AJPN FOCUS

RESEARCH ARTICLE

Cohort Study of Downgraded Misdemeanor Convictions and Subsequent Violent Crime: Differences by Defendant Race and Ethnicity



Julia P. Schleimer, MPH,^{1,2} Miriam J. Haviland, PhD, MSPH,² Amy Gallagher, MPH,² Ayah Mustafa, BS,² Rachel Ross, MPH,² Garen Wintemute, MD, MPH,^{3,4} Deirdre Bowen, JD, PhD,^{2,5} Ali Rowhani-Rahbar, MD, PhD, MPH^{1,2}

Introduction: Criminal convictions may be imperfect markers of criminalized behavior, in part because of criminal legal system processes (e.g., plea bargaining). In this retrospective cohort study of individuals convicted of misdemeanors, authors compared the risk of subsequent criminal charges for a violent crime among those initially charged with a felony with that among those initially charged with only misdemeanors, overall and by defendant race and ethnicity.

Methods: The study population included individuals aged ≥ 18 years who were convicted of a misdemeanor in Washington Superior Courts from January 1, 2015 to December 31, 2019. Those with and without initial felony charges were age/gender matched in a 4:1 ratio. The primary outcome was the first subsequent violent crime charge in Washington Superior Courts through December 31, 2020. Data were analyzed with Fine–Gray hazard models from June 2022 to November 2023.

Results: There were 3,841 individuals with initial felony charges and 956 with initial misdemeanor charges only. Median follow-up was 2.4 years for both groups. During follow-up, there were 166 new violent crime charges. In multivariable models, White defendants with initial felony charges had a greater risk of subsequent violent crime charges (subdistribution hazard ratio=2.58; 95% CI=1.24, 5.36) than White defendants with initial misdemeanor charges only. Among Black and Hispanic/Lat-inx defendants, initial felony versus misdemeanor charges were not associated with subsequent violent crime charges (subdistribution hazard ratio=0.93; 95% CI=0.44, 1.97 among Black defendants; subdistribution hazard ratio=0.49; 95% CI=0.15, 1.57 among Hispanic/Latinx defendants).

Conclusions: Findings suggest differential associations between downgrading of felony charges to misdemeanor convictions and future violent crime charges by defendant race and ethnicity, with implications for inequitable collateral consequences of criminal convictions.

AJPM Focus 2024;3(3):100206. © 2024 The Author(s). Published by Elsevier Inc. on behalf of The American Journal of Preventive Medicine Board of Governors. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

2773-0654/\$36.00

https://doi.org/10.1016/j.focus.2024.100206

© 2024 The Author(s). Published by Elsevier Inc. on behalf of The American Journal of Preventive Medicine Board of Governors.

This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

From the ¹Department of Epidemiology, School of Public Health, University of Washington, Seattle, Washington; ²Firearm Injury & Policy Research Program, University of Washington, Seattle, Washington; ³California Firearm Violence Research Center, University of California, Davis, Sacramento, California; ⁴Violence Prevention Research Program, Department of Emergency Medicine, University of California, Davis, Sacramento, California; and ⁵School of Law, Seattle University, Seattle, Washington

Address correspondence to: Julia P. Schleimer, MPH, Department of Epidemiology, University of Washington, 3980 15th Avenue Northeast, Seattle WA 98195. E-mail: jps36@uw.edu.

INTRODUCTION

In 2021, there were 4.6 million nonfatal violent victimizations and 26,031 homicides in the U.S.^{1,2} These events have wide-ranging consequences, and preventing them is a public health priority.³

Criminal convictions may prevent violent crime through deterrence (threat of punishment),⁴ incapacitation (incarceration),⁴ or tailored interventions among those with criminal histories (e.g., criminal history –based firearm prohibitions).^{5,6} The justness of criminal convictions and their effectiveness in crime prevention rest on them being accurate and fair markers of criminalized behavior. However, owing to factors within and outside of the criminal legal system—including social, political, educational, and legal system policies; police deployment; access to attorneys; pretrial detention; and interpersonal bias—criminal convictions may be imperfect markers of criminalized behavior.

It may be possible to gain insight into the differences between criminal convictions and actual criminalized behavior by comparing defendants' initial charges with their final convictions. Differences in level, type, or severity of initial charges and final convictions could arise in part through police and prosecutor discretion, judge and jury decision making, strength of the case, or plea bargaining, that is, when defendants plead guilty to lower-level crimes in exchange for a lesser sentence.⁷ For example, some suggest that plea bargaining reflects leniency and that defendants receive less severe convictions and sentences than they otherwise would at trial.^{8,9} In that case, convictions may understate the severity of defendants' behavior. Others suggest that plea bargaining is punitive and that prosecutors inflate initial charges to induce guilty pleas, including when defendants are innocent.^{10,11} If so, the initial charge and conviction may overstate the severity of the defendants' behavior.^{10,12–14} Nationally, most convictions (60-90%) are resolved through plea bargains.^{15–18}

Evidence suggests racial disparities in plea bargaining processes, with White defendants receiving more leniency than defendants of color.^{17,19–22} For example, a study in Dane County, Wisconsin, from 1999 to 2006 found that White defendants had initial charges downgraded more often than similarly situated Black defendants, resulting in White defendants with felony charges being more likely than Black defendants with felony charges to be offered a plea deal with a final charge and conviction at the misdemeanor level.²⁰ Racial disparities in plea bargaining are one element of widespread racial disparities in the criminal legal system, particularly for Black communities,^{23–25} which reflect the legacy and continuation of racial oppression in social, political, economic, educational, and legal

systems along with institutional policies about police deployment, access to attorneys, pretrial detention, and interpersonal racism on the part of police officers, prosecutors, and judges.^{24,26}

Prior research has described the process and frequency of downgraded convictions (through plea offers and trials) and their association with sentencing, including by race and ethnicity.^{7,20,27-30} The authors of this study sought to extend this literature by examining the association of downgraded misdemeanor convictions and subsequent violent crime charges in Washington state, overall and by defendant race and ethnicity. Specifically, the authors compared the risk of subsequent violent crime charges between 2 groups of people: one group was initially charged with a felony and ultimately convicted at the misdemeanor level (downgraded), and the other group was initially charged with a misdemeanor and ultimately convicted at the misdemeanor level (nondowngraded). The authors focused on felonyto-misdemeanor downgrading for 3 reasons: misdemeanors constitute 80% of state criminal cases, prior research suggests greater racial disparities for misdemeanors and lower-level felonies than for higher-level felonies, and important differences exist in collateral consequences between felony and misdemeanor convictions (e.g., for voting rights, job opportunities, and firearm ownership).^{12,20,31–33}

The authors examined variation in the association between downgrading and subsequent violent crime charges by defendant race and ethnicity because of prior evidence of disparities in the criminal legal system,^{23,25} including research suggesting that people of color more often receive less favorable plea offers and that White people more often receive more favorable plea offers.^{20,34-37} Thus, it might be expected that White people with felony charges reduced to a misdemeanor conviction (downgraded) would have a greater risk of future violence than White people who were initially charged with and convicted of a misdemeanor (nondowngraded). Alternatively, people of color initially charged with a felony but convicted of a misdemeanor (downgraded) may have a risk of future violence similar to people of color charged with and convicted of a misdemeanor (nondowngraded). By comparing downgraded with nondowngraded misdemeanor convictions among defendants of the same race and ethnicity, this study controls for differences in propensity for criminal legal involvement (e.g., police surveillance, arrest) that may strongly confound comparisons across racial and ethnic groups.

This study will contribute to the understanding of racial and ethnic differences in the criminal legal system and the potential collateral consequences of criminal convictions. For example, in Washington, individuals convicted of felonies are prohibited from accessing firearms, but those convicted of misdemeanors are generally not prohibited (with some exceptions);³⁸ this means that those with downgraded convictions move from a prohibited group to a nonprohibited group. Likewise, individuals with violent misdemeanor convictions are prohibited in states with a violent misdemeanor firearm prohibition but are not prohibited in states without such a policy (including Washington).³⁹ Given implications for violent misdemeanor prohibitions, this study also examined the association of downgrading and subsequent violent crime charges among those whose misdemeanor conviction was for a violent crime. As debates continue about whether to strengthen or loosen firearm prohibitions on the basis of criminal history and the role of plea bargaining in firearm violence prevention,^{40–43} this study will add evidence on the nexus of racial equity and criminal history-based firearm prohibitions.

METHODS

Study Population

This was a retrospective cohort study of individuals convicted of misdemeanors in Washington State Superior Courts. The authors obtained data on all individuals aged \geq 18 years convicted of a misdemeanor in Washington Superior Courts, January 1, 2015–December 31, 2019, from Washington Administrative Offices of the Courts and King County Department of Judicial Administration.

Individuals' index conviction was their first case during the study with only misdemeanor convictions. The authors generated a propensity score predicting downgraded convictions (i.e., initial felony versus misdemeanor charge) on the basis of defendant gender (man, woman) and age (years), implementing a nearest-neighbor algorithm and matching individuals with and without downgraded convictions in a 4:1 ratio. The authors sampled because each case required manual review to determine firearm involvement as detailed in the section Defining Violent and Firearm-Related Crime.

Individuals were grouped by ethnicity—Hispanic/Latinx or non-Hispanic/Latinx—and, if non-Hispanic/Latinx, by race: American Indian or Alaskan Native, Asian, Black, multiracial, unknown, and White. Race and ethnicity were considered to reflect structural and interpersonal (dis)advantages created by socially constructed hierarchies. Race and ethnicity, age, and gender originated from charging documents.

Measures

The exposure was whether the index misdemeanor conviction was downgraded from initial felony charges or not. Those with any initial felony charges were compared with those with only initial misdemeanor charges. The authors lacked complete data on whether cases were resolved through plea or trial, but the sample of cases with case resolution (n=1,188, 25%) indicated that 99% of downgraded and nondowngraded convictions were resolved through plea, suggesting that the exposure reflected a specific type of plea offer (felony to misdemeanor).

The primary outcome was subsequent violent crime charge (referred to as violent crime in the remaining parts of this paper), defined as the first charge for a violent crime (misdemeanor or felony) in Washington Superior Courts after index conviction through December 31, 2020. Given the implications of downgrading for access to firearms, this study also measured whether subsequent violent charges were firearm related.

Index convictions were linked to outcome charges using deterministic and probabilistic linking on the basis of name and gender. As in prior research, \geq 99% match probability was considered as true matches.⁴⁴

The study controlled for defendant's age and gender and whether the index case was for a violent crime or was firearm related. Definitions for violent and firearmrelated crime are in the section Defining Violent and Firearm-Related Crime.

Defining Violent and Firearm-Related Crime. Violent is not an objective crime category.⁴⁵ Some prior studies used the Federal Bureau of Investigation's Uniform Crime Reporting (UCR) program⁴⁶ as a guide (considering only murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault as violent);⁴⁴ some used more expansive definitions, including threats and intimidation;⁴⁷ and some used multiple definitions.^{5,6}

In this study's primary analysis, violent crime outcomes were restricted to UCR crimes (referred to as restrictive in the remaining parts of this paper). To measure violent crime in the index case and violent crime outcomes in a supplementary analysis, this study used an expansive definition that included UCR crimes along with others (referred to as expansive in the remaining parts of this paper). This category aligned more closely with the WHO's definition of violence: "The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation."48 Additional details are in Appendix Table 1 (available online). Throughout the text, the term violent crime is used to refer to the restrictive definition, except when explicitly stated otherwise.

Washington criminal codes do not comprehensively identify firearm-involved violent crimes.⁴⁹ Therefore, for each case (index and outcome), the authors manually reviewed affidavits of probable cause—narrative offense descriptions written by law enforcement to justify an arrest—to identify firearm-related cases. The authors considered cases as firearm related if there was evidence that the defendant allegedly possessed or used a firearm during a crime, made firearm-related threats, or was in violation of firearm-related laws. Affidavits were unavailable for 155 cases; because cases may involve multiple charges, the authors used criminal codes to determine firearm-related cases when affidavits were missing. Appendix Table 2 (available online) describes the remaining missingness.

Statistical Analysis

The Fine-Gray method was used to estimate subdistribution hazard ratios for subsequent violent crime, following individuals from their index conviction until the outcome, incarceration, death, or study end (December 31, 2020), whichever occurred first. Death and incarceration were competing events. Death dates were ascertained from the Washington Department of Health (data were missing for the fourth quarter of 2020 because the Washington Department of Health stopped processing requests owing to the coronavirus disease 2019 [COVID-19] pandemic). Felony incarceration was determined with adult sentencing data provided by the Washington State Caseload Forecast Council. Individuals with felony sentences of any length were considered incarcerated from sentence date onward.

Models were estimated for the entire population and separately by defendant race and ethnicity. Owing to small sample sizes, race- and ethnicity-stratified estimates were only generated for Black, Hispanic/Latinx, and White defendants. Because of implications for violent misdemeanor firearm prohibitions, the authors also examined the association of downgraded convictions and subsequent violent crime charges among those whose index misdemeanor conviction was for a violent crime. For this, the expansive definition of violent crime was used because, by definition, no misdemeanor convictions were for murder, rape, robbery, or aggravated assault.

All models treated gender (man, woman) and age quartiles (18–27, 28–35, 36–46, 47–85 years) as strata and controlled for whether the index offense was firearm related (1.5% with missing data for this variable were excluded). Models not limited to those with violent index convictions additionally controlled for whether the index charge or conviction was violent.

In supplementary analyses, the expansive definition of violent crime was used for the outcome. Separately, time in jail was subtracted from the time at risk to account for time spent in jail for the index conviction or subsequent arrests/nonviolent misdemeanor convictions. Jail data included entry/release dates and were obtained from the Office of Financial Management and King County Department of Adult and Juvenile Corrections. The Office of Financial Management receives jail data from the Washington Statewide Jail Booking and Reporting System per Revised Code of Washington 70.48.100. Finally, the authors additionally adjusted for the number of charges in the index case and the year of the index conviction.

Analyses were done in R, Version 4.0.0 (R Foundation for Statistical Computing, Vienna, Austria), using the crrSC package (Version 4.1.2). The University of Washington IRB approved this study and waived informed consent. Data were analyzed June 2022–November 2023.

RESULTS

There were 3,841 individuals with a downgraded conviction and 956 individuals with a nondowngraded conviction. Owing to matching, gender and age distributions were similar (Table 1). Although the study did not match on race or ethnicity, these distributions were also similar. Overall, 2.5% were classified as American Indian or Alaskan Native (n=121), 3.7% as Asian (n=178), 15.2% as Black (n=727), 5.8% as Hispanic/Latinx (n=280), 0.1% as multiracial (n=7), 4.4% as unknown race or ethnicity (n=209), and 68.3% as White (n=3,275).

Over half of downgraded (n=2,006, 52.2%) and nondowngraded (n=539, 56.4%) index convictions were for violent crimes (Table 1). The cross-classification of violent index charges and convictions among defendants with downgraded convictions is in Appendix Table 3 (available online). In terms of competing events, <0.4% of each group died during follow-up, and approximately one quarter were incarcerated for a felony.

During follow-up, 3.6% (n=138) of those with downgraded convictions and 2.9% (n=28) of those with nondowngraded convictions were charged with a new violent crime (Table 1). Median (25th and 75th percentile) follow-up time was 2.4 (1.3 and 3.9) years for those with downgraded convictions and 2.4 (1.10 and 4.6) years for those with nondowngraded convictions.

In adjusted models, those with downgraded convictions had 1.42 times the hazard of subsequent violent crime charges as those with nondowngraded convictions

Table 1. Index and Outcome Cases Among Individuals Convicted of Misdemeanors in Washington State Superior Courts, Jan-
uary 1, 2015–December 31, 2019

Characteristic	Downgraded index conviction ^a (n=3,841) n (%)	Nondowngraded index conviction ^b (<i>n</i> =956) <i>n</i> (%)	Total (n=4,797) n (%)
Age, years			
Mean (SD)	36.77 (12.21)	36.95 (12.30)	36.81 (12.23)
Range	18.0-85.0	18.0-85.0	18.0-85.0
Gender			
Woman	574 (14.9%)	148 (15.5%)	722 (15.1%)
Man	3,267 (85.1%)	808 (84.5%)	4,075 (84.9%)
Race and ethnicity			
American Indian or Alaskan Native	97 (2.5%)	24 (2.5%)	121 (2.5%)
Asian	144 (3.7%)	34 (3.6%)	178 (3.7%)
Black	602 (15.7%)	125 (13.1%)	727 (15.2%)
Hispanic/Latinx	211 (5.5%)	69 (7.2%)	280 (5.8%)
Multiracial	7 (0.2%)	0 (0.0%)	7 (0.1%)
Unknown	166 (4.3%)	43 (4.5%)	209 (4.4%)
White	2,614 (68.1%)	661 (69.1%)	3,275 (68.3%)
Index case ^c			
Violent crime charge (restrictive) ^d	810 (21.1%)	0 (0.0%)	810 (16.9%)
Violent crime charge (expansive) ^e	2,189 (57.0%)	558 (58.4%)	2,747 (57.3%)
Violent crime conviction (expansive) ^e	2,009 (52.3%)	540 (56.5%)	2,549 (53.1%)
Firearm related ^f	287 (7.6%)	103 (11.1%)	390 (8.3%)
Outcome case ^g			
Violent crime charge (restrictive) ^d	138 (3.6%)	28 (2.9%)	166 (3.5%)
Firearm related ^h	16 (0.4%)	2 (0.2%)	18 (0.4%)
Violent crime charge (expansive) ^e	472 (12.3%)	129 (13.5%)	601 (12.5%)
Firearm related ⁱ	33 (0.9%)	15 (1.6%)	48 (1.0%)
Died during follow-up	13 (0.34%)	2 (0.21%)	15 (0.31%)
Felony sentence during follow-up	934 (24.3)	298 (31.2)	1,232 (25.7)

^aMisdemeanor conviction with initial felony charge.

^bMisdemeanor conviction with initial misdemeanor charges only.

^cFirst case during the study period that resulted in only misdemeanor convictions.

^dThe restrictive definition of violent crime includes criminal homicide, forcible rape, robbery, and aggravated assault. This definition was used for the outcome in the primary analyses.

^eThe expansive definition of violent crime includes criminal homicide, forcible rape, robbery, and aggravated assault along with other crimes, such as intimidation and harassment.

 $^{
m f}$ A total of 74 cases missing (43 among those with downgraded convictions and 31 among those without).

^gFirst subsequent violent crime charge of each type during follow-up through December 31, 2020, prior to competing events.

^hA total of 18 cases missing (15 among those with downgraded convictions and 3 among those without).

¹A total of 73 cases missing (67 among those with downgraded convictions and 6 among those without).

(95% CI=0.94, 2.16) (Figure 1A and Appendix Table 4, available online). When stratified by race and ethnicity, associations varied in magnitude and direction. White defendants with downgraded convictions had 2.58 times the hazard of future violent crime charge as White defendants with nondowngraded convictions (95% CI=1.24, 5.36), whereas Hispanic/Latinx defendants with downgraded convictions had 0.49 times the hazard of violent crime charge as Hispanic/Latinx defendants with nondowngraded convictions (95% CI=0.15, 1.57), and Black defendants with downgraded convictions had 0.93 times the hazard of violent crime charge as Black

defendants with nondowngraded convictions (95% CI=0.44, 1.97).

Firearm-related violent crime outcomes and results for those with violent misdemeanor index convictions are in Appendix Table 5 (available online) and Figure 2A and Appendix Table 6 (available online), respectively.

When measuring outcomes with the expansive definition of violent crime, downgraded convictions were associated with a lower risk of future violent crime charges among Black defendants with violent misdemeanor index convictions (subdistribution hazard



Subdistribution hazard ratio (95% CI)

Figure 1. Risk of subsequent violent crime charge comparing individuals with vs without downgraded misdemeanor convictions, overall and stratified by defendant race and ethnicity. (A) Subsequent violent crime charge (restrictive definition).^a (B) Subsequent violent crime charge (expansive definition).^b

Results are from separate models that accounted for death and incarceration as competing events, adjusted for age quartiles and gender as stratifying variables and adjusted for whether the index case was violent and firearm related. Subdistribution hazard ratios are plotted on the log scale. ^a*p*-value for interaction from likelihood ratio test=0.03.

^bp-value for interaction from likelihood ratio test=0.29.

ratio=0.57, 95% CI=0.35, 0.94) (Figure 2B and Appendix Tables 6, available online). Results accounting for time in jail and adjusting for the number of charges in the index case and the year of index conviction were consistent with those of the primary analysis (Appendix Tables 7–9, available online).

DISCUSSION

In this retrospective cohort study, misdemeanor convictions downgraded from felony charges were differentially associated with subsequent risk of violent crime on the basis of defendant race and ethnicity. White defendants with downgraded misdemeanor convictions had a greater risk of future violent crime charges during follow-up—including for homicide, robbery, rape, and aggravated assault—than White defendants with nondowngraded misdemeanor convictions. In comparison, downgraded convictions were generally not associated with subsequent violent crime charges among Black and Hispanic/Latinx defendants.

This study's overall estimates align with prior research, which has found no association between downgraded convictions and subsequent crime.^{50,51} However, stratified estimates revealed important differences that suggest that White defendants received more favorable plea offers than people of color, consistent with prior research.^{20,34–36,52} In contrast, that downgraded convictions among Black and Hispanic/Latinx defendants were not associated with subsequent violent crime charges suggests that initial felony charges were overstated.

Prior research may help explain the study's findings. Because of racialized perceptions of dangerousness, racial bias in policing, and structural racism, people of color are arrested, charged, and convicted at greater rates than White people.^{23–25,53} In turn, prior criminal history may set the stage for more severe initial charges and worse plea offers for people of color.^{20,35,54} Pretrial detention could also increase pressures to accept less favorable plea offers,^{13,55–57} and people of color are more often held in pretrial detention than White people.^{35,58} Research suggests that people held in pretrial detention for misdemeanors (versus felonies) are more likely to plead guilty and do so more quickly.⁵⁹ If the pressure of pretrial detention leads more people with initial misdemeanor charges than felony charges to plead guilty to crimes they did not commit,¹⁴ that could help explain the findings of greater risk of subsequent violent crime charges for White defendants among those with initial felony charges than among those with initial misdemeanor charges.⁵⁹ For defendants of color (for whom this study generally found no association between downgraded convictions and subsequent violent crime), pressures to plead guilty to overly

initially charged with a misdemeanor or felony. Furthermore, prosecutors have wide discretion.^{11,60} Research suggests that prosecutorial overcharging (imposing overly severe charges) is more common for Black⁶¹ and Hispanic/Latinx defendants⁶² than for similarly situated White defendants, and charge reductions for violent crimes are more common for White defendants than for Black defendants.⁶³ White defendants may also receive more lenient pleas because prosecutors fear a lower likelihood of winning at trial against White defendants due to White privilege.^{64,65} Racial and ethnic differences in plea bargaining may also stem in part from defendants' access to quality criminal defense. Defense attorneys can influence case outcomes in myriad ways, and owing to structural disadvantages, people of color may more often lack resources to obtain high-quality counsel.³⁷ Some evidence suggests that defense attorneys encourage Black clients to accept worse pleas than White clients.²¹

severe charges may similarly exist regardless of whether

If structural, institutional, and/or interpersonal racism is reflected in felony downgrading, this could lead to further inequities. The penalties of criminal convictions are substantial, with costs for civil rights, educational and employment opportunities, immigration, time with family and community, incarceration, and potentially legal firearm ownership.^{10,11,15,66} If downgraded convictions occur because of initial overcharging, which could happen more often for people of color than for White people,^{61,62} these penalties may impart undue harm and reify racial inequities, especially considering the oversurveillance of communities of color.²⁴ Likewise, if downgrading disproporprivileges White defendants, tionately White defendants will disproportionately avoid felony conviction and the collateral consequences.

One important collateral consequence of criminal convictions is criminal history-based firearm prohibitions. This study's results suggest that felony firearm prohibitions fail to capture the subset of White defendants whose felony charges were downgraded to misdemeanors, yet who are at elevated risk of violence. In that way, the federal felony prohibition may be underinclusive. Nevertheless, misdemeanor-based firearm prohibitions might be overinclusive and unfairly prohibit some Hispanic/Latinx and Black individuals from purchasing firearms if, for these groups, downgraded misdemeanor convictions more often reflect overly punitive practices. Results therefore suggest the importance of considering the public health benefits of criminal history-based firearm prohibitions⁶⁷ alongside the ordinariness of racism⁶⁸ and the ways racism may affect firearm policies in practice, especially those embedded in the criminal legal system.^{69,70}



Subdistribution hazard ratio (95% CI)

Figure 2. Risk of subsequent violent crime charges comparing individuals with vs without downgraded violent misdemeanor convictions, overall and stratified by defendant race and ethnicity. (A) Subsequent violent crime charge (restrictive definition).^a (B) Subsequent violent crime charge (expansive definition).^b

Results are from separate models that accounted for death and incarceration as competing events, adjusted for age quartiles and gender as stratifying variables and adjusted for whether the index case was firearm related. Subdistribution hazard ratios are plotted on the log scale.

^a*p*-value for interaction from likelihood ratio test=0.11.

^b*p*-value for interaction from likelihood ratio test=0.05.

Limitations

Estimates may be confounded because the authors could not control for all relevant factors (e.g., prior criminal history, firearm prohibitions). However, for confounding to explain away the findings, it would need to operate in qualitatively different directions among different racial and ethnic subpopulations, given that point estimates for the association of downgrading and subsequent violent crime were generally in opposite directions for White defendants and Black and Hispanic/Latinx defendants. Administrative records data lacked detail on the source of race and ethnicity classification (e.g., self-report, other assigned) and the criminal legal system processes that led to the outcomes observed. Study authors did not have complete information on whether cases were resolved through plea or trial. However, the sample of cases for which authors did have case resolution suggested that the exposure reflected felony charges with a plea deal of final charge and conviction at the misdemeanor level versus misdemeanor charges with a plea deal of final charge and conviction at the misdemeanor level. The authors used the level of initial charges (i.e., felony or misdemeanor) among people convicted of misdemeanors because it could be reliably ascertained for the entire cohort and has direct implications for collateral consequences (e.g., felonies restrict certain rights that misdemeanors do not). Affidavits of probable cause may have had missing or inaccurate information, and authors did not receive all records. The authors did not have data on residence during followup, so they did not know whether people left the state. The sample was relatively small, resulting in some imprecise estimates, low power (which may explain, in part, null findings for some associations), and an inability to generate results for some racial and ethnic groups and for covariate-adjusted risk of firearm-related violent crime. The study did not examine specific crimes most often downgraded or those most predictive of future violent crime risk; this is an area for future research. The study focused on 1 state, and part of the study period was during the COVID-19 pandemic, which may influence generalizability. For example, the Washington State Supreme Court ordered courts in the state to conduct remote hearings and take other precautions to protect public health in their jurisdictions.^{71,72} Finally, the authors recognize that any potential structural or racial biases that exist in the study's exposure measure are likely present in the outcomes. Indeed, Black defendants may be more likely than others to receive subsequent violent charges because of pervasive anti-Black bias, regardless of their actual behavior,^{23–25} which could mean that downgrading is associated with lower risk of subsequent violence than the estimates suggest.

CONCLUSIONS

Results suggest that misdemeanor convictions understated the risk of future violence among White defendants with felony charges, whereas initial felony charges among Black and Hispanic/Latinx defendants may have overstated their risk of violence. Findings may reflect structural, institutional, and interpersonal racism and have implications for racial and ethnic differences in the collateral consequences of criminal convictions. Future research should examine the specific processes and policies that give rise to this study's findings—including decision making by various actors in the criminal legal system, pretrial detention and bail, police surveillance, and others—and implement interventions to jointly promote equity and safety.

ACKNOWLEDGMENTS

The authors thank Dr. Alice Ellyson for help in reviewing and refining our violent crime classification and Mona Wright for reading and providing comments on the manuscript.

The views expressed in this paper are those of the author(s) and do not necessarily represent those of the Office of Financial Management or other data contributors. Any errors in such views are attributable to the author(s). The funding source had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

This work was supported by the Fund For a Safer Future (Grant Number 013167-2020-12-21).

Declaration of interest: None.

CREDIT AUTHOR STATEMENT

Julia P. Schleimer: Conceptualization, Methodology, Formal analysis, Data curation, Writing — original draft, Writing review & editing. Miriam J. Haviland: Conceptualization, Data curation, Writing — review & editing. Amy Gallagher: Data curation, Writing — review & editing. Ayah Mustafa: Data curation, Writing — review & editing. Rachel Ross: Data curation, Writing — review & editing. Rachel Ross: Data curation, Writing — review & editing. Garen Wintemute: Writing — review & editing. Deirdre Bowen: Supervision, Writing — review & editing. Ali Rowhani-Rahbar: Conceptualization, Methodology, Supervision, Writing — review & editing, Funding acquisition.

SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.focus.2024.100206.

REFERENCES

 Fatal injury data. Web-based injury statistics query and reporting system (WISQARS). Centers for Disease Control and Prevention; 2023. https://www.cdc.gov/injury/wisqars/fatal.html. Updated november 8Accessed November 15, 2023.

- Thompson A, Tapp SN. Criminal victimization, 2021. Washington, DC: Bureau of Justice Statistics, U.S. Department of Justice; September 2022. https://bjs.ojp.gov/content/pub/pdf/cv21.pdf. Published Accessed October 3, 2023.
- Rivara F, Adhia A, Lyons V, et al. The effects of violence on health. *Health Aff (Millwood)*. 2019;38(10):1622–1629. https://doi.org/ 10.1377/hlthaff.2019.00480.
- National Research Council. National Research Council. The crime prevention effects of incarceration. The Growth of Incarceration in the United States Exploring Causes and Consequences. Washington, DC: The National Academies Press, 2014:130–156. https://doi.org/ 10.17226/18613.
- Wintemute GJ, Drake CM, Beaumont JJ, Wright MA, Parham CA. Prior misdemeanor convictions as a risk factor for later violent and firearm-related criminal activity among authorized purchasers of handguns. *JAMA*. 1998;280(24):2083–2087. https://doi.org/10.1001/jama.280.24.2083.
- Kagawa RMC, Stewart S, Wright MA, et al. Association of prior convictions for driving under the influence with risk of subsequent arrest for violent crimes among handgun purchasers. *JAMA Intern Med.* 2020;180(1):35–43. https://doi.org/10.1001/jamainternmed.2019.4491.
- Devers L. Plea and charge bargaining. Washington, DC: Bureau of Justice Assistance, U.S. Department of Justice; 2011. https://bja.ojp.gov/sites/g/files/xyckuh186/files/media/document/pleabargainingresearch-summary.pdf. PublishedAccessed October 3, 2023.
- Brown MP, Bunnell SE. Negotiating justice: prosecutorial perspectives on federal plea bargaining in the District of Columbia the state federal prosecution. *Am Crim Law Rev.* 2006;43(3):1063–1094. https://heinonline.org/HOL/P?h=hein.journals/amcrimlr43&i=1071. Accessed November 15, 2023.
- Grossman GM, Katz ML. Plea bargaining and social welfare. Am Econ Rev. 1983;73(4):749–757. https://www.jstor.org/stable/1816572. Accessed November 15, 2023.
- Alschuler AW. Plea bargaining and mass incarceration. N Y Univ Annu Surv Am L. 2021;76(2):205. https://heinonline.org/HOL/P? h=hein.journals/annam76&i=259. Accessed November 15, 2023.
- Davis AJ. The power and discretion of the American prosecutor. Droit Cult Rev Int Interdiscip. 2005;49(49):55–66. https://doi.org/10.4000/ droitcultures.1580.
- Natapoff A. Misdemeanors. SSRN J. February 24, 2012. Published online https://papers.ssrn.com/abstract=2010826. Accessed July 15, 2022.
- Dobbie W, Goldin J, Yang CS. The effects of pre-trial detention on conviction, future crime, and employment: evidence from randomly assigned judges. *Am Econ Rev.* 2018;108(2):201–240. https://doi.org/ 10.1257/aer.20161503.
- Dervan LE, Edkins VA. The innocent defendant's dilemma: an innovative empirical study of plea bargaining's innocence problem criminal law. J Crim Law Criminol. 2013;103(1):1–48. https://scholarlycommons.law.northwestern.edu/jclc/vol103/iss1/1.
- Natapoff A. Punishment Without Crime: How Our Massive Misdemeanor System Traps the Innocent and Makes America More Unequal. New York, NY: Basic Books, 2018.
- Subramanian R, Digard L, Washington M, Sorage S. In the shadows: a review of the research on plea bargaining. New York, NY: Vera Institute of Justice; 2020. https://www.vera.org/downloads/publications/inthe-shadows-plea-bargaining.pdf. PublishedAccessed November 15, 2023.
- 17. Stemen D, Huebner B, Omori M, Webster E, Early A, Torres L. Exploring plea negotiation processes and outcomes in Milwaukee and St. Louis County. Chicago, IL: Safety and Justice Challenge, John D. and Catherine T. MacArthur Foundation; November 29, 2022. https://safetyandjusticechallenge.org/resources/exploring-plea-negotiation-processes-and-outcomes-in-milwaukee-and-st-louis-county/. PublishedAccessed June 5, 2023.
- Reaves BA. Felony defendants in large urban counties, 2009-statistical tables. Washington, DC: U.S. Department of Justice.; 2013. https://bjs.

ojp.gov/library/publications/felony-defendants-large-urban-counties-2009-statistical-tables. PublishedAccessed October 3, 2023.

- Kutateladze BL, Andiloro NR, Johnson BD. Opening Pandora's box: how does defendant race influence plea bargaining? *Justice Q.* 2016;33 (3):398–426. https://doi.org/10.1080/07418825.2014.915340.
- Berdejó C. Criminalizing race: racial disparities in plea-bargaining. Boston Coll Law Rev. 2018;59(4):1187–1250. https://heinonline.org/ HOL/P?h=hein.journals/bclr598xi=1210. Accessed November 15, 2023.
- Edkins VA. Defense attorney plea recommendations and client race: does zealous representation apply equally to all? *Law Hum Behav*. 2011;35(5):413–425. https://doi.org/10.1007/s10979-010-9254-0.
- Rousseau DM, Pezzullo GP. Race and context in the criminal labeling of drunk driving offenders: a multilevel examination of extralegal variables on discretionary plea decisions. *Crim Justice Policy Rev.* 2014;25 (6):683–702. https://doi.org/10.1177/0887403413493089.
- Piquero AR. Understanding race/ethnicity differences in offending across the life course: gaps and opportunities. J Dev Life Course Criminology. 2015;1(1):21–32. https://doi.org/10.1007/s40865-015-0004-3.
- Bailey ZD, Feldman JM, Bassett MT. How structural racism works racist policies as a root cause of U.S. racial health inequities. N Engl J Med. 2021;384(8):768–773. https://doi.org/10.1056/NEJMms2025396.
- Visualizing the racial disparities in mass incarceration. Prison Policy Initiative. https://www.prisonpolicy.org/blog/2020/07/27/disparities/. Updated July 27, 2020. Accessed July 14, 2022.
- Rucker JM, Richeson JA. Toward an understanding of structural racism: implications for criminal justice. *Science*. 2021;374(6565):286– 290. https://doi.org/10.1126/science.abj7779.
- Langer M. Plea bargaining, conviction without trial, and the global administratization of criminal convictions. *Annu Rev Criminol.* 2021;4:377–411. https://doi.org/10.1146/annurev-criminol-032317-092255.
- Subramanian R, Digard L, Washington II M, Sorage S. *In the shadows:* a review of the research on plea bargaining. New York, NY: Vera Institute of Justice; 2020. https://www.vera.org/downloads/publications/inthe-shadows-plea-bargaining.pdf. PublishedAccessed 3 October 2023.
- King NJ, Soulé DA, Steen S, Weidner RR. When process affects punishment: differences in sentences after guilty plea, bench trial, and jury trial in five guidelines states. *Colum Law Rev.* 2005;105(4):959– 1009. https://www.jstor.org/stable/4099426.
- Pryor WH, Barkow RE, Breyer CR, et al. Demographic Differences in Sentencing: an Update to the 2012 Booker Report. Washington, DC: United States Sentencing Commission; November 2017. https://www. ussc.gov/sites/default/files/pdf/research-and-publications/researchpublications/2017/20171114_Demographics.pdf. Published Accessed October 3, 2023.
- Pinard M. Collateral consequences of criminal convictions: confronting issues of race and dignity. N Y Univ Law Rev. 2010;85(2):457–534. https://heinonline.org/HOL/P?h=hein.journals/nylr85&i=461. Accessed November 15, 2023.
- Schauffler R, LaFountain R, Strickland S, Holt K, Genthon K. Examining the work of state courts: an overview of 2015 state court caseloads. Washington, DC: National Center for State Courts, Court Statistics Project. https://www.courtstatistics.org/__data/assets/pdf_file/0028/ 29818/2015-EWSC.pdf. Published 2016. Accessed November 15, 2023.
- Stevenson MT, Mayson SG. The scale of misdemeanor justice. Boston, MA: Boston University Law Review; 2018. https://digitalcommons.law. uga.edu/fac_artchop/1210. Published Accessed November 15, 2023.
- Welch S, Spohn C, Gruhl J. Convicting and sentencing differences among black, Hispanic, and white males in six localities. *Justice Q.* 1985;2(1):67–80. https://doi.org/10.1080/07418828500088391.
- Kutateladze BL, Andiloro NR, Johnson BD, Spohn CC. Cumulative disadvantage: examining racial and ethnic disparity in prosecution and sentencing. *Criminology*. 2014;52(3):514–551. https://doi.org/ 10.1111/1745-9125.12047.
- Metcalfe C, Chiricos T. Race, Plea, and charge reduction: an assessment of racial disparities in the plea process. *Justice Q.* 2018;35 (2):223–253. https://doi.org/10.1080/07418825.2017.1304564.

- Greenberg EE. Unshackling plea bargaining from racial bias. J Crim L & Criminology. 2020;111:93. https://doi.org/10.2139/ssrn.3634786.
- Firearm prohibitions in Washington. Giffords Law Center to Prevent Gun Violence. https://giffords.org/lawcenter/state-laws/firearm-prohibitions-in-washington/. Updated January 5, 2023. Accessed November 15, 2023.
- Everytown for gun safety. No gun purchases after violent offense. Everytown Research & Policy. https://everytownresearch.org/rankings/law/no-gun-purchases-after-violent-offense/. Updated January 4, 2024. Accessed February 24, 2024.
- Greenlee JGS. The historical justification for prohibiting dangerous persons from possessing arms. Wyo Law Rev. 2020;20(2). Article 7. https://doi.org/10.59643/1942-9916.1434..
- Winkler A. Racist gun laws and the second amendment. Harv Rev F. 2021;135:537. https://harvardlawreview.org/forum/vol-135/racistgun-laws-and-the-second-amendment/. Accessed October 3, 2023.
- How plea bargains boost gun violence. Boston.com. http://archive. boston.com/bostonglobe/ideas/brainiac/2014/06/how_plea_bargai. html. Updated June 19, 2014. Accessed June 11, 2023.
- Reavy P. Salt Lake County D.A.'s response to uptick in gun-related crime: "No more plea bargains. *Deseret News*. October 20, 2021. Published. https://www.deseret.com/utah/2021/10/20/22737347/salt-lakedistrict-attorney-issues-warning-criminals-with-guns-no-more-pleabargains. Accessed June 11, 2023.
- Rowhani-Rahbar A, Zatzick D, Wang J, et al. Firearm-related hospitalization and risk for subsequent violent injury, death, or crime perpetration: a cohort study. *Ann Intern Med.* 2015;162(7):492–500. https:// doi.org/10.7326/M14-2362.
- O'Hear MM. Third-class citizenship: the escalating legal consequences of committing a "violent" crime. SSRN J. April 3, 2019. Published online https://papers.ssrn.com/abstract=3365248. Accessed July 16, 2022.
- Uniform crime reporting. Federal Bureau of Investigation, 2019 Crime In the United States. https://ucr.fbi.gov/crime-in-the-u.s/2019/crimein-the-u.s.-2019/topic-pages/violent-crime. Updated 2020. Accessed July 1, 2023.
- Agan AY, Doleac JL, Harvey A. *Misdemeanor prosecution*. Cambridge, MA: National Bureau of Economic Research; March 2021. https://www. nber.org/system/files/working_papers/w28600/w28600.pdf. Accessed November 15, 2023.
- Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. *Lancet*. 2002;360(9339):1083–1088. https://doi.org/ 10.1016/S0140-6736(02)11133-0.
- Schleimer JP, Mustafa A, Ross R, et al. Misclassification of firearmrelated violent crime in criminal legal system records: challenges and opportunities. *Inj Epidemiol.* 2023;10(1):46. https://doi.org/10.1186/ s40621-023-00458-1.
- Wright MA, Wintemute GJ. Firearm prohibition for persons convicted of violent crimes: a potential non-legislative approach. *Am J Prev Med.* 2014;47(2):e3–e5. https://doi.org/10.1016/j.amepre.2014.04.008.
- Rhodes WM. Plea bargaining: who gains? Who loses? Washington, DC: PROMIS Research Project, Institute for Law and Social Research; 1978. https://www.ojp.gov/pdffiles1/Digitization/49571NCJRS.pdf. Published Accessed November 15, 2023.
- Kovera MB. Racial disparities in the criminal justice system: prevalence, causes, and a search for solutions. J Soc Issues. 2019;75(4):1139–1164. https://doi.org/10.1111/josi.12355.
- Pierson E, Simoiu C, Overgoor J, et al. A large-scale analysis of racial disparities in police stops across the United States. *Nat Hum Behav.* 2020;4(7):736–745. https://doi.org/10.1038/s41562-020-0858-1.
- Covey RD. Longitudinal guilt: repeat offenders, plea bargaining, and the variable standard of proof. *Fla Law Rev.* 2011;63(2):431–456. https://scholarship.law.ufl.edu/flr/vol63/iss2/4.

- Petersen N. Do detainees plead guilty faster? A survival analysis of pretrial detention and the timing of guilty pleas. *Crim Justice Policy Rev.* 2020;31(7):1015–1035. https://doi.org/10.1177/0887403419838020.
- Lerman AE, Green AL, Dominguez P. Pleading for justice: bullpen therapy, pre-trial detention, and plea bargains in American courts. Crime Delinquency. 2022;68(2):159–182. https://doi.org/10.1177/ 0011128721999339.
- Johnson BD, Richardson R. Race and plea bargaining. In: Edkins VA, Redlich AD, eds. A System of Pleas: Social Sciences Contributions to the Real Legal System. Oxford, United Kingdom: Oxford University Press, 2019 83–C5.P169. https://doi.org/10.1093/oso/9780190689247.003.0006..
- Donnelly E, MacDonald J. The downstream effects of bail and pretrial detention on racial disparities in incarceration. J Crim Law Criminol. 2018;108(4):775. https://scholarlycommons.law.northwestern.edu/ jclc/vol108/iss4/4.
- Thomas C, Cadoff B, Wolff KT, Chauhan P. How do the consequences of pretrial detention on guilty pleas and carceral sentences vary between misdemeanor and felony cases? *J Crim Justice*. 2022;82:102008. https://doi.org/10.1016/j.jcrimjus.2022.102008.
- 60. Smith RJ, Levinson JD. The impact of implicit racial bias on the exercise of prosecutorial discretion symposium on racial bias and the criminal justice system: section I. *Seattle Univ Law Rev.* 2011;35(3):795–826. https://digitalcommons.law.seattleu.edu/sulr/vol35/iss3/9/. Accessed November 15, 2023.
- Rehavi MM, Starr SB. Racial disparity in federal criminal sentences. J Pol Econ. 2014;122(6):1320–1354. https://doi.org/10.1086/677255.
- Ulmer JT, Kurlychek MC, Kramer JH. Prosecutorial discretion and the imposition of mandatory minimum sentences. J Res Crime Delinquency. 2007;44(4):427–458. https://doi.org/10.1177/0022427807305853.
- Romain Dagenhardt DM, Heideman AJ, Freiburger TL. An examination of the direct and interactive effects of race/ethnicity and gender on charge reduction. J Crime Justice. 2022;45(3):324–346. https://doi. org/10.1080/0735648X.2021.1936123.
- Anwar S, Bayer P, Hjalmarsson R. The impact of jury race in criminal trials. Q J Econ. 2012;127(2):1017–1055. https://doi.org/10.1093/qje/qjs014.
- Flanagan FX. Race, gender, and juries: evidence from North Carolina. J Law Econ. 2018;61(2):189–214. https://doi.org/10.1086/698193.
- 66. Guilty CS, Honor Y. The direct and collateral consequences of guilty pleas and the courts that inconsistently interpret them notes and comments. Whittier Law Rev. 2004;26(1):305–332. https://heinonline.org/ HOL/P?h=hein.journals/whitlr26&i=319. Accessed November 15, 2023.
- Wintemute GJ, Wright MA, Drake CM, Beaumont JJ. Subsequent criminal activity among violent misdemeanants who seek to purchase handguns: risk factors and effectiveness of denying handgun purchase. *JAMA*. 2001;285(8):1019–1026. https://doi.org/10.1001/jama.285.8.1019.
- Ford CL, CO Airhihenbuwa. The public health critical race methodology: praxis for antiracism research. *Soc Sci Med.* 2010;71(8):1390–1398. https://doi.org/10.1016/j.socscimed.2010.07.030.
- Swanson JW. The color of risk protection orders: gun violence, gun laws, and racial justice [published correction appears in Inj Epidemiol. 2020;7(1):48]. *Inj Epidemiol.* 2020;7(1):46. https://doi.org/10.1186/ s40621-020-00272-z.
- Abelow H, Crifasi C, Webster D. The legal and empirical case for firearm purchaser licensing. J Law Med Ethics. 2020;48(4)(suppl):17–24. https://doi.org/10.1177/1073110520979397.
- News, reports, court information. Washington State Courts. https:// www.courts.wa.gov/newsinfo/index.cfm?fa=newsinfo.COVID19. Accessed November 12, 2023.
- Hirsch M. COVID-19 and adult criminal justice: a quantitative look at affected systems. Washington, DC: Washington State Institute for Public Policy. https://www.wsipp.wa.gov/ReportFile/1739/Wsipp_COVID-19-and-Adult-Criminal-Justice-A-Quantitative-Look-at-Affected-Systems_Report.pdf. Published 2021. Accessed November 15, 2023.