076 *** 2.020–2.134 Simple Assault 1.756 *** 1.723–1.789 1.757 *** 1.724–1.791 Alcohol 1.400 *** 1.376–1.423 1.399 *** 1.376–1.423 Drug Use 1.683 *** 1.615–1.753 1.680 *** 1.613–1.750 Gang .987 .845–1.152 .990 .848–1.155 Victim Characteristics	Offense Characteristics					
Simple Assault 1.756*** 1.723-1.789 1.757*** 1.724-1.791 Alcohol 1.400*** 1.376-1.423 1.399*** 1.376-1.423 Drug Use 1.683*** 1.615-1.753 1.680*** 1.613-1.750 Gang .987 .845-1.152 .990 .848-1.155 Victim Characteristics	Weapon	1.048 ***	1.025-1.072	1.048 ***	1.025-1.071	
Alcohol 1.400*** 1.376-1.423 1.399*** 1.376-1.423 Drug Use 1.683*** 1.615-1.753 1.680*** 1.613-1.750 Gang .987 .845-1.152 .990 .848-1.155 Victim Characteristics	Aggravated Assault	2.075 ***	2.019-2.133	2.076***	2.020-2.134	
Alcohol 1.400*** 1.376-1.423 1.399*** 1.376-1.423 Drug Use 1.683*** 1.615-1.753 1.680*** 1.613-1.750 Gang .987 .845-1.152 .990 .848-1.155 Victim Characteristics	Simple Assault	1.756***	1.723–1.789	1.757 ***	1.724–1.791	
Gang	Alcohol	1.400 ***	1.376-1.423	1.399 ***	1.376-1.423	
Gang	Drug Use	1.683 ***	1.615-1.753	1.680 ***	1.613-1.750	
Age1.006***1.005-1.0071.006***1.005-1.007Number1.304***1.291-1.3171.304***1.291-1.317Hispanic1.283***1.246-1.3201.283***1.247-1.321Resident.942***.928956.942***.928956Injury1.748***1.727-1.7701.749***1.727-1.771Stranger1.273***1.239-1.3081.272***1.238-1.307White Female.872***.853891.873***.854893Interactions	Gang	.987	.845-1.152	.990	.848-1.155	
Number 1.304*** 1.291–1.317 1.304*** 1.291–1.317 Hispanic 1.283*** 1.246–1.320 1.283*** 1.247–1.321 Resident .942*** .928–.956 .942*** .928–.956 Injury 1.748*** 1.727–1.770 1.749*** 1.727–1.771 Stranger 1.273*** 1.239–1.308 1.272*** 1.238–1.307 White Female .872*** .853–.891 .873*** .854–.893 Interactions . . .992 .982–1.002 1.066*** 1.048–1.083 Other Race × Male .014 .968–1.061 1.057 .996–1.121 White Female × Black . . .945* .903–.989 White Female × Other Race . . .945* .903–.989 White Female × Male . . .945* .903–.989 White Female × Male . .	Victim Characteristics					
Hispanic 1.283*** 1.246-1.320 1.283*** 1.247-1.321 Resident .942*** .928956 .942*** .928956 Injury 1.748*** 1.727-1.770 1.749*** 1.727-1.771 Stranger 1.273*** 1.239-1.308 1.272*** 1.238-1.307 White Female .872*** .853891 .873*** .854893 Interactions .872 .982-1.002 1.066*** 1.048-1.083 Other Race × Male 1.014 .968-1.061 1.057 .996-1.121 White Female × Black .945* .903989 .945* .903989 White Female × Other Race 1.267*** 1.166-1.438 .092*** 1.067-1.118	Age	1.006 ***	1.005-1.007	1.006 ***	1.005-1.007	
Resident .942*** .928956 .942*** .928956 Injury 1.748*** 1.727-1.770 1.749*** 1.727-1.771 Stranger 1.273*** 1.239-1.308 1.272*** 1.238-1.307 White Female .872*** .853891 .873*** .854893 Interactions	Number	1.304 ***	1.291-1.317	1.304 ***	1.291-1.317	
Resident .942*** .928956 .942*** .928956 Injury 1.748*** 1.727-1.770 1.749*** 1.727-1.771 Stranger 1.273*** 1.239-1.308 1.272*** 1.238-1.307 White Female .872*** .853891 .873*** .854893 Interactions	Hispanic	1.283 ***	1.246-1.320	1.283 ***	1.247-1.321	
Injury 1.748*** 1.727–1.770 1.749*** 1.727–1.771 Stranger 1.273*** 1.239–1.308 1.272*** 1.238–1.307 White Female .872*** .853–.891 .873*** .854–.893 Interactions Black × Male .992 .982–1.002 1.066*** 1.048–1.083 Other Race × Male 1.014 .968–1.061 1.057 .996–1.121 White Female × Black .945* .903–.989 White Female × Other Race 1.267*** 1.116–1.438 White Female × Male .902*** 1.067–1.118	Resident		.928–.956		.928–.956	
Stranger 1.273 *** 1.239–1.308 1.272 *** 1.238–1.307 White Female .872 *** .853–.891 .873 *** .854–.893 Interactions	Injury		1.727-1.770		1.727-1.771	
White Female .872*** .853891 .873*** .854893 Interactions Black × Male .992 .982-1.002 1.066*** 1.048-1.083 Other Race × Male 1.014 .968-1.061 1.057 .996-1.121 White Female × Black .945* .903989 White Female × Other Race 1.267*** 1.116-1.438 White Female × Male 1.092*** 1.067-1.118	Stranger		1.239-1.308	1.272 ***	1.238-1.307	
Interactions Black × Male .992 .982–1.002 1.066 *** 1.048–1.083 Other Race × Male 1.014 .968–1.061 1.057 .996–1.121 White Female × Black .945* .903–.989 White Female × Other Race 1.267 *** 1.116–1.438 White Female × Male 1.092 *** 1.067–1.118	White Female		.853891		.854–.893	
Other Race × Male 1.014 .968–1.061 1.057 .996–1.121 White Female × Black .945* .903–.989 White Female × Other Race 1.267*** 1.116–1.438 White Female × Male 1.092*** 1.067–1.118	Interactions					
Other Race × Male 1.014 .968–1.061 1.057 .996–1.121 White Female × Black .945* .903–.989 White Female × Other Race 1.267*** 1.116–1.438 White Female × Male 1.092*** 1.067–1.118	$Black \times Male$.992	.982-1.002	1.066 ***	1.048-1.083	
White Female × Other Race 1.267 *** 1.116-1.438 White Female × Male 1.092 *** 1.067-1.118	Other Race × Male	1.014	.968–1.061		.996–1.121	
White Female × Male 1.092^{***} $1.067-1.118$	White Female \times Black			.945*	.903–.989	
	White Female \times Other Race			1.267***	1.116–1.438	
White Female × Black × Male 1.155^{***} $1.099-1.214$	White Female \times Male			1.092***	1.067-1.118	
	White Female \times Black \times Male			1.155 ***	1.099-1.214	

		Model 4	Model 5		
	Odds Ratio	Confidence Interval	Odds Ratio	Confidence Interval	
White Female \times Other Race \times Male			.963	.806-1.150	
Intercept	.550 ***	.547–.553	.552 ***	.549–.556	

*** p<.001,

** p<.01

N=865,280 co-offenders nested within 432,640 co-offending partnerships

Table 4.

Likelihood of Arrest for Homicide Offenses for Black and White Co-offenders, by Victim Race and Sex

	Model 1		Model 2		Model 3	
	Odds Ratio	Confidence Interval	Odds Ratio	Confidence Interval	Odds Ratio	Confidence Interval
Offender Characteristics						
Age	.996	.984–1.009	.996	.984–1.009	.995	.983-1.007
Male		1.185-1.595	1.375 ***	1.185-1.595	1.380***	1.189-1.602
Black	.988	.742-1.316	.988	.742-1.316	1.049	.784–1.403
Other Race	1.667	.826-3.364	1.667	.826-3.363	1.551	.786-3.059
Incident Characteristics						
Co-Offender Characteristics						
Age	.992	.974-1.009	.992	.974-1.009	.992	.975-1.010
Male	.226 ***	.120428	.226***	.120427	.208 ***	.110–.396
Black	.923	.623-1.366	.921	.616–1.378	.972	.647-1.460
Other Race	.445	.165–1.197	.445	.164-1.203	.448	.154-1.309
Offense Characteristics						
Weapon	.959	.727-1.265	.958	.724-1.269	.960	.725–1.272
Alcohol	.930	.603–1.434	.930	.603-1.434	.921	.597-1.419
Drug Use	.891	.601–1.319	.891	.602-1.319	.896	.607–1.324
Gang	.661	.144–3.036	.662	.144-3.036	.677	.149-3.082
Victim Characteristics						
Age	1.007 *	1.001-1.013	1.007 *	1.001-1.013	1.006*	1.001-1.012
Number	.967	.834-1.121	.967	.834-1.121	.967	.834-1.120
Hispanic	.704	.451-1.100	.704	.451-1.100	.700	.449-1.092
Resident	1.509 ***	1.174–1.941	1.510***	1.173-1.943	1.499 **	1.165-1.929
Stranger	1.233	.863-1.762	1.233	.863-1.761	1.230	.858-1.765
White Female			.995	.702-1.409	1.267	.833-1.927
Interactions						
White Female \times Black					2.821*	1.282-6.205
White Female × Other Race					.693	.064–7.464
Intercept	2.168 ***	1.945-2.417	2.168 ***	1.945-2.417	2.279 ***	2.025-2.565

Note:

*** p<.001,

** p<.01,

* p<.05

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N=2,120 co-offenders nested within 1,060 co-offending partnerships

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