

Article

Paying the Trial Tax: Race, Guilty Pleas, and Disparity in Prosecution

Criminal Justice Policy Review 2020, Vol. 31(4) 500–531

© The Author(s) 2019
Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0887403419838025
journals.sagepub.com/home/cjp



Alexander Testa 100 and Brian D. Johnson²

Abstract

The vast majority of criminal cases are disposed of through guilty pleas, yet relatively little empirical research focuses on the factors that are related to whether a defendant pleads guilty or goes to trial. The current work investigates this issue, analyzing three recent years of data from the Maryland Commission on Criminal Sentencing Policy. It examines predictors of guilty plea and trial dispositions as well as key differences among different types of guilty pleas. Findings indicate that Black and Latino defendants are substantially less likely to plead guilty, and that these differences are most pronounced for nonnegotiated guilty pleas. Little evidence emerges for gender disparities or for compound disadvantages associated with young, male, minority defendants. Results are discussed as they relate to contemporary theoretical perspectives on racial differences in perceived legitimacy and trust in the criminal justice system.

Keywords

trial tax, guilty pleas, trials, disparity, prosecution

Introduction

The right to jury trial is a fundamental aspect of the American legal system. Yet, despite its Constitutional centrality, relatively few defendants exercise their right to trial and little empirical work investigates the factors related to this important decision. Compared with the vast research literature on inequality in sentencing, considerably

Corresponding Author:

Alexander Testa, Department of Criminal Justice, The University of Texas at San Antonio, 501 W. Cesar Chavez Blvd., San Antonio, TX 78207, USA.

Email: alexander.testa@utsa.edu

¹The University of Texas at San Antonio, TX, USA

²University of Maryland, College Park, MD, USA

less work focuses on disparities that characterize critical stages of criminal case processing such as the decision to plead guilty or pursue trial (Baumer, 2013; Ulmer, 2012). Indeed, criminologists, sociologists, and legal scholars have only rarely considered "the choice of alternative types of case disposition" when examining the intersection of social inequality, criminal case processing, and disparities in punishment (Johnson, King, & Spohn, 2016, p. 487).

This is important given that evidence suggests disparities often exist at multiple points in criminal justice case processing (Albonetti, 1990; Demuth, 2003; Reitler, Sullivan, & Frank, 2013; Schlesinger, 2005), and that these differences can exert important influences over final punishments (Kutateladze, Andiloro, Johnson, & Spohn, 2014; Spohn, 2009; Wooldredge, Frank, Goulette, & Travis, 2015). One of the most consequential decisions is whether a defendant enters a guilty plea or opts for a trial. The broader legal ramifications of pleading guilty, along with its pronounced influence on punishment, suggest it is a key turning point in the disposition of criminal cases (Albonetti, 1990). Although the Sixth Amendment to the Constitution guarantees the right to a public trial by an impartial jury, few cases are disposed of at trial and surprisingly little research exists on the social correlates of pleading guilty.

Researching the determinants of plea outcomes is important for several reasons. First, the majority of criminal convictions are decided by guilty plea. Historical overviews show that the plea rate for felony offenders has been steadily increasing for decades (B. P. Smith, 2005). For instance, guilty plea rates in federal district courts rose from about 70% in the early 1980s to more than 95% in the 2000s (Johnson et al., 2016). Reaves (2013) finds guilty plea rates for felony offenders adjudicated in large urban courts increased from 90% in 1990 to 97% in 2009. As Justice Anthony Kennedy famously opined, plea bargaining "is not some adjunct to the criminal justice system; it is the criminal justice system" (*Missouri v. Frye*, 2012).

Second, some research suggests plea/trial differences reflect broader patterns of inequality in society. Black and Latino defendants, in particular, may be less likely to enter into plea agreements (Albonetti, 1990; Frenzel & Ball, 2008; Metcalfe & Chiricos, 2018; Sutton, 2013), possibly because they receive less favorable plea offers (Kutateladze, Andiloro, & Johnson, 2016) or because they have less trust in the criminal justice system (Albonetti, 1990; Hagan & Albonetti, 1982). Moreover, racial differences in guilty plea rates are important because they are likely to translate into differences in sentencing severity. A substantial body of research demonstrates that there is a plea discount, or "trial tax," in which defendants who plead guilty are punished less severely than those who are convicted at trial (Bushway, Redlich, & Norris, 2014; N. J. King, Soule, Steen, & Weidner, 2005; Ulmer & Bradley, 2006; Ulmer, Eisenstein, & Johnson, 2010). For instance, recent reviews note that defendants convicted at trial compared with those convicted by guilty plea are more likely to go to prison and receive sentences that are 15% to 60% longer on average (Johnson, 2019; National Association of Criminal Defense Lawyers, 2018). As such, disparities in guilty pleas may directly contribute to social inequalities in sentencing. Organizational perspectives on sentencing suggest that the decision to plead guilty shapes the application of social attributions related to punishment. For example, Kramer and Ulmer (2009, p. 8) note that "a defendant's choice to plead guilty" has "ramifications for how court actors define his or her blameworthiness." Accordingly, understanding the factors that explain the decision to plead guilty carries implications for theories of punishment more broadly.

Importantly, research investigating the social correlates of plea decisions remains limited in important ways. Much of the extant research is dated, relying on data from the 1970s and 1980s (Albonetti, 1990; LaFree, 1980), with even more recent studies using datasets that are nearly two decades old (Frenzel & Ball, 2008; Sutton, 2013). Analyzing plea decisions in contemporary court contexts is particularly important given the continued growth of guilty pleas (Reaves, 2013; B. P. Smith, 2005) and the fact that modern sentencing reforms, like sentencing guidelines, have shifted greater plea bargaining power to the prosecutor (Bibas, 2001; Miethe, 1987). As Schulhofer and Nagel (1997, p. 1284) argue, "prosecutors exercise a considerable degree of sentencing discretion through charging and bargaining decisions," which raises the premium on understanding the factors that shape negotiated guilty pleas (Albonetti, 1990; Alschuler, 1978; Piehl & Bushway, 2007).

Notably, there has been an increase within the past year in scholarship assessing the decision to plead guilty (Kutateladze & Lawson, 2018; Metcalfe & Chiricos, 2018). Despite its valuable contributions, this work remains limited in key ways. Metcalfe and Chiricos (2018) examined guilty pleas for indigent defendants from one Florida county public defender's office and focused on simple Black—White comparisons. Kutateladze and Lawson (2018) analyzed a subsample of misdemeanor offenders in New York City, the overwhelming majority of which pled guilty. Both studies use data from a single urban county, and the former used a case-control design that resulted in an analytic sample with nearly half of the defendants going to trial, whereas the latter relied on a sample where only 0.2% of defendants went to trial. As a result of these unique samples, the generalizability of these findings is somewhat limited.

Moreover, extant research has yet to consider the ways that other factors may condition trial penalties, such as the type of criminal offense committed. Importantly, previous work indicates that sentencing disparities for other groups, like Latinos, often parallel or even exceed those for Black defendants (Johnson, 2003; Steffensmeier & Demuth, 2000), and that trials are more prevalent for certain types of crime, such as more serious and violent offenses (Reaves, 2013; Ulmer & Bradley, 2006). Finally, little work considers important distinctions among different types of guilty pleas. Not all guilty pleas are created equal; in some cases, defendants plead guilty outright, and in others, prosecutors explicitly negotiate concessions in exchange for the act of selfconviction (Padgett, 1985). Moreover, in some states, certain types of guilty pleas are judicially approved and legally binding on the court. As such, there are important differences in the degree of uncertainty involved in various types of guilty pleas, which is useful for investigating sources of inequality across modes of conviction. Overall, our understanding of plea disparities is restricted to a small number of studies from few jurisdictions, most of which rely on data that predate recent shifts in sentencing policy. For these reasons, recent reviews of the guilty plea literature have concluded that "relatively little empirical research analyzes plea outcomes" and "a great deal

remains unknown about the processes that lead to guilty pleas" (Johnson et al., 2016, p. 481).

In light of this, the current study contributes to existing work in several ways. First, it uses recent data from a new jurisdiction to examine potential plea disparities among White, Black, and Latino defendants. Second, it broadens current conceptualizations of guilty pleas by capitalizing on the unique case disposition system in Maryland, which distinguishes among types of plea bargains that vary in their level of negotiation and legal enforcement. Finally, it considers other factors that may condition the relationship between race and mode of conviction. Specifically, we investigate the intersection of age, gender, and race in guilty plea disparities, and we consider variations in these effects among different criminal offense categories.

The article begins by reviewing prior research on race and guilty pleas. It then presents theoretical expectations about racial and ethnic differences in pleading guilty. Next, it describes the data, measures, and analytical method, and finally, it reports key findings before discussing the implications of this work for future research and theorizing on race and punishment.

Guilty Pleas, Race, and Prosecution

Although few cases were initially settled by guilty plea in the early years of the American criminal justice system (B. P. Smith, 2005), by the turn of the 20th century, guilty plea rates had become the dominant form of criminal conviction (McDonald, 1979). Today, the overwhelming majority of criminal cases are disposed of through guilty pleas, with more than nine out of 10 defendants pleading guilty (Reaves, 2013). However, an important distinction exists between pleas that are negotiated and those that are not (Padgett, 1985). The latter require the defendant to openly admit guilt to charged crimes, often with the implicit expectation of leniency in sentencing, whereas the former involve the explicit "exchange of official concessions for the act of self-conviction" (Alschuler, 1979, p. 213). The concessions that are involved in negotiated pleas take sundry forms, including the reduction or elimination of some of the initial charges, or the tacit or explicit agreement of a specified sentence, with or without judicial approval (Alschuler, 1979; Padgett, 1985).

The process of negotiating a guilty plea involves multiple actors in the courtroom work group, with plea bargaining offering distinct incentives for each party. For prosecutors, guilty pleas provide the benefits of obtaining expedient convictions that require less time and resources than going to trial, and they ensure a high conviction rate, which is often politically desirable (Alschuler, 1968; Flemming, Nardulli, & Eisenstein, 1992; Rasmusen, Raghav, & Ramseyer, 2009). For defendants and defense attorneys, guilty pleas present an opportunity to reduce expected punishments to a less severe level than if convicted at trial. In addition, plea agreements shield defendants from a public display of potentially negative information, and from "bad facts" related to their criminal conduct that may come out at trial (Ulmer & Bradley, 2006). Finally, for judges, guilty pleas offer a pragmatic approach to clearing their docket and keeping caseloads flowing (Alschuler, 1976). Accordingly, researchers note that "it is

not surprising that negotiated guilty pleas have come to dominate the contemporary landscape of criminal punishment in the United States" (Johnson et al., 2016, p. 484). Despite the overwhelming reliance on pleading guilty in the American criminal justice system, though, there is scant empirical research on guilty pleas, especially with regard to who enters a plea and who goes to trial.

Racial Disparity in Guilty Pleas and Trials

Some prior work reports evidence that minority defendants are less likely than White defendants to plead guilty. For example, LaFree (1980) used data on 124 rape cases filed in criminal court in a large Midwestern city in the early 1970s and found that Black defendants were significantly less likely than White defendants to plead guilty. However, this work conflated the plea/trial distinction with a separate measure of the probability of conviction at trial. Petersilia (1983) similarly provided a descriptive analysis of defendants prosecuted in Los Angeles County in the 1970s, finding that 12% of Blacks and 11% of Latinos pursued a jury trial compared with only 7% of Whites. Although plea-trial differences were not the primary focus of either of these studies, they both provide some early evidence for racial differences in modes of conviction. Albonetti (1990) conducted the first in-depth treatment of race differences in guilty pleas. She analyzed data from the late 1970s on 464 criminal proceedings in Norfolk, Virginia, and found that a number of case characteristics, including the presence of physical evidence, the number of charges, and confessing to the crime, all increased the likelihood of pleading guilty. Moreover, her work also showed racial disparities, with Black defendants being 11% less likely than Whites to plead guilty.

Since that time, relatively few studies have investigated racial disparities in who pleads guilty and who goes to trial. We are aware of only five empirical studies that have addressed the question in the past 25 years, compared with hundreds of studies examining how race influences sentencing outcomes (Baumer, 2013; Mitchell, 2005; Ulmer, 2012). The first study, by Meyer and Gray (1997), analyzed decisions to plead not guilty at arraignment by offenders charged with driving under the influence (DUI) in one metropolitan county in southern California in 1993. The findings demonstrated that White offenders were twice as likely to plead not guilty relative to racial/ethnic minorities and offense severity was positively associated with the likelihood of pleading not guilty. The second study, by Frenzel and Ball (2008), analyzed guilty pleas in one metropolitan county in Pennsylvania using data from the late 1990s. They found mixed results for the effects of defendant characteristics on guilty pleas. Black defendants were less likely than White defendants to plead guilty, and male defendants were more likely than females, but age and ethnicity were unrelated to the mode of conviction. In the third study, Sutton (2013) used the 2000 State Court Processing Statistics (SCPS) data to assess cumulative disadvantages in criminal case processing. With regard to guilty pleas, he found that Latino defendants were significantly less likely than White defendants to plead guilty, although there was no statistically significant difference between Black and White defendants. Moreover, his work also suggested

that racial differences in the likelihood of pleading guilty varied across county court communities.

Finally, two very recent studies have examined plea disparities. Metcalfe and Chiricos (2018) used data on a sample of indigent defendants from a public defender's office in one large county in Florida. Their findings revealed that Black defendants, and especially Black males, were less likely to plead guilty than White defendants. However, because the data lacked information on ethnicity, the study was unable to separate Latino defendants from other racial groups, which may have affected their estimates of racial differences. Kutateladze and Lawson (2018) analyzed the likelihood that a misdemeanor case was taken to trial in New York City. Their findings revealed no evidence of racial disparities in the decision to plead guilty, but very few (a fraction of 1%) defendants went to trial in their sample, so the limited variation in the dependent variable may partially explain their null findings.

Despite the notable contributions of prior work, research on the social correlates of guilty pleas has been largely restricted to small samples of specific crime types from select jurisdictions. LaFree (1980) examined only rape cases, Albonetti (1990) analyzed data from a single city, Meyer and Gray (1997) focused only on DUIs, both Frenzel and Ball (2008) and Metcalfe and Chiricos (2018) were limited to data from a single urban county, and Kutateladze and Lawson (2018) assessed only misdemeanor cases from one district attorney office. As such, the generalizability of prior findings remains limited. Moreover, with two recent exceptions (Kutateladze & Lawson, 2018; Metcalfe & Chiricos, 2018), prior work has been based on data from the 1970s, 1980s, or 1990s and consequently provides little guidance on disparities in contemporary courtroom proceedings (Albonetti, 1990; Frenzel & Ball, 2008; LaFree, 1980; Petersilia, 1983).

The current study contributes in several important ways to recent efforts (e.g., Kutateladze & Lawson, 2018; Metcalfe & Chiricos, 2018; Sutton, 2013) to expand our understanding of plea/trial disparities. First, it analyzes a broader, more representative statewide sample of criminal cases. Second, it examines disparities among White, Black, Latino, and other race defendants and considers the ways that age and gender interact with race to shape plea outcomes. Third, it expands upon traditional conceptualizations of plea/trial differences by using a more nuanced measure of the mode of conviction that distinguishes among types of guilty pleas. Different plea options offer varying degrees of certainty that provide different incentive structures to defendants. As we argue below, the ability to distinguish among types of guilty pleas can provide useful theoretical leverage for thinking about who is most likely to plead guilty and why. Finally, the current work also investigates other legal case characteristics that may condition plea/trial decisions, such as the seriousness and the type of crime committed. Below, we outline our theoretical expectations before turning to the data and analysis.

Theoretical Perspectives on Race and Pleading Guilty

A number of contemporary theoretical perspectives on court actor decision-making provide useful insights into the organizational incentives that encourage defendants to plead guilty. Court community theorists suggest that case dispositions are the result of repeated interactions among court actors who share the common goal of efficient case disposition (Dixon, 1995; Eisenstein, Flemming, & Nardulli, 1988). The result is a system based on organizational incentives that reward guilty pleas. Shared workgroup norms are established over time that provide standardized sentencing discounts, or "going rates" for defendants who plead guilty outright (Eisenstein et al., 1988; Sudnow, 1965). At the same time, negotiated discounts, or "guilty plea concessions," are exchanged as part of the adversarial bargaining process in which defendants are explicitly rewarded for their admission of guilt. Both types of guilty pleas—nonnegotiated and negotiated pleas—can result in punishment discounts in the interest of organizational efficiency, although prior research suggests that the greatest discounts attach to negotiated plea deals (Johnson, 2003).

Although organizational efficiency perspectives elucidate the reasons for high guilty plea rates in criminal courts, related viewpoints argue that different types of defendants may be more likely than others to enter a plea of guilty. In particular, existing research has proposed two primary reasons why one might expect racial differences in the likelihood of pleading guilty. The first explanation focuses on defendants' perceptions of legitimacy and trust in the criminal justice system. In particular, prior research draws from work showing that racial minorities, and especially African Americans, have lower levels of trust in various agents of the criminal justice system, including prosecutors and judges (Bobo & Thompson, 2006; Hagan & Albonetti, 1982). Racial differences in trust and perceived legitimacy may translate into disparities in guilty pleas because plea bargaining is an uncertain and ambiguous process in which the accused is expected to place their faith in state actors, including the prosecutor and, oftentimes, a publicly appointed defense attorney. Under these conditions, minority defendants may be more likely to opt for a public trial where their fate is determined by a jury of their peers. As Albonetti (1990) suggests, "compared to a guilty plea, a trial disposition provides a more rigorous testing of the facts of the case and provides the defendant . . . with the opportunity to have an independent judicial review of the procedures leading to the conviction" (p. 330).

The second, complementary explanation for potential race differences in guilty pleas relates to the relative quality of plea offers. Some work suggests that racial minorities may be offered lower quality plea deals than similarly situated White defendants. Chambliss and Seidman (1971, p. 412), for example, suggest that "how favorable a 'bargain' one can strike with the prosecutor . . . is a direct function of how politically and economically powerful the defendant is" with "lower-class, indigent and minority-group member[s]" being most disadvantaged in guilty plea processes. Empirical research on the quality of plea offers is extremely limited, but some work implies racial disparities in the quality of plea offers. Welch, Spohn, and Gruhl (1985), for instance, found that Blacks who pled guilty were sentenced more severely than

Whites who pled guilty, in part because final charges were more severe in guilty plea cases for Black defendants. More recent work by Kutateladze and colleagues (2014) draws a similar conclusion. Using data from New York City, it shows that Black defendants are 19% more likely than similarly situated White defendants to be offered plea deals that include jail or prison time (Kutateladze et al., 2014). These same authors also find that Black defendants are less likely to receive reduced charge offers in misdemeanor marijuana cases, and that Latino defendants have a higher likelihood of receiving custodial sentence offers in felony drug cases (Kutateladze et al., 2016). Similarly, Metcalfe and Chiricos (2018) report that Black defendants who plead guilty receive less value than White defendants in terms of their charge reductions, and Edkins (2011) shows that defense attorneys are more likely to recommend sentences that include some jail time to Black defendants.

Theoretically, these empirical findings dovetail with recent arguments that prosecutorial decision-making is subject to normal cognitive processes that may "skew prosecutorial decisions in a range of racially biased ways" (R. J. Smith & Levinson, 2011, p. 797). Implicit associations rooted in widespread societal stereotypes can link minority defendants to enhanced perceptions of dangerousness, risk, and culpability in ways that may shape the quality of plea offers (Albonetti, 1991; Bridges & Steen, 1998; Johnson & King, 2017). In this way, "prosecutors—the vast majority of whom would never intend to hold double-standards based on race—might nonetheless be unwitting propagators of bias" (R. J. Smith & Levinson, 2011, p. 796). However, it is important to note that not all prior work finds evidence of racial disparities in plea outcomes. For example, Albonetti (1992) reported no evidence that race of the defendant was related to charge reductions in burglary and robbery cases, and Shermer and Johnson (2010) showed that Black and Latino offenders were not any less likely than White offenders to have statutory maximum penalties reduced as part of their plea negotiations in federal court. Overall, though, the weight of the evidence from prior research suggests that minority defendants may be less likely to plead guilty in part because they have lower perceived legitimacy in the justice system and because they may receive less favorable plea offers from prosecutors.

Summary and Hypotheses

Drawing on the above theoretical arguments and findings from prior research, we expect to find significant racial differences in the likelihood of pleading guilty, with Black and Latino defendants being less likely than Whites to enter into any type of guilty plea. Accordingly, we suggest the following:

Hypothesis 1: Black and Latino defendants will be less likely than similarly situated White defendants to plead guilty instead of going to trial.

Prior research and theorizing also suggest that differences in guilty pleas may be especially pronounced for young, male, minority defendants. Theories of intersectionality argue that social statuses are inherently interdependent and should be examined

jointly (McCall, 2005). Empirical research largely supports these arguments (Steffensmeier, Painter-Davis, & Ulmer, 2017; Ulmer, Painter-Davis, & Tinik, 2016). Metcalfe and Chiricos (2018), for instance, found that Black males were especially unlikely to plead guilty. Related research finds perceived trust in the justice system differs across age, race, and gender groupings. Hagan and Albonetti (1982, p. 338), for instance, have argued that men "are most likely to perceive criminal injustice," and similar work shows that young, Black men, in particular, are more likely to report being treated unfairly in the justice system (Gallup, 2013; Peffley & Hurwitz, 2010). Moreover, several studies find that young, male, minority defendants receive less favorable treatment at later stages of criminal case processing (e.g., Spohn & Holleran, 2000; Steffensmeier et al., 2017; Steffensmeier et al., 1998). Based on prior research and theory, then, we expect the following:

Hypothesis 2: Young, male, minority defendants, in particular, will be less likely to plead guilty instead of going to trial.

In addition to overall differences in the likelihood of pleading guilty, there may also be important disparities across different types of guilty pleas. In particular, if racial differences in modes of conviction are in fact a product of differences in perceived trust and legitimacy in the system, then we would expect the largest racial disparities to occur for guilty pleas that have the least formal structure and legal guarantees. Specifically, we expect minority defendants to be especially unlikely to enter into nonnegotiated, or open, pleas, where they must freely admit their guilt and throw themselves on the mercy of the court. Conversely, we would expect minority defendants who plead guilty to be more likely to opt for pleas that involve more formal structure and legal recourse. In Maryland, certain types of negotiated pleas are sanctioned by the American Bar Association (ABA pleas) and are judicially approved and legally binding on the court. In these cases, the defendant knows in advance what specific concessions will be exchanged for their admission of guilt and they are legally guaranteed to receive them. As such, we anticipate the following:

Hypothesis 3: Black and Latino defendants will be less likely than White defendants to enter into nonnegotiated or open pleas.

Hypothesis 4: Black and Latino defendants will be more likely than White defendants to enter into ABA pleas, which are legally binding on the court.

Finally, there are also theoretical reasons to expect that racial disparities in guilty pleas might vary by offense type. First, in Maryland, there are separate sentencing grids for person, property, and drug offenses. Additional factors such as weapon use and victim vulnerability are calculated into sentencing recommendations for person crimes but not for property or drug crimes, and these additional criteria may provide additional bargaining chips to prosecutors during plea negotiations. Second, racial stereotypes are often linked more closely to certain crimes such as violence in the public discourse (Chiricos & Escoholtz, 2002; Hurwitz & Peffley, 1997; Steen, Engen, &

Gainey, 2005). Weatherspoon (1998, p. 23) for example, has suggested that young Black men are often portrayed as "gang affiliated, gun toting and a menace to society." Such stereotypes may implicitly influence decision-making and result in lower quality plea bargains offered by prosecutors. Finally, there tend to be stark differences in trial rates for different crime categories. In general, defendants are more likely to go to trial when charged with more serious, violent crimes (Reaves, 2013), so there may be greater opportunity for racial disparities to arise in these types of cases. For these reasons, we investigate the following:

Hypothesis 5: Racial differences in guilty pleas will be more pronounced for person offenses than for drug or property crimes.

The Current Research Context

Maryland's Judicial Conference, a statewide body of Maryland judges, voluntarily adopted Maryland State sentencing guidelines without legislative mandate in May 1983. As with many other jurisdictions, the guidelines were adopted to achieve several goals, such as (a) reducing disparity in sentencing, (b) articulating clear sentencing policy, (c) generating information for new judges, and (d) promoting transparency in sentencing (Bushway & Piehl, 2001). Maryland's guidelines are in many ways unique. They are voluntary so Maryland judges are not legally mandated to sentence offenders within prescribed guidelines ranges, and they are descriptive, so they are based explicitly on the past sentencing practices of state judges.

Maryland contains several types of guilty pleas that enable an investigation of variation in types of case disposition beyond a simple plea versus trial analysis. There are three specific ways in which a defendant can plead guilty: ABA plea agreement, non-ABA agreement, and plea with no agreement (Maryland State Commission on Criminal Sentencing Policy [MSCCSP], 2016). The key difference between each type of case disposition is the level of negotiation pursuant to the plea and the degree to which the plea agreement is binding on the court. In particular, both ABA and non-ABA pleas are negotiated plea offers; however, ABA pleas are judicially approved and legally binding on the court under Maryland Rule 4-243 (c). ABA pleas occur through an agreement made by the sentencing judge, the defendant, and the prosecutor as to what the maximum sentence will be. Therefore, if the plea is accepted, a defendant's actual sentence cannot exceed the maximum number of months and days agreed upon. Finally, an ABA plea agreement is considered within the sentencing guideline range even if the actual sentence falls outside of the recommended range because the plea represents a consensus among parties and the court of a specific community (MSCCSP, 2016).

Non-ABA pleas result from a negotiated plea agreement. However, these agreements occur between a prosecutor and defendant and are not binding on the court. Therefore, a sentencing judge can deviate from the negotiated sentence that results from non-ABA pleas. Accordingly, non-ABA pleas that result in sentences outside the sentencing guideline range are not considered guideline compliant. Finally, pleas with

no agreement occur when a defendant admits guilt without any formal arrangement from the prosecutor or judge. In these cases, the defendant receives no formal agreement of a sentence reduction or other types of concessions in exchange for a guilty plea. These detailed distinctions among types of guilty pleas mean that the Maryland sentencing data are particularly well suited to testing our research questions.

Data and Methods

This study uses data collected by the MSCCSP for cases sentenced between January 1, 2012, and June 30, 2015 (the end of fiscal year 2015). The MSCCSP data contain detailed information on a variety of individual offender and case-processing characteristics. Because our study focuses on case disposition resulting from guilty pleas and trials, we restrict the sample to those with known disposition information for new criminal offenses, which results in a total of 27,317 offenders.² The sample is further restricted to individuals with available information on key independent variables of interest, producing a final sample size of 24,854 offenders.^{3,4}

Dependent Variable

The dependent variable is the mode of conviction, which distinguishes cases that are resolved through guilty pleas from those that go to trial. Guilty plea is first coded 1 for any type of guilty plea with trial cases coded 0. Because some hypotheses distinguish types of guilty pleas, we also examine a more refined measure of the mode of conviction. Recall that ABA and non-ABA pleas are two types of negotiated plea in which only the former is legally binding on the court.⁵ For these analyses, ABA pleas are separated from non-ABA pleas and from nonnegotiated, or open, pleas.

Independent Variables

The primary independent variable of interest is the race/ethnicity of the defendant. *Race/ethnicity* is coded as a series of dummy variables indicating whether the defendant is White, Black, Latino, or Other race.⁶ We also consider other demographic defendant characteristics. *Gender* is coded as a dichotomous variable with males scored 1 and females scored 0. *Age* is captured with ordinal categories indicating whether the defendant is younger than 25 years, 25 to 34 years, 35 to 44 years, 45 to 54 years, or older than 55 years. This allows for examination of nonlinearities in the effects of age (Steffensmeier, Kramer, & Ulmer, 1995). The *Type of counsel* is measured with a series of dichotomous variables indicating whether the defendant had a private attorney, public defender, or other/unknown type of counsel.⁷

To control for other relevant punishment characteristics, we include the *presumptive guidelines sentence* coded as the mid-point of the recommended sentencing range (in years), which is included to capture the severity of sentences under the Maryland guidelines (Bushway & Piehl, 2001; Kurlychek & Johnson, 2010). Criminal history is captured with a guidelines *offender score* that ranks the seriousness of prior criminal

record on a 7-point scale. Offender score is calculated based on prior adult and juvenile offending, current supervision status, and prior violations of probation or parole. *Criminal charges* are included with a measure of the number of charges against the defendant, and we also measure whether the defendant was charged with an offense carrying a *mandatory minimum* using an additional binary variable. We also control for the primary *offense type* using three dichotomous variables that distinguish whether the most serious conviction charge was for a property, drug, or person offense.

Finally, the Maryland sentencing guidelines use separate sentencing grids for person, property, and drug offenses. Accordingly, for the analyses that disaggregate the sample by offense type, additional offense-specific controls are included in the model (see Kurlychek & Johnson, 2010). Person offenses include control variables for weapon use, vulnerable victim, and victim injury. Weapon use is coded as a series of dummy variables that indicate whether an offender used a firearm, a weapon other than a firearm, or no weapon (reference). Vulnerable victim is a dummy variable indicating whether the victim is younger than 11 years, older than 65 years, or is physically or mentally handicapped. Victim injury is represented by a series of dummy variables indicating whether the victim suffered a permanent injury or death, a nonpermanent injury, or no injury (reference). Drug offenses include a series of dummy variables indicating the most serious drug type, including marijuana (reference), cocaine, heroin, or other/unidentified drug type.

Analytic Strategy

The analysis proceeds in several stages. First, we build upon prior research by assessing the predictors that are associated with pleading guilty rather than going to trial. For this analysis, logistic regression models are used. We also incorporate select interactions into these models to test theoretical predictions about the intersectionality of defendant age, gender, and race. The formal model that we estimate is summarized in Equation 1.

$$Z_{i} = \log\left(\frac{\pi}{1-\pi}\right) = \beta_{0} + \beta_{1} \left(\text{race/ethnicity}\right)_{i} + B_{j} \mathbf{X}_{ij} + \alpha_{ik},$$
 (1)

where Z_i represents the log odds of pleading guilty versus going to trial for each individual i in the data. The primary coefficient of interest is β_1 , which represents the series of dummy variables that capture defendant race/ethnicity, or in the second model, the joint impact of age, gender, and race interactions. \mathbf{X}_{ij} represents the vector of control variables and α_k represents the blocks of fixed effects for years and for county court jurisdictions. The fixed effects for years and jurisdictions remove any between-court and between-year variation in guilty plea outcomes and, importantly, account for error correlations that may result from the clustering of cases within years and within districts (Ulmer & Johnson, 2004). Given that the focus of the current study is on individual-level disparities, rather than contextual factors that influence plea decisions, this approach is useful for removing county-level variation without

requiring more complicated multilevel modeling techniques. As prior research argues, it provides both a theoretically appropriate and parsimonious analytic approach (see Helms & Jacobs, 2002; Johnson & Betsinger, 2009; Shermer & Johnson, 2010).

Second, we also examine variation among types of guilty pleas using multinomial regression models to assess differences among ABA pleas, and non-ABA pleas relative to nonnegotiated guilty pleas. This model is summarized in Equation 2.

$$X_{i} = \log\left(\frac{\pi_{i} = j}{\pi_{i} = J}\right) = \beta_{0} + \beta_{1} \left(\text{race/ethnicity}\right)_{i} + B_{j} \mathbf{X}_{ij} + \alpha_{ik}.$$
 (2)

For the multinomial model, we restrict the analysis to case disposed of by guilty pleas. The outcome X_i represents the log odds of individual i taking plea type j—ABA plea or non-ABA plea—compared with the referent J—a nonnegotiated guilty plea. β_1 captures the impact of race/ethnicity on the likelihood of entering into each type of guilty plea, and once again \mathbf{X}_{ij} represents the vector of control variables, and α_k the blocks of fixed effects for years and for county court jurisdictions. We also estimate separate models for different offense categories to investigate the conditioning effects of type of crime on guilty pleas. Specifically, we estimate separate models for person, drug, and property crimes, which include the same sets of predictors as above as well as crime-specific covariates. The Maryland guidelines score offense severity differently for different offense types, allowing for the incorporation of additional offense-specific predictors in these models. As noted above, these include controls for vulnerable victims, victim injury, and weapon use for person crimes and measures capturing the type of drug in drug offenses. For property crimes, the included covariates are identical to pooled models for all crime types.

Results

Table 1 reports the descriptive statistics examining guilty pleas in Maryland courts for the full sample and disaggregated by race. Regarding case disposition, 94% of defendants are convicted via a guilty plea. The most common types of guilty plea are non-ABA and ABA pleas. The majority of offenders in the sample are males and the average age is approximately 32 years old. Black defendants are overrepresented in the sample, accounting for two thirds of all convicted offenders. The majority of defendants were represented by a public defender, although a substantial proportion was represented by private counsel. Finally, consistent with recent annual reports from the sentencing commission (MSCCSP, 2016), person offenses were most common followed by drug and then property crimes.

A few important patterns emerge across defendant race and ethnicity. First, Whites are significantly more likely than any other racial/ethnic group to plead guilty. Ninety-six percent of White defendants entered a plea of guilty compared with 93% of Blacks and 91% of Latinos. Second, across types of guilty pleas, Whites are substantially less likely to enter into ABA pleas relative to other racial/ethnic groups, but they are more likely to enter into non-ABA plea and nonnegotiated pleas. More than half of all White

Table 1. Summary Statistics by Full Sample and by Race.

	•									
	Full sample $(N=24,854)$	Full sample $V=24,854)$	White $(n=7,607)$	ite ,607)	Black $(n = 15,875)$:k ,875)	$ Latino \\ (n = 1,090) $	oo (060)	Other race $(n=282)$	race .82)
	Σ	SD	₹	SD	Σ	SD	Σ	SD	₹	SD
Any guilty plea	0.94	0.25	96.0	0.20	0.93	0.26	0.91	0.28	0.93	0.25
ABA plea	0.40	0.49	0.24	0.43	0.46	0.50	0.45	0.50	0.43	0.50
Non-ABA plea	0.42	0.49	0.55	0.50	0.36	0.48	0.37	0.48	0.43	0.50
Plea no agreement	0.12	0.32	91.0	0.37	0.10	0:30	60'0	0.29	0.08	0.27
Bench trial	0.01	0.12	0.01	0.11	0.02	0.12	0.02*	0.13	*10.0	0.10
Jury trial	0.05	0.22	0.03	0.17	90:0	0.23	0.07	0.26	90.0	0.23
White	0.31	0.46	I	1	I	1	I	1	I	I
Black	0.64	0.48					1		1	
Latino	0.04	0.20	I	1	I	1	I	1	I	I
Other race	0.01	0.1	I	1	I	1	I	1	I	1
Male	0.88	0.33	0.81	0.40	16.0	0.29	16.0	0.28	0.88	0.33
Age (continuous)	31.74	11.17	33.34	11.74	31.09	10.85	29.72	10.12	33.14*	12.14
Age										
<25 years	0.33	0.47	0.27	0.45	0.36	0.48	0.38	0.49	0.28*	0.45
25-34	0.35	0.48	0.36	0.48	0.34	0.47	9:30	0.48	0.38*	0.49
35-44	0.17	0.37	0.18	0.39	91.0	0.37	%I.0	0.37	*91.0	0.36
45-54	0.11	0.31	0.12	0.33	0. [0.31	90'0	0.23	0.13*	0.33
>55 years	0.04	0.21	90'0	0.24	0.04	0.19	0.03	0.17	*90.0	0.24
Attorney										
Private	0.43	0.49	0.48	0.50	0.40	0.49	0.47*	0.50	99.0	0.47
Public	0.53	0.50	0.49	0.50	0.56	0.50	0.50*	0.50	0.31	0.46
Other/unknown	0.04	0.19	0.03	91.0	0.04	0.21	0.03	0.17	0.03	0.18
Mandatory minimum	0.02	0.14	0.01	0.08	0.03	91.0	*10.0	0.07	*00.0	90.0
Presumptive sentence	5.65	8.78	3.97	7.07	6.62	9.45	3.96*	7.50	3.02	7.45
Offender score	2.74	2.44	2.27	2.29	3.11	2.47	1.20	1.79	80 [.] 1	1.63
Criminal charges	1.38	01.1	1.34	0.95	1.40	8I.I	1.36*	0.94	1.32*	0.81
Person offense	0.44	0.50	0.37	0.48	0.46	0.50	0.62	0.49	0.44	0.50
Property offense	0.19	0.40	0.32	0.47	0.14	0.34	0.19	0.39	0.21	0.41
Drug offense	0.37	0.48	0.31	0.46	0.41	0.49	0.20	0.40	0.35*	0.48
Block of year dummies	l	1	l				1		1	
Block of district dummies						I	1	I		I

Note, ABA = American Bar Association. **Indicates contrasts with Whites that are not statistically significant at the $\rho<.05$ level. **Indicates contrasts with Whites that are not statistically significant at the $\rho<.05$ level.

24,854

0 0			o	,	,	,
	Mod	lel I: Main	effects	Model 2	2: Interact	ion effects
Variable	Ь	SE	Exp(b)	Ь	SE	Exp(b)
Black	-0.52	0.08	0.60***	-0.43	0.09	0.65***
Latino	-0.74	0.14	0.47***	-0.66	0.18	0.52***
Other race	-0.69	0.26	0.50**	-0.80	0.30	0.45**
Male	0.02	0.10	1.03	0.10	0.11	1.10
Young: <30 years	_	_	_	0.53	0.12	1.69***
Age						
25-34 years	-0.38	0.08	0.69***	_	_	_
35-44 years	-0.60	0.09	0.55***	_	_	_
45-54 years	-0.59	0.11	0.55***	_	_	_
55 years	-0.88	0.13	0.41***	_	_	_
Attorney						
Public	0.41	0.06	1.51***	0.42	0.06	1.51***
Other/unknown	-1.03	0.10	0.36***	-1.02	0.10	0.36***
Mandatory minimum	-0.84	0.14	0.43***	-0.82	0.14	0.44***
Presumptive sentence	-0.04	0.00	0.96***	-0.04	0.00	0.96***
Offender score	-0.11	0.01	0.89***	-0.12	0.01	0.89***
Criminal charges	-0.42	0.04	0.65***	-0.42	0.04	0.66***
Person offense	-0.5 I	0.09	0.60***	-0.5 I	0.09	0.60***
Drug offense	0.40	0.10	1.50***	0.39	0.10	1.48***
Year fixed effects	_	_	_	_	_	_
County fixed effects	_	_	_	_	_	_
Black imes Young imes Male	_	_	_	-0.19	0.14	0.82
Latino $ imes$ Young $ imes$ Male	_	_	_	-0.22	0.26	0.80
Other Race \times Young \times Male	_	_	_	0.24	0.58	1.28
Pseudo R ²		.244			.241	

 Table 2. Logistic Regression for Racial Differences in Pleading Guilty Versus Going to Trial.

Note. References = White, age: <25 years, attorney: private, property offense; young (<30 years) is substituted for age in Model 2.

24,854

defendants settled their criminal cases through nonnegotiated pleas compared with only about one third of Black and Latino defendants. In contrast, Black and Latino defendants settled cases through ABA pleas at a rate of more than 40% compared with just 24% for White defendants. Thus, in the aggregate, the descriptive analysis suggests racial differences in the frequency of pleading guilty and in the specific types of guilty pleas defendants are most likely to use.

Table 2 reports the results of the logistic regression model examining the distinction between all guilty pleas and trials. Model 1 reports the main effects of race and ethnicity and Model 2 incorporates interaction terms for young, male, minority offenders.

^{*}p < .05. **p < .01. ***p < .001.

Focusing on the first model, the findings indicate clear racial differences in the overall likelihood of pleading guilty. The odds of a guilty plea are reduced by 40% for Black defendants and by more than half for Latino defendants relative to Whites in the sample. Similar-sized effects also emerge for defendants of other racial or ethnic backgrounds, which include Asian and Native Americans. Overall, these findings provide strong support for our first hypothesis that minority defendants are substantially less likely than White defendants to plead guilty rather than going to trial, even after adjusting for other salient case-processing considerations.

The results in Model 1 also indicate that older offenders are less likely to plead guilty. Relative to the less than 25 years reference group, all older age groups are significantly less likely to plead guilty. In contrast, we find no evidence of gender differences in the likelihood of pleading guilty. The type of attorney, however, is strongly associated with the mode of conviction. In line with theoretical expectations, offenders who are represented by public defenders are significantly more likely to plead guilty than are defendants represented by private attorneys. Turning to the legal controls, on average, more serious offenders are less likely to plead guilty. In particular, defendants with mandatory minimums, multiple criminal charges of conviction, longer criminal histories, and higher presumptive sentences are all significantly less likely to plead guilty. This is not surprising given that these defendants typically have more to gain from gambling on an acquittal at trial. Finally, the type of crime is also related to the likelihood of pleading guilty. Relative to property offenders, defendants charged with drug offenses have 50% greater odds of pleading guilty, whereas the odds for those charged with person offenses are 40% lower.

Model 2 provides the results of the interaction of age, gender, and race to test the hypothesis that young, male, minority defendants are the least likely demographic group to plead guilty. Of particular interest, the interaction terms yield negative, but nonsignificant, effects for both young Black and young Latino male defendants relative to the reference category of young, White male defendants. Overall, these results provide little evidence in support of theoretical expectations that young, male, minority defendants are uniquely unlikely to plead guilty rather than go to trial.

Table 3 reports the results of a separate, multinomial regression model that distinguishes among different types of guilty pleas. We focus our discussion primarily on racial differences. The first set of estimates in Table 3 reports difference between ABA-sanctioned guilty pleas and nonnegotiated, or open, pleas. Compared with White defendants, Black defendants are significantly more likely to enter into ABA pleas rather than pleading guilty outright. The coefficient for Latino defendants is of similar magnitude and direction but not statistically significant, whereas the effect for other racial and ethnic background indicates they are also more likely to enter into ABA pleas. The second set of estimates indicates that compared with White defendants, Black defendants are also more likely take non-ABA pleas relative to nonnegotiated pleas, although there are no difference for other minority defendants. Finally, the last set of estimates shows that minority defendants tend to be more likely to accept ABA pleas rather than non-ABA pleas. Overall, these results suggest that Black defendants, in particular, are less likely to enter into nonnegotiated guilty pleas, compared with both non-ABA and

Table 3. Multinomial Logistic Regression for Racial Differences Across Types of Guilty Pleas.

	ABA pl	ABA pleas vs. nonnegotiated pleas	gotiated	Non-ABA	Non-ABA pleas vs. nonnegotiated pleas	negotiated	ABA	ABA pleas vs. non-ABA pleas	-ABA
Variable	p	SE	Exp(b)	p	SE	Exp(b)	p	SE	Exp(b)
Black	0.24	0.07	1.27***	91.0	90.0	**9I'I	0.08	0.04	1.09†
Latino	0.22	0.15	1.24	-0.02	0.15	0.98	0.23	0.09	1.26**
Other race	0.56	0.27	1.74*	0.14	0.26	<u>-</u> .	0.42	91.0	1.52**
Male	0.07	80.0	1.07	-0.0	0.07	0.98	0.08	0.05	80:I
Age									
25-34 years	60.0	90.0	60 [.] 1	0.04	90.0	<u>-</u>	0.05	0.04	1.05
35-44 years	0.00	0.08	00:1	-0.04	0.08	96.0	0.04	0.05	<u>1</u> .04
45-54 years	0.00	0.09	00:1	-0.06	0.09	0.94	90:0	90:0	90:1
>55 years	-0.20	0.12	0.82	-0.35	0.12	0.70**	91.0	60:0	1.17
Attorney									
Public	90:0	0.05	1.07	0.05	0.05	1.05	0.0	0.04	<u> 1</u> 0:
Other/unknown	-0.62	0.12	0.54***	-0.62	0.13	0.54***	0.00	0.10	0 0 1
Mandatory minimum	-0.04	0.20	96.0	-0.20	0.22	0.82	0.15	0.14	1.17
Presumptive sentence	0.00	0.00	00:1	-0.01	0.00	*66.0	0.0	0.00	<u>*</u> 10:1
Offender score	0.02	0.01	1.02	-0.02	0.01	0.98†	0.04	0.0	1.04**
Criminal charges	-0.04	0.03	96.0	-0.02	0.03	0.98	-0.02	0.02	0.98
Person offense	0.17	0.07	<u>*8</u> -	-0.06	0.07	0.94	0.22	0.05	1.25
Drug offense	-0.26	0.07	0.77	-0.30	0.07	0.74***	0.04	0.05	<u>-</u>
Year fixed effects							I	I	I
County fixed effects							I		I
Pseudo R ²		.282			.282			.282	
и		23,255			23,255			23,255	

Note. The model was estimated twice after shifting the base category to present coefficients for all possible contrasts. References = White, age: <25 years, attorney: private, property offense. ABA = American Bar Association. $^{\dagger} p <$.10. $^* p <$.05. $^{*ok} p <$.01. $^{*ols} p <$.001.

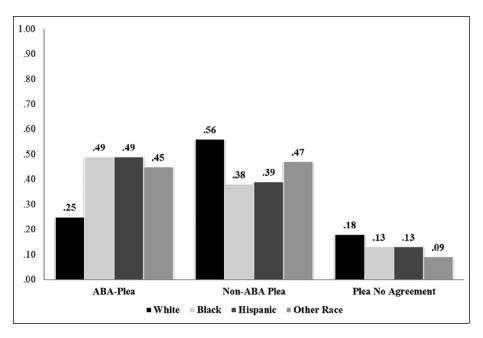


Figure 1. Predicted probabilities of the type of plea by race/ethnicity. *Note.* ABA = American Bar Association.

ABA pleas. These findings are in line with our theoretical expectations and indicate that racial disparities tend to be most pronounced in nonnegotiated guilty pleas and least pronounced in legally binding ABA plea agreements. These differences are visualized in Figure 1, which shows the predicted probabilities of each type of guilty plea by defendant race. Consistent with expectations, racial and ethnic minorities are more likely to opt for ABA-sanctioned pleas where there is greater certainty, whereas White defendants are the most likely to enter into non-ABA pleas and nonnegotiated pleas.

Finally, we also consider whether or not racial disparities in pleading guilty might vary by the type of offense. We hypothesized that racial differences in guilty pleas would be largest for person crimes, in part because the Maryland guidelines allow for the consideration of additional factors, such as victim injury and the use of a weapon, and also because racial stereotypes are likely to be most salient in these types of crimes. The results of our offense-specific models are reported in Table 4. In the interest of space, we only report the race coefficients, although each model is estimated with the full set of controls reported in previous analyses, as well as the additional offense-specific controls. First, the results of the logistic regression comparing all pleas with trials show that Black and Latino defendants are significantly less likely than White defendants to plead guilty across all offense categories. Contrary to our hypothesis, though, racial disparities in guilty pleas do not appear to be most pronounced for person offenses; in fact, the results from Model 1 indicate that the largest estimates of racial differences emerge for property crimes. Turning to the multinomial model, the results

Table 4. Offense-Specific Models of Racial Differences in Guilty Pleas.

	BA	Exp(b)		0.95	1.26†			1.1	I.I			1.21*	Ξ	
	ABA pleas vs. non-ABA plea	SE E		0.07	0.12	(n = 9,208)		80.0	91.0	€		60.0	0.19	(n = 4,563)
	ABA plea	9		-0.05	0.23	<i>u</i>)		91.0	0.15	(n = 8,828)		0.19	0.11	u)
gression	vs. Ilea	Exp(b)		 <u>4</u>	90:I			1.29*	1.42			96.0	0.74	
inomial re	Non-ABA pleas vs. nonnegotiated plea	SE		0.0	0.20	(n = 9,208)		0.10	0.33	(n = 8,828)		0.13	0.34	(n = 4,563)
Model 2	Non-	p		0.13	90.0	٤		0.26	0.35	<i>u</i>)		-0.04	-0.30	u)
	gotiated	Exp(b)		80. I	1.34			1.52***	99:1			91.1	0.82	
	ABA pleas vs. nonnegotiated plea	SE		0.1	0.20	(n = 9,208)		0.1	0.32	(n = 8,828)		0.14	0.35	(n=4,563)
	ABA plea	p		0.08	0.29			0.42	0.50			0.15	-0.20	
istic n	. trial	Exp(b)		0.68***	0.55	(6)		0.58**	0.46*	2)		0.55***	0.42*	3)
Model 1: Logistic regression	Guilty plea vs. trial	SE		<u> </u>	0.18	(n = 10,219)		0.19	0.38	(n = 9,045)		91.0	0.34	(n=4,773)
		p		-0.39	-0.60	٥		-0.54	-0.79	•		-0.60	-0.86	
		Variable	Person offenses	Black	Latino		Drug offenses	Black	Latino		Property offenses	Black	Latino	

models include additional controls for vulnerable victim status, victim injury (no injury, permanent injury, or nonpermanent injury), and use of a weapon (no weapon, firearm, other weapon). Drug models include additional controls for drug type (marijuana, cocaine, heroin, or other drug). Other race coefficients Note. Property offense analysis uses circuit dummies in place of jurisdiction dummies. All models include the full list of variables in Table 3. Person offense omitted in the interest of space. ABA = American Bar Association.

 $^{\dagger}p < .10. *p < .05. **p < .01. ***p < .001.$

show that Black defendants are most likely to accept ABA pleas in drug and property offenses, and least likely to accept nonnegotiated pleas for drug offenses, whereas Latino defendants are more likely to accept ABA pleas for person offenses.¹⁴

Discussion

The current study aimed to advance literature on the social correlates of guilty pleas in the American criminal court system by empirically examining various defendant and case characteristics that are related to guilty pleas, with a particular focus on racial and ethnic differences in the likelihood of pleading guilty instead of going to trial. We examine whether there are racial and ethnic disparities in the decision to plead guilty, consider how these disparities vary across distinct types of negotiated and nonnegotiated guilty pleas, and investigate the extent to which they are shaped by other case-processing characteristics, such as the type of offense. The analysis is informed by contemporary perspectives that highlight racial differences in perceived legitimacy of the justice system as well as recent theoretical arguments on racial disadvantages in plea bargaining that suggest minority defendant may be less likely to enter into guilty pleas in criminal courts.

With regard to our first hypothesis, we found strong support for the direct effects of race and ethnicity on the decision to plead guilty. In particular, we find that Black, Latino, and other racial minority defendants are all significantly less likely than White defendants to plead guilty. This result is largely consistent with earlier research (Albonetti, 1990; LaFree, 1980; Metcalfe & Chiricos, 2018; Petersilia, 1983). We extend this work to a new research context and provide new evidence that racial and ethnic differences in guilty pleas persist despite contemporary changes in sentencing policies and dramatic increases in the use of guilty pleas in criminal courts. For instance, Albonetti's (1990) original study had a guilty plea rate of only 76% compared with 94% of defendants in the current study. Despite increased homogeneity in the mode of conviction, then, we find that racial differences in the likelihood of pleading guilty persist. Moreover, we demonstrate this in a large, diverse, statewide sample of criminal cases.

The current study also expands prior research that has focused primarily on Black—White comparisons of guilty pleas by including information on Latinos and other racial minorities (cf. Albonetti, 1990; LaFree, 1980; Metcalfe & Chiricos, 2018), which have been shown to occupy a unique position in criminal case processing (Alvarez & Bachman, 1996; Franklin, 2013; Johnson & Betsinger, 2009; Kutateladze et al., 2014). In doing so, our results indicate that, like Black defendants, Latino defendants are also significantly less likely than Whites to plead guilty. We also show that other minority groups (which include Asian and American Indians) are less likely than White defendants to plead guilty. In addition, we provide the first large-scale analysis of guilty plea decisions and trial outcomes in a state with voluntary sentencing guidelines. This is notable given that most prior work is restricted to limited samples from single court jurisdictions (Albonetti, 1990; Kutateladze & Lawson, 2018; Metcalfe & Chiricos, 2018). Future work can build upon this effort by investigating the social correlates of guilty pleas in additional research contexts, such as states with presumptive guidelines or in the federal criminal justice system, which has larger samples that may

allow for further distinctions among Asian and Native American defendants (Franklin, 2013; Johnson & Betsinger, 2009).

One reason that racial differences in modes of conviction are so important is because prior work suggests they can contribute to racial disparities in punishment. To investigate this issue in our data, we ran supplemental models (see the appendix) examining the effects of pleading guilty on the likelihood and length of incarceration. Consistent with previous research (e.g., Johnson, 2003; Ulmer & Bradley, 2006; Ulmer et al., 2010), the odds of imprisonment and the average length of imprisonment are both significantly lower for defendants convicted by guilty plea instead of trial. For incarceration, pleading guilty reduces the odds of a custodial sentence between 60% and 66% across types of guilty pleas. For sentence length, the average length of imprisonment is also reduced between 41% and 51% across types of pleas. Notably, the likelihood of imprisonment is smallest for defendant convicted through court-sanctioned ABA pleas, although equality of coefficients tests (not reported in tabular form) indicate these differences are not statistically significant (Paternoster, Brame, Mazerolle, & Piquero, 1998). 15 Overall these additional findings show that defendants who plead guilty tend to receive less severe sentences, and because racial and ethnic minorities are less likely to plead guilty, differences in modes of conviction have the potential to contribute directly to racial disparities in punishment.

The findings regarding racial differences also hold important theoretical implications. Past research suggests that the decision of a defendant to plead guilty or pursue trial may influence perceptions of blameworthiness (Kramer & Ulmer, 2009; Ulmer et al., 2010). For instance, Ulmer et al. (2010) note, "whereas pleading guilty is seen in court communities as a signal of remorse, rehabilitative potential, and decreased blameworthiness, trial conviction may be seen as heightening an offender's blameworthiness and signaling his or her recalcitrance" (p. 588). The findings of this study suggest that minority defendants may be perceived as more blameworthy in part because they are less likely than White defendants to plead guilty. A useful direction for future research is to further explore this possibility and investigate the intersection between race, guilty pleas, and perceptions of blameworthiness in criminal proceedings.

Previous sentencing research also suggests that racial differences in criminal case processing may be conditioned by other ascriptive characteristics such as defendant age and gender. In particular, prior research on intersectional disparities in punishment argues that greater levels of culpability, dangerousness, and recidivism risk are often attributed to young, male, minorities in criminal court (Spohn & Holleran, 2000; Steffensmeier, Ulmer, & Kramer, 1998). Related work reveals that young, male minorities are also more likely to have mandatory minimums applied to them (see Ulmer, Kurlychek, & Kramer, 2007), and one recent study found that Black males were particularly unlikely to plead guilty (Metcalfe & Chiricos, 2018). Our second hypothesis predicted that young, male, minority defendants would be particularly unlikely to plead guilty relative to going to trial. However, we found no empirical support for this expectation. In part, this may reflect the fact that defendants retain some agency when deciding to accept or reject a guilty plea offer. Prior research demonstrates that there are racial differences in perceptions of the relative severity of different sanctions. For

instance, Wood and May (2003) found that Black probationers were more likely than Whites to prefer short terms of incarceration to various alternative sanctions. Future research is needed to further delve into the complex role that age—gender—race associations play in the plea bargaining process.

A second contribution of this work is that it moves beyond a simple comparison of guilty plea and trials by considering how racial disparities vary across different types of negotiated and nonnegotiated guilty pleas (Padgett, 1985). No prior work has considered fundamental distinctions among types of guilty pleas. This study takes advantage of unique information on legally binding ABA pleas in Maryland, which offer a greater degree of certainty in the plea bargaining process. Specifically, Hypothesis 3 predicted that racial minorities would be less likely than White defendants to enter into nonnegotiated, open pleas. To the extent that racial differences in perceived trust and legitimacy shape the guilty plea process, minority defendants may avoid plea options with greater uncertainty that do not provide legal constraint over judicial discretion. The results from our multinomial logistic regression provide general support for this expectation, as well as for Hypothesis 4, which proposed that racial minorities would be especially likely to enter into legally binding (ABA) plea agreements. Specifically, across types of pleas, racial/ethnic minorities are less likely than White defendants to enter into nonnegotiated pleas and more likely to agree to legally binding, negotiated ABA pleas. This was especially the case for African American defendants and for other race defendants. These results extend prior research on guilty pleas by beginning to parse out the contexts in which racial disparities are most likely to occur. One potential explanation for this finding is that because minority defendants have less trust in the criminal justice system, they are more likely than White defendants to seek out legally binding pleas that do not permit judges to deviate from the negotiated sentence.

Finally, our last hypothesis proposed that racial disparities in guilty pleas would be largest for crimes committed against a person. Some prior work suggests that racial stereotypes link minority defendants to enhanced perceptions of violent crime. Hurwitz and Peffley (1997), for example, demonstrated a strong association between images of African Americans and judgments of crime and punishment, but only for Black criminals convicted of violent crimes. We similarly anticipated that racial stereotypes would be particularly pronounced for minority defendants charged with person offenses, leading to greater racial disparity in guilty pleas. If prosecutors offer less favorable plea offers to minority offenders in these cases, it should lead to greater disparity than in property or drug cases. Our results did not provide support for this hypothesis. In fact, the largest racial differences in pleading guilty tended to occur for less serious property crimes. One possible explanation for this finding is the "liberation hypothesis," which argues that because court actors have greater discretion in less serious cases, they are more likely to entail inequalities. Some prior sentencing research, for example, finds that race has a significant effect on incarceration, but only for less serious crimes (Spohn & Cederblom, 1991), suggesting that greater decision-making latitude on the part of court actors in less serious cases can lead to greater disparities in punishment. It is possible that a similar process is occurring for prosecutors during plea negotiations, although clearly future research is needed to investigate and validate this possibility.

In addition to racial disparities, which were the main focus of our analysis, we also highlight several other interesting findings that emerged from our study. Regarding age, we found that older defendants were less likely to plead guilty compared with younger defendants. In particular, defendants younger than the age of 25 years were the most likely to plead guilty. One plausible explanation for this is that defendant age is positively related to criminal history, and first and second time offenders are more likely to receive noncustodial plea offers, which may provide greater incentive to plead guilty. 16 It is also interesting to note that we find no evidence of significant gender disparities in guilty pleas in any of our statistical models. If the driving force behind racial differences in guilty pleas is racial stereotypes or implicit bias on the part of prosecutors (R. J. Smith & Levinson, 2011), it is surprising that similar differences do not emerge for gender, especially given the fact that research often reports larger effects for gender than race in studies of prosecution and punishment (Shermer & Johnson, 2010; Ulmer, 2012). This could suggest an especially important role for defendant agency in the plea bargaining process—if racial differences in perceived trust and legitimacy result in defendants of color being less willing to enter into plea negotiations that would largely account for our pattern of findings, although additional future work will be needed to test this explanation more directly.

Future research is also needed to better address a number of limitations in this study. First, the MSCCSP data do not contain information on pretrial detention. Prior research has found racial disparities in pretrial detention decisions (Demuth, 2003; Schlesinger, 2005) and detention status may be related to the decision to plead guilty (Dobbie, Goldin, & Yang, 2018; Kellough & Wortley, 2002; Metcalfe & Chiricos, 2018). However, any impact of pretrial detention is likely to downwardly bias our estimates of racial disparity in plea/trial differences as minority defendants generally have a greater likelihood of being detained, which should increase their likelihood of accepting a guilty plea. As Kellough and Wortley (2002) note, "detention of accused persons is a rather important resource that the prosecution uses to encourage (or coerce) guilty pleas" (p. 186). Thus, although it is unlikely that the inclusion of pretrial detention would substantively alter our conclusions, future research should continue to investigate racial disparities in guilty pleas with alternative data sources that contain detailed information on pretrial detention status.

Other potential omitted variables should also be incorporated into future work. For example, a defendant's educational attainment, employment status, and drug or alcohol addiction could all impact the likelihood of a guilty plea. Education and employment may be related to the quality of counsel and could indirectly shape guilty plea decisions through stronger bonds to social institutions. Drug and alcohol addiction may result in additional guilty plea options, such as pretrial diversion programs or intermediate punishments like drug courts or treatment programs that can be used as incentives to encourage guilty pleas. Accounting for these types of additional plea options is especially important in the context of racial disparities because defendants may vary in their perceived severity of different plea options (Wood & May, 2003). Finally, although the structure of the Maryland sentencing system provides a unique opportunity to study the guilty plea process, it may also restrict the generalizability of

the findings. Maryland has a voluntary guidelines system, and it is unclear how the results would generalize to jurisdictions with more mandatory sentencing guidelines. Moreover, nearly two-thirds of convicted defendants in Maryland are African American, so racial disparities in guilty plea processes may also differ in other states. Future research should investigate racial disparities in plea processes across jurisdictions with different sentencing systems and racial compositions.

We conclude by suggesting some additional future research initiatives that could significantly advance our understanding of the guilty plea process. First, researchers need to begin to tease out the complementary processes involved in the quality of plea bargains offered by the prosecution and in the role that offender agency plays in selecting a jury trial. Some work emphasizes how offenders play an important role in the determination of their own case outcomes. For instance, research suggests that Blacks are less likely to be sentenced to alternative sanctions, in part, because they tend to view these types of sanctions as less desirable (Johnson & DiPietro, 2012; Wood & May, 2003). It is likely that offender agency plays a major role in the plea bargaining process and the decision to pursue a trial. Improved data are needed on the quality of initial plea offers, how they change over the course of the negotiation process, and on defendant decisions to accept or reject offers at different stages of the plea bargaining process. It will be imperative for future research to collect these types of detailed data on the intermediate stages of the plea bargaining process to better explain the relative contributions of prosecutorial bias and defendant agency in observed patterns of guilty plea disparities.

Further research is also needed that better investigates the degree to which implicit racial biases enter into the plea bargaining process and contribute to racial disparities. Although scholars often contend that implicit associations influence plea bargaining (e.g., R. J. Smith & Levinson, 2011), few empirical investigations have been undertaken, so we know relatively little about these subtle but important influences. Prior work conducted with judges could serve as a valuable example of the type of future work that could be done on guilty pleas (Rachlinski, 2009). If plea negotiations are in fact influenced by implicit bias and race-based stereotypes, then they may unintentionally contribute to racial differences in the likelihood of entering a guilty plea.

Finally, additional qualitative research is also needed on prosecutorial rationales behind the plea offers they make. In particular, more work collecting quality measures that tap into the strength of the prosecutor's case against the defendant is an important area for future research. What we can conclude from the current work is that Black and Latino defendants are consistently less likely to plead guilty relative to Whites, and that they are especially unlikely to enter into nonnegotiated guilty pleas where they must throw themselves on the mercy of the court. What is needed next is more detailed information on the theoretical explanations that underlie stark racial differences in the likelihood of pleading guilty in American criminal courts. As Baumer (2013, p. 13) recently noted, "We do not have good national-level data on the probability that arrested persons are prosecuted or that prosecuted persons are convicted," and this needs to be a clear priority for future research on race, guilty pleas, and the study of inequality in criminal punishment.

AppendixThe Effect of Mode of Conviction on Sentencing

Table A1. The Effect of the Type of Disposition on Incarceration and Sentence Length.

		Model I Incarceration	Model 2 Ln sentence length			
Variable	ь	SE	Odds	ь	SE	
Intercept	0.98	0.19	***	1.70	0.07***	
ABA plea	-1.08	0.10	0.34***	-0.41	0.03***	
Non-ABA plea	-1.03	0.10	0.36***	-0.51	0.03***	
Plea with no agreement	-0.92	0.10	0.40***	-0.47	0.03***	
Black	0.01	0.04	1.01	0.02	0.02	
Latino	0.19	0.08	1.21*	0.14	0.04***	
Other race	-0.37	0.14	0.70**	0.05	0.08	
Male	0.36	0.05	1.43***	0.15	0.03***	
Age						
25-34 years	-0.22	0.04	0.80***	0.04	0.02**	
35-44 years	-0.44	0.05	0.64***	0.05	0.02***	
45-54 years	-0.78	0.06	0.46***	0.03	0.03*	
>55 years	-0.83	0.08	0.44***	-0.01	0.04	
Attorney						
Public	0.03	0.03	1.03	0.04	0.02**	
Unknown	0.09	0.08	1.09	-0.09	0.04*	
Mandatory minimum	1.69	0.17	5.43***	0.38	0.03***	
Presumptive sentence	0.11	0.01	1.12***	_	_	
Ln presumptive sentence	_			1.11	0.01***	
Offender score	0.26	0.01	1.29***	0.00	0.00	
Criminal charges	0.54	0.03	1.72***	0.05	0.02***	
Person offense	0.21	0.04	1.23***	0.14	0.02***	
Drug offense	-0.51	0.04	0.60***	-0.07	0.02***	
Year fixed effects	_			_	_	
County fixed effects	_	_		_	_	
Pseudo R ²		.242		.6	548	
n		24,854		13	,890	

Note. References = trial, White, age: <25 years, attorney: private, property offense. ABA = American Bar Association.

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.

 $^{^{\}dagger}p < .10. *p < .05. **p < .01. ***p < .001.$

Funding

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

ORCID iD

Alexander Testa https://orcid.org/0000-0002-8686-9115

Notes

- Notably, the American Bar Association (ABA) launched an "Implicit Bias Initiative" to combat implicit bias in the justice system and, in 2016, the U.S. Department of Justice put forth a requirement for prosecutors to receive implicit bias training (American Bar Association, 2016; U.S. Department of Justice, 2016).
- 2. The original data file includes cases on 31,668 offenders but we omit cases included in the data for sentencing reconsideration, sentencing review, and probation revocations. Reconsideration allows for a new hearing of a previously imposed sentence for a crime of violence defined in CR, §14-101. Review provides a panel review of a previously imposed sentence pursuant to CP, §8-105. Probation revocation considers violation of previously imposed terms of probation. This resulted in a removal of 32 cases under "reconsideration," six cases under review, and two probation revocation hearings, as well as 4,331 cases with missing information on the type of case disposition.
- 3. Supplemental analyses were performed to investigate the possible effects of missing data in our analysis. Defendants missing information on mode of conviction were more likely to be White, female, represent themselves, have a shorter recommended sentence length, and be property offenders. To address this issue, all analyses were replicated using multiple imputation procedures. The results from those alternative models (available upon request) produce identical patterns of findings and result in substantively equivalent conclusions. Because missing data rates also varied by county, we performed additional sensitivity analyses in which we reestimated our models after restricting the sample to jurisdictions with less than 5% or 10% of missing data and those results were also consistently similar to the reported analysis.
- 4. Some research using Maryland Sentencing data restricts the sampling frame to single-count cases (Bushway, Owens, & Piehl, 2012; Bushway & Piehl, 2001; Souryal & Wellford, 1997). Single-count cases are those in which the defendant has one convicted offense in which the judge must impose a sentence. Single-count cases make up approximately 55% of the data. Supplemental analysis restricting the sample to single-count cases also revealed substantially similar findings to the analysis for all cases. These results are also available upon request.
- 5. Although there are also two types of trials, bench trial and jury trials, these are combined into a single trial category because bench trials are extremely rare in the data (only 1% of all criminal cases in Maryland).
- 6. Other race includes Asian, Native Hawaiian/Pacific Islander, American Indian/Alaskan Native, Other.
- 7. The other/unknown category is comprised of respondents who had appointed counsel (1.1%), self-representation (0.05%), and attorney information was missing (2.1%).
- Consistent with the procedure used by the Maryland State Commission on Criminal Sentencing Policy (2016), for cases involving multiple offenses, the controlling offense is determined by the most serious offense.

- 9. Given the infrequency of convictions via trial, we also performed a sensitivity analysis using a rare event logistic regression (see G. King & Zeng, 2001). The results of this analysis provided substantively similar results compared with the analysis using the standard logistic regression model. These results are available upon request.
- 10. An investigation of variance inflation factors (VIFs) revealed no issues with multicollinearity, as all VIF values were below 2 (Allison, 2012).
- 11. We also examined multinomial models that included trial cases, using trial as the reference group. The results indicate that racial and ethnic minorities are less likely to accept each type of plea relative to going to trial. However, the disparity between minority defendants and White defendants is largest for nonnegotiated pleas and smallest among ABA pleas. These additional models are available by request but are not reported here because our core theoretical questions deal with differences between types of guilty pleas.
- 12. Supplemental models also examined whether attorney type might interact with the race of the defendant to influence guilty pleas. Coefficients for Black × Private Attorney and Latino × Private Attorney were consistently positive but not statistically significant across types of guilty pleas. Moreover, the inclusion of the interaction term did not alter the direction or statistical significance of other variables included in the model.
- 13. Similarly, in a separate analysis, we find no significant interaction effects for age, race, and gender across the multinomial comparisons for each individual type of guilty plea when using trials as the base outcome.
- 14. Baltimore City makes up approximately 30% of cases in the analytic sample and is, in many ways, a unique jurisdiction in Maryland. To assess whether cases from Baltimore city disproportionately impact the results, we reestimated all models excluding this jurisdiction. The results of these supplemental models remain substantively similar to the reported results in both direction and magnitude and are available upon request.
- 15. We also examined the interaction between defendant race and guilty pleas on sentencing outcomes. The results did not show a significant interaction effect for the likelihood of incarceration, but Blacks and the "Other" race group both had significant negative interaction effects for the effect of guilty pleas on sentence lengths. This indicates that even though guilty pleas are less common among minority defendants, the decision to plead guilty can yield especially strong benefits in terms of their reductions in sentence lengths.
- 16. A subsequent analysis included an interaction term between age (below 30 years) and criminal history. The results demonstrated a negative and statistically significant interaction effect (odds ratio = 0.91, p < .001) on the likelihood of pleading guilty.

References

- Albonetti, C. A. (1990). Race and the probability of pleading guilty. *Journal of Quantitative Criminology*, 6, 315-334.
- Albonetti, C. A. (1991). An integration of theories to explain judicial discretion. *Social Problems*, 38, 247-266.
- Albonetti, C. A. (1992). Charge reduction: An analysis of prosecutorial discretion in burglary and robbery cases. *Journal of Quantitative Criminology*, *8*, 317-333.
- Allison, P. (2012). When can you safely ignore multicollinearity. *Statistical Horizons*, 5. Retrieved from https://statisticalhorizons.com/multicollinearity
- Alschuler, A. W. (1968). The prosecutor's role in plea bargaining. *The University of Chicago Law Review*, 36, 50-112.

Alschuler, A. W. (1976). The trial judge's role in plea bargaining, Part I. *Columbia Law Review*, 76, 1059-1154.

- Alschuler, A. W. (1978). Sentencing reform and prosecutorial power: A critique of recent proposals for "fixed" and "presumptive" sentencing. *University of Pennsylvania Law Review*, 126, 550-577.
- Alschuler, A. W. (1979). Plea bargaining and its history. Columbia Law Review, 79, 1-43.
- Alvarez, A., & Bachman, R. (1996). American Indians and sentencing disparity: An Arizona test. *Journal of Criminal Justice*, 24, 549-561.
- American Bar Association. (2016). *Implicit bias initiative*. Chicago, IL: Author. Retrieved from https://www.americanbar.org/groups/litigation/initiatives/task-force-implicit-bias.html
- Baumer, E. P. (2013). Reassessing and redirecting research on race and sentencing. Justice Quarterly, 30, 231-261.
- Bibas, S. (2001). Judicial fact-finding and sentence enhancements in a world of guilty pleas. *The Yale Law Journal*, 110, 1097-1185.
- Bobo, L. D., & Thompson, V. (2006). Unfair by design: The war on drugs, race, and the legitimacy of the criminal justice system. *Social Research*, 73, 445-472.
- Bridges, G. S., & Steen, S. (1998). Racial disparities in official assessments of juvenile offenders: Attributional stereotypes as mediating mechanisms. *American Sociological Review*, 63, 554-570.
- Bushway, S. D., Owens, E. G., & Piehl, A. M. (2012). Sentencing guidelines and judicial discretion: Quasi-experimental evidence from human calculation errors. *Journal of Empirical Legal Studies*, 9, 291-319.
- Bushway, S. D., & Piehl, A. M. (2001). Judging judicial discretion: Legal factors and racial discrimination in sentencing. *Law & Society Review*, *35*, 733-764.
- Bushway, S. D., Redlich, A. D., & Norris, R. J. (2014). An explicit test of the plea bargaining in the "shadow of the trial." *Criminology*, 52, 723-754.
- Chambliss, W. J., & Seidman, R. B. (1971). *Law, order, and power*. Reading, MA: Addison-Wesley.
- Chiricos, T., & Eschholz, S. (2002). The racial and ethnic typification of crime and the criminal typification of race and ethnicity in local television news. *Journal of Research in Crime & Delinquency*, 39, 400-420.
- Demuth, S. (2003). Racial and ethnic differences in pretrial release decisions and outcomes: A comparison of Hispanic, black, and white felony arrestees. *Criminology*, 41, 873-908.
- Dixon, J. (1995). The organizational context of criminal sentencing. American Journal of Sociology, 100, 1157-1198.
- Dobbie, W., Goldin, J., & Yang, C. S. (2018). The effects of pretrial detention on conviction, future crime, and employment: Evidence from randomly assigned judges. *The American Economic Review*, 108, 201-240.
- Edkins, V. A. (2011). Defense attorney plea recommendations and client race: Does zealous representation apply equally to all? *Law and Human Behavior*, *35*, 413-425.
- Eisenstein, J., Flemming, R. B., & Nardulli, P. F. (1988). *The contours of justice: Communities and their courts*. Boston, MA: Little, Brown.
- Flemming, R., Nardulli, P., & Eisenstein, J. (1992). *The craft of justice: Politics and work in criminal court communities*. Philadelphia: University of Pennsylvania Press.
- Franklin, T. W. (2013). Sentencing native Americans in US federal courts: An examination of disparity. *Justice Quarterly*, 30, 310-339.

- Frenzel, E. D., & Ball, J. D. (2008). Effects of individual characteristics on plea negotiations under sentencing guidelines. *Journal of Ethnicity in Criminal Justice*, 5, 59-82.
- Gallup. (2013). Gulf grows in black-white views of U.S. justice system bias. Washington, DC: Author.
- Hagan, J., & Albonetti, C. (1982). Race, class, and the perception of criminal injustice in America. American Journal of Sociology, 88, 329-355.
- Helms, R., & Jacobs, D. (2002). The political context of sentencing: An analysis of community and individual determinants. *Social Forces*, 81, 577-604.
- Hurwitz, J., & Peffley, M. (1997). Public perceptions of race and crime: The role of racial stereotypes. *American Journal of Political Science*, 41, 375-401.
- Johnson, B. D. (2003). Racial and ethnic disparities in sentencing departures across modes of conviction. Criminology, 41, 449-490.
- Johnson, B. D. (2019). Trials and tribulations: The trial tax and the process of punishment. *Crime and Justice*. Advance online publication. doi:10.1086/701713
- Johnson, B. D., & Betsinger, S. (2009). Punishing the "model minority": Asian-American criminal sentencing outcomes in federal district courts. *Criminology*, 47, 1045-1090.
- Johnson, B. D., & DiPietro, S. M. (2012). The power of diversion: Intermediate sanctions and sentencing disparity under presumptive guidelines. *Criminology*, 50, 811-850.
- Johnson, B. D., & King, R. D. (2017). Facial profiling: Race, physical appearance, and punishment. *Criminology*, 55, 520-547.
- Johnson, B. D., King, R. D., & Spohn, C. (2016). Sociolegal approaches to the study of guilty pleas and prosecution. *Annual Review of Law and Social Science*, 12, 479-495.
- Kellough, G., & Wortley, S. (2002). Remand for plea: Bail decisions and plea bargaining as commensurate decisions. *The British Journal of Criminology*, 42, 186-210.
- King, G., & Zeng, L. (2001). Logistic regression in rare events data. *Political Analysis*, 9, 137-163.
- King, N. J., Soule, D. A., Steen, S., & Weidner, R. R. (2005). When process affects punishment: Differences in sentences after guilty plea, bench trial, and jury trial in five guidelines states. Columbia Law Review, 105, 959-1009.
- Kramer, J. H., & Ulmer, J. T. (2009). Sentencing guidelines: Lessons from Pennsylvania. Boulder, CO: Lynne Rienner.
- Kurlychek, M. C., & Johnson, B. D. (2010). Juvenility and punishment: Sentencing juveniles in adult criminal court. Criminology, 48, 725-758.
- Kutateladze, B. L., Andiloro, N. R., & Johnson, B. D. (2016). Opening Pandora's box: How does defendant race influence plea bargaining? *Justice Quarterly*, 33, 398-426.
- Kutateladze, B. L., Andiloro, N. R., Johnson, B. D., & Spohn, C. C. (2014). Cumulative disadvantage: Examining racial and ethnic disparity in prosecution and sentencing. *Criminology*, 52, 514-551.
- Kutateladze, B. L., & Lawson, V. Z. (2018). Is a plea really a bargain? An analysis of plea and trial dispositions in New York City. *Crime & Delinquency*, 64, 856-887.
- LaFree, G. D. (1980). Variables affecting guilty pleas and convictions in rape cases: Toward a social theory of rape processing. *Social Forces*, 58, 833-850.
- Maryland State Commission on Criminal Sentencing Policy. (2016). 2015 annual report. College Park, MD: Author.
- McCall, L. (2005). The complexity of intersectionality. Signs, 30, 1771-1800.
- McDonald, W. F. (1979). The prosecutor's domain. In W. F. McDonald (Ed.), *The prosecutor* (pp. 15-51). Beverly Hills, CA: Sage.

Metcalfe, C., & Chiricos, T. (2018). Race, plea, and charge reduction: An assessment of racial disparities in the plea process. *Justice Quarterly*, *35*, 223-253.

- Meyer, J. A., & Gray, T. (1997). Drunk drivers in the courts: Legal and extra-legal factors affecting pleas and sentences. *Journal of Criminal Justice*, 25, 155-163.
- Miethe, T. (1987). Charging and plea bargaining practices under determinate sentencing: An investigation of the hydraulic displacement of discretion. *The Journal of Criminal Law and Criminology*, 78, 155-176.
- Missouri v. Frye, 132 S. Ct. U.S. 134 (2012).
- Mitchell, O. (2005). A meta-analysis of race and sentencing research: Explaining the inconsistencies. *Journal of Quantitative Criminology*, 21, 439-466.
- National Association of Criminal Defense Lawyers. (2018). The trial penalty: The sixth amendment right to trial on the verge of extinction and how to save it. Washington, DC: Author.
- Padgett, J. F. (1985). The emergent organization of plea bargaining. American Journal of Sociology, 90, 753-800.
- Paternoster, R., Brame, R., Mazerolle, P., & Piquero, A. (1998). Using the correct statistical test for the equality of regression coefficients. *Criminology*, *36*, 859-866.
- Peffley, M., & Hurwitz, J. (2010). *Justice in America: The separate realities of Blacks and Whites*. Cambridge, UK: Cambridge University Press.
- Petersilia, J. (1983). *Racial disparities in the criminal justice system*. Santa Monica, CA: RAND Corporation.
- Piehl, A. M., & Bushway, S. D. (2007). Measuring and explaining charge bargaining. *Journal of Quantitative Criminology*, 23, 105-125.
- Rachlinski, J. J. (2009). Why heightened pleading—Why now. Penn State Law Review, 114, 1247-1256.
- Rasmusen, E., Raghav, M., & Ramseyer, M. (2009). Convictions versus conviction rates: The prosecutor's choice. *American Law and Economics Review*, 11, 47-78.
- Reaves, B. A. (2013). Felony defendants in large urban counties, 2009. Washington, DC: Bureau of Justice Statistics, U.S. Department of Justice.
- Reitler, A. K., Sullivan, C. J., & Frank, J. (2013). The effects of legal and extralegal factors on detention decisions in US district courts. *Justice Quarterly*, 30, 340-368.
- Schlesinger, T. (2005). Racial and ethnic disparity in pretrial criminal processing. *Justice Quarterly*, 22, 170-192.
- Schulhofer, S. J., & Nagel, I. H. (1997). Plea negotiations under the federal sentencing guidelines: Guideline circumvention and its dynamics in the post-Mistretta period. *Northwestern University Law Review*, 91, 1284-1684.
- Shermer, L. O. N., & Johnson, B. D. (2010). Criminal prosecutions: Examining prosecutorial discretion and charge reductions in U.S. federal district courts. *Justice Quarterly*, 27, 394-430.
- Smith, B. P. (2005). Plea bargaining and the eclipse of the jury. *Annual Review of Law and Social Science*, 1, 131-149.
- Smith, R. J., & Levinson, J. D. (2011). The impact of implicit racial bias on the exercise of prosecutorial discretion. Seattle University Law Review, 35, 795-826.
- Souryal, C., & Wellford, C. (1997). An examination of unwarranted sentencing disparity under Maryland's voluntary sentencing guidelines. College Park: Maryland State Commission on Criminal Sentencing Policy.
- Spohn, C. (2009). How do judges decide? The search for fairness and justice in punishment. Thousand Oaks, CA: Sage.

- Spohn, C., & Cederblom, J. (1991). Race and disparities in sentencing: A test of the liberation hypothesis. *Justice Quarterly*, 8, 305-327.
- Spohn, C., & Holleran, D. (2000). The imprisonment penalty paid by young, unemployed black and Hispanic male offenders. *Criminology*, 38, 281-306.
- Steen, S., Engen, R. L., & Gainey, R. R. (2005). Images of danger and culpability: Racial stereotyping, case processing, and criminal sentencing. *Criminology*, 43, 435-468.
- Steffensmeier, D., & Demuth, S. (2000). Ethnicity and sentencing outcomes in U.S. federal courts: Who is punished more harshly? *American Sociological Review*, 65, 705-729.
- Steffensmeier, D., Kramer, J., & Ulmer, J. (1995). Age differences in sentencing. *Justice Ouarterly*, 12, 583-602.
- Steffensmeier, D., Painter-Davis, N., & Ulmer, J. (2017). Intersectionality of race, ethnicity, gender, and age on criminal punishment. *Sociological Perspectives*, 60, 810-833.
- Steffensmeier, D., Ulmer, J., & Kramer, J. (1998). The interaction of race, gender, and age in criminal sentencing: The punishment cost of being young, black, and male. *Criminology*, *36*, 763-798.
- Sudnow, D. (1965). Normal crimes: Sociological features of the penal code in a public defender office. Social Problems, 12, 255-276.
- Sutton, J. R. (2013). Structural bias in the sentencing of felony defendants. *Social Science Research*, 42, 1207-1221.
- Ulmer, J. T. (2012). Recent developments and new directions in sentencing research. *Justice Quarterly*, 29, 1-40.
- Ulmer, J. T., & Bradley, M. S. (2006). Variation in trial penalties among serious violent offenses. Criminology, 44, 631-670.
- Ulmer, J. T., Eisenstein, J., & Johnson, B. D. (2010). Trial penalties in federal sentencing: Extra-guidelines factors and district variation. *Justice Quarterly*, 27, 560-592.
- Ulmer, J. T., & Johnson, B. (2004). Sentencing in context: A multilevel analysis. *Criminology*, 42, 137-178.
- Ulmer, J. T., Kurlychek, M. C., & Kramer, J. H. (2007). Prosecutorial discretion and the imposition of mandatory minimum sentences. *Journal of Research in Crime and Delinquency*, 44, 427-458.
- Ulmer, J. T., Painter-Davis, N., & Tinik, L. (2016). Disproportional imprisonment of Black and Hispanic males: Sentencing discretion, processing outcomes, and policy structures. *Justice Quarterly*, 33, 642-681.
- U.S. Department of Justice. (2016). Department of justice announces new department-wide implicit bias training for personnel. Washington, DC: Author.
- Weatherspoon, F. D. (1998). *African-American males and the law: Cases and materials*. Lanham, MD: University Press of America.
- Welch, S., Spohn, C., & Gruhl, J. (1985). Convicting and sentencing differences among black, Hispanic, and white males in six localities. *Justice Quarterly*, 2(1), 67-80.
- Wood, P. B., & May, D. C. (2003). Racial differences in perceptions of the severity of sanctions: A comparison of prison with alternatives. *Justice Quarterly*, 20, 605-631.
- Wooldredge, J., Frank, J., Goulette, N., & Travis, L. (2015). Is the impact of cumulative disadvantage on sentencing greater for Black defendants? *Criminology & Public Policy*, 14, 187-223.

Author Biographies

Alexander Testa is an assistant professor in the Department of Criminal Justice at the University of Texas at San Antonio. His research interests include the consequences of criminal justice contact across the life course, criminal justice decision-making, cross-national criminology, and criminal justice policy.

Brian D. Johnson is a professor of criminology and criminal justice at the University of Maryland, College Park. His areas of expertise involve social inequality in the justice system, with a particular focus on racial disparities in criminal case processing and sentencing. Much of his research examines contextual influences in punishment, as well as the use of advanced statistical modeling techniques to study the criminal process. He is the recipient of the 2008 American Society of Criminology Ruth Shonle Cavan Young Scholar Award and the 2011 American Society of Criminology, Division on Corrections and Sentencing New Scholar Award.