



Delft University of Technology

The demographic divide

Population dynamics, race and the rise of mass incarceration in the United States

Campbell, Michael C.; Vogel, Matt

DOI

[10.1177/1462474517734166](https://doi.org/10.1177/1462474517734166)

Publication date

2017

Document Version

Final published version

Published in

Punishment and Society

Citation (APA)

Campbell, M. C., & Vogel, M. (2017). The demographic divide: Population dynamics, race and the rise of mass incarceration in the United States. *Punishment and Society*, 21 (2019)(1), 47-69.
<https://doi.org/10.1177/1462474517734166>

Important note

To cite this publication, please use the final published version (if applicable).
Please check the document version above.

Copyright

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights.
We will remove access to the work immediately and investigate your claim.



The demographic divide: Population dynamics, race and the rise of mass incarceration in the United States

Michael C Campbell

University of Missouri, USA

Matt Vogel

University of Missouri, USA and TU Delft, Netherlands

Punishment & Society
0(0) 1–23

© The Author(s) 2017

Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/1462474517734166

journals.sagepub.com/home/pun



Abstract

This manuscript examines whether certain fundamental demographic changes in age structures across racial groups might help explain incarceration rates in the United States. We argue that a “demographic divide”—a growing divergence in the age structures of blacks and whites—was an important factor that contributed to the nation’s rising incarceration rates. Where age disparities between blacks and whites were higher ideological conservatism and religious fundamentalism increased, as did incarceration rates. We contend that historical forces shape how groups respond to subsequent social problems and proposed solutions to them and explore how “generational effects” may shape law and policy. Specifically, we suggest that states with older white and younger black populations created fertile conditions for a more punitive brand of politics and penal policy. We analyze decennial state-level data from 1970 to 2010 and examine whether differences in the median ages of blacks and whites contributed to changing incarceration rates within states over time. We situate our findings within the broader scholarship that has engaged the complex links between race, religion, political conservatism, and punishment. Our findings illustrate the importance of accounting for long-term shifts in social structure in understanding more proximate changes in law and policy.

Corresponding author:

Michael C Campbell, 324 Lucas Hall, St. Louis, MO 63121, USA.

Email: campbellmi@umsl.edu

Keywords

age structure, incarceration, prison, punitiveness, race, religion

Introduction

Efforts to explain the sharp and prolonged increases in imprisonment in the United States have generated a robust and thriving literature that has illuminated the complex links between social conflicts, rising crime rates, economic shifts, political processes, and the legal and policy changes that helped drive prison expansion (e.g., Alexander, 2010; Beckett, 1997; Garland, 2001; Gottschalk, 2014; Simon, 2007). Historical research has helped demonstrate how these forces converged within specific state-level contexts to fuel increasingly aggressive and punitive responses to crime that created nation's carceral state (e.g., Barker, 2009; Campbell and Schoenfeld, 2013; Lynch, 2010; Miller, 2008; Page, 2011). The incarceration boom was not the product of any single factor but of a "uniquely American combination of crime, race and politics that shaped the adoption of more punitive criminal justice policies" (National Research Council, 2014: 104).

This article adds to this literature in two ways. First, it illuminates how sometimes overlooked shifts in the nation's demographic structure shaped the political terrains upon which battles over law and policy unfolded. Specifically, this paper argues that a "demographic divide"—defined here as the rapid divergence of African American and white age structures in the years following Second World War—altered America's social fabric. This divide fueled higher levels of Christian fundamentalism and ideological conservatism, abetting the expansion of incarceration within states over the latter half of the 20th-century by exacerbating long-standing racial divisions. Second, we argue that explanations of law and policy would benefit from accounting for generational forces, or the ways in which historical events condition how groups respond to social problems, and how these processes are inherently stratified across age and race.

The demographic divide could help explain broader shifts in the social and political underpinnings that helped give rise to mass incarceration. Explanations of American penalty stressing the importance of the nation's political economy (Gottschalk, 2014), inherent tensions in late-modern social structures and cultures that produced more punitive norms (Garland, 2001), and political strategy and racialized fear mongering (Alexander, 2010; Beckett, 1997; Simon, 2007), are sometimes hard-pressed to account for the persistence of the "law and order" movement's successes and for the magnitude of the differences between the US and other nations. As increasingly punitive political positions became the bipartisan norm, crime's political utility should have waned. Instead, punitive criminal justice policies sustained a striking momentum that overwhelmed concerns about effectiveness, cost, justice, and sustainability (Clear and Frost, 2013). Accounts stressing the importance of America's federalist structure and the legal and political processes it generates provide useful insights into the ways institutions shape

long-term outcomes (Campbell and Schoenfeld, 2013; Miller, 2008) but cannot effectively explain why crime's politicization resonated more than other social issues embedded in the same institutional frameworks.

Considering links between population dynamics and incarceration provides useful insights into why politicians appealing to "law and order" were so successful in particular state contexts. Crime, after all, was only one among many issues that politicians might deploy to mobilize voters' anxieties for electoral gain in the latter 20th-century. Fears over Communism and nuclear war, inflation and deindustrialization, and the mounting national debt were all poignant issues as crime increasingly occupied the center stage of state and national politics (McGirr, 2001). And efforts to stir fear of crime were not new; federal bureaucrats successfully stoked fears of drugs and organized crime early in the 20th-century (Chambliss, 1999; Gottschalk, 2006), but their efforts failed to generate sweeping changes in state and federal criminal justice akin to those that drove mass incarceration. And while penal policy and practice have always been the product of contestation and conflict (Goodman et al., 2017), the winners of these conflicts were increasingly those who were willing to invest mightily in imprisoning far more people.

Our goal is not to undermine explanations of incarceration's rise that emphasize the importance of political strategy (Beckett, 1997; Simon, 2007), shifting cultural trends (Garland, 1990, 2001), political institutions and American federalism (Campbell and Schoenfeld, 2013; Miller, 2008), or those linking penal change with neoliberalism and America's political economy (Goodman et al., 2015; Gottschalk, 2006, 2014; Lacey and Soskice, 2015; Wacquant, 2006). Rather, we attempt to highlight how demographic forces magnified the racial tensions that permeate these explanations and to provide a nuanced account of the forces that helped shape changes in state political cultures that provided fertile ground for those pressing imprisonment. Lastly, we raise questions about how generational dynamics might play an important role in explaining America's uniquely punitive brand of criminal justice.

Literature review

Racial dynamics are deeply woven into the political and legal processes that drove the carceral state's expansion in the US. As Alexander (2010) has argued, America's prison binge was inextricably intertwined with racial forces that captured and reconfigured historical prejudices within new socio-political contexts. Recent historical work highlights how race is deeply embedded in the state-level political processes that drive penal policy and practice (e.g., Goodman et al., 2017; Lynch, 2010). Group threat theories have long posited that a polity's racial composition affects social control. These explanations contend that the size of minority populations has a curvilinear relationship with punishment; as the share of minorities in a population increase, so too should punitive responses to their behavior. Once the size of the minority population reaches a critical mass, efforts at social control should begin to diminish (Blalock, 1967; Blumer, 1958; Bobo and Hutchings, 1996). Indeed,

increasing proportions of minorities, especially blacks, have been linked to increasing state incarceration rates (Campbell et al., 2015; Greenberg and West, 2001; Jacobs and Carmichael, 2001) and punitive attitudes (Jacobs and Helms, 2001). Campbell et al. (2015) found that the proportion of blacks in a state's population has persisted as the strongest predictor of state incarceration rates, even after violent crime rates dropped precipitously in the 1990s.

Racial conflict could be linked not just to the size of minority populations but also to the composition of majority and minority groups. As is discussed in greater detail below, much of the growth in the black population post-Second World War can be attributed to high rates of fertility rather than mass immigration. Thus, the link between minority population size and incarceration rates uncovered in prior work reflects the growing proportion of *young blacks* within states over time. Indeed, Brown's (2016) recent work demonstrates how the proportion of young black males remains a robust correlate of incarceration rates within states over time. Similarly, Vogel and Porter (2016) demonstrate that a sizable portion of racial and ethnic disparities in incarceration can be attributed to the greater concentration of blacks and Hispanics at younger ages. Examining migration and punishment trends during the "Great Migration" Muller (2012) finds that factors such as criminal offending or economic forces alone cannot explain rising incarceration rates and racial disparities in Northern states. Rather, it was the responses to the growth in the African American population within states and cities with larger proportions of recent European immigrants working as police that best accounted for penal trends (Muller, 2012). Collectively, this work suggests that the oft-observed link between race and incarceration likely operates through more nuanced pathways associated with differential demographic processes characterizing the black and white populations. We build upon this body of literature by arguing that the growth and persistence of mass incarceration in the US can be best understood as reflecting the confluence of legacies of racial animus, shifting demographics, generational dynamics, and political decisions that ultimately increased incarceration.

Population dynamics in the US: 1950–2010

The age structure of the US shifted dramatically in the years following Second World War. The best documented of these trends is the post-war "baby boom," when fertility rates increased as much as 40%. Overall, the baby boom persisted for nearly two decades, spanning from roughly 1946 to 1964 (Colby and Ortman, 2014). The annual number of births consistently exceeded 3 million during this period, reaching an apex of 4.3 million in 1957. Discussed less often is the fact that the tempo of the baby boom varied across racial and ethnic groups and was isolated to specific regions of the US (Tamura et al., 2012). The black baby boom peaked several years after the white boom, and while white fertility rates dropped markedly, black fertility rates remained at above-replacement levels through 2010 (Mather, 2012). Moreover, while the black birthrate increased across the country, there was

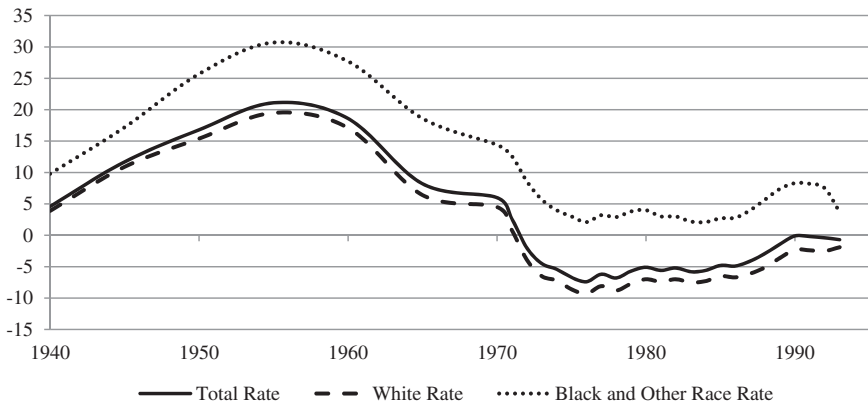


Figure 1. Intrinsic rates of growth for total population and by race (1940–1993). Prior to 1970, data are grouped into five-year intervals. Estimates are based on annual data thereafter. Source: Statistical Abstracts of the United States, US Census Bureau.

no notable increase in white births in Southern states (Tamura et al., 2012). Figure 1 presents the intrinsic rates of natural increase (r), or the expected rate of growth for the white, non-white, and total population from 1940 to 1995. These trends can be interpreted as the expected change in the population that would eventually occur from the prevailing age-specific fertility and mortality rates, assuming no migration. Thus, these trends provide an intuitive means of comparing population dynamics without the confounding influence of differential migratory patterns across groups. Both the black and white populations enjoyed high levels of fertility in the years spanning 1940–1970. However, the trends diverge significantly in 1972, with the white population dropping below zero and the non-white population hovering above zero for the remainder of the series. In this sense, the prevailing fertility rates projected population declines and, resultantly, population aging among whites and population growth and slower rates of aging among non-whites.

These two trends—divergent booms and differential fertility decline—had a significant effect on the age structures of the black and white populations in the latter half of the 20th-century. Figure 2 presents the median ages of the white and black populations from 1820 through 2010.¹ The black and white populations display very similar trends for the early part of the series, with the age disparity hovering between 3 and 4 years. In 1940, the last decennial estimate prior to the baby boom, the median age of whites was 29.5 and the median age of blacks was 25.4. In real terms, the white population in the US was four years older than the black population as the US entered the Second World War. The baby boom had a profound impact on both black and white age structures, contributing a *decline* in median age for the first time in recorded US history. But, as demonstrated in this figure, the prevailing fertility rates had a stronger influence on the age structure of the black population, effectively knocking the two trends out of equilibrium for the next 20 years.

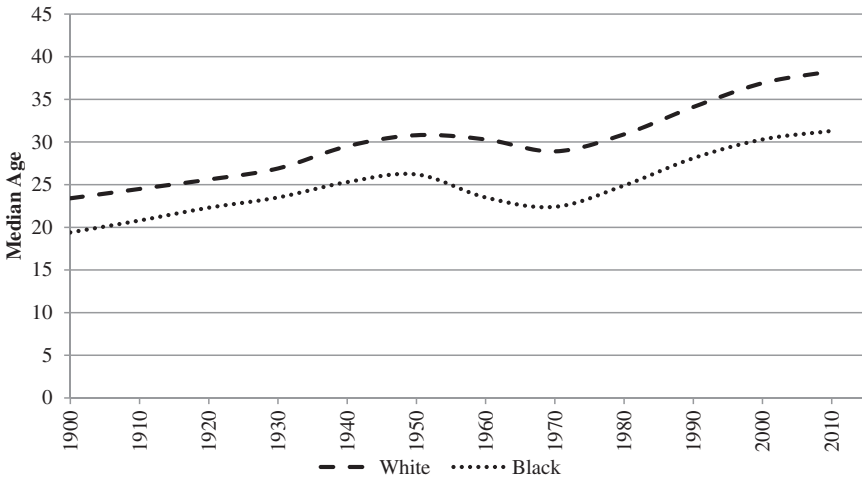


Figure 2. Median age for white and black population, 1900–2010.
Source: Statistical Abstracts of the United States, US Census Bureau.

Between 1940 and 2010, the median age of whites in the US increased to 10 years, while of the black population increased to 6 years. By 2010, the age disparity between the white and black population had increased to over 7 years. At first blush, this may seem relatively small. However, for changes like this to occur at a population level requires sharp differences in fertility rates over time. Perhaps more importantly, these trends were not uniform across states. The median age of blacks in Vermont increased by only .3 years between 1970 and 2010, while the average age of whites increased by 16.4 years. While the largest disparities in median age growth are found in states with historically small black populations (e.g., Maine, Idaho, North Dakota), marked disparities also characterized many Midwestern and Sunbelt states, states that led the charge in incarceration. Conversely, the black and white populations in Northeastern states like New York and New Jersey aged at similar rates over the past five decades, generating remarkably stable differences in age structure over time. Collectively, these trends highlight (1) an increasing age disparity between blacks and whites in the US, with whites aging more rapidly than blacks and (2) that age disparities were not uniform across states. Gradual but substantial shifts in population aging might help explain how crime politics seemed to exhibit an appeal that often trumped concerns about other pressing social issues such as public health, education, and rising inequality. We argue that aging whites were especially responsive to campaigns and lawmakers that linked the growing proportion of younger blacks to danger and the need for more aggressive and punitive law enforcement policies. Previous research has identified violent crime, political conservatism, Republican Party power, religious fundamentalism, and minority share of the population as

important factors in explaining state incarceration rates (Campbell et al., 2015; Greenberg and West, 2001; Jacobs and Carmichael, 2001). Social contexts characterized by aging white populations and growing, younger black populations might be more conducive to the social and political factors that have been consistently associated with higher incarceration rates. Divergent age structures across racial groups likely exacerbated historical tensions between blacks and whites, especially among older whites whose life experiences were rooted in pre-Civil Rights social conditions where racial tensions were suppressed.

Recent research on historical shifts in public opinion suggests that an increasingly conservative public might have predated the political focus on crime (Enns, 2014). Given consistent findings that ideological conservatism has been associated with state incarceration rates (Campbell et al., 2015; Greenberg and West, 2001; Jacobs and Carmichael, 2001) and that states with conservative political cultures have historically embraced aggressive and punitive responses to crime (Lynch, 2010; Perkinson, 2010), it seems essential to understand why conservatism persisted and, ultimately, why it is associated with higher incarceration rates. After all, conservatism historically incorporated ideological currents seemingly contradictory to mass incarceration, including fiscal conservatism and limits to state power. Shifting demographic structures at the state level might have fueled changes in and higher rates of conservatism or other factors and tilted the political balance in ways that abetted mass incarceration's rise and persistence.

Diverging age structures could have helped fuel politically conservative ideologies that predated the Civil Rights era. Generational differences rooted in the shared historical experiences of birth cohorts provide valuable clues that make sense of changing political currents in the latter 20th-century. Danigelis et al. (2007) find that attitudes within age cohorts continue to evolve over the life course, often trending toward more tolerant views, but that older cohorts' views most often remain more conservative than those of younger cohorts. Schuman and Scott (1989) found that peoples' memories of significant events vary across age cohorts (i.e., older people were more likely to emphasize the importance of Second World War than younger generations) and are conditioned by social factors such as gender and race. Building on this work, Griffin (2004) shows that peoples' memories of the Civil Rights Movement in particular were also shaped by region and were more salient in the South. Changes in attitudes and conservatism, including those linked to race, crime, and punishment, might be contingent on proximate, or state-level demographic forces and differential historical experiences of age cohorts.

White voters who were 35–55 years old in 1980 (among those most likely to vote) entered adulthood before the Civil Rights Movement became a national phenomenon. This generation came of age during and after the nation's victory in the Second World War, which was celebrated for the depth of national unity and the nation's emergence as a global super power (Schuman and Scott, 1989). For most whites, pre-Civil Rights Era racial tensions likely remained abstract and marginal as these tensions were whitewashed in an age of heightened patriotism.

These historical experiences might have created conditions where partisan appeals that later linked race, violence, and calls for stringent formal social controls were especially well received. Historical pressures generated by the Civil Rights Movement (e.g., urban unrest, political upheaval) forged generational differences across larger, aging white populations and youthful African American populations that continued to grow well beyond the white baby boom. Thus, violent crime might have been more readily linked to young and growing black populations rather than to the rapidly decaying urban conditions driven by deindustrialization and suburbanization. The association between Republican Party strength and incarceration reflected that party's effectiveness in linking crime to individual moral failings within political contexts characterized by growing age disparities. Ultimately, group tensions were exacerbated by differential historical experiences across black and white cohorts that generated support for new systems of racial subordination within changing contexts over time.

This demographic divide helps explain consistent findings that link support for more punitive criminal justice policies and the proportion of Christian Protestant fundamentalists who accept "the existence and power of transcendent religious evil" (Baker and Booth, 2016: 151). Research has linked Protestant fundamentalist Christians, those who adhere to a literal interpretation of the Bible, and more punitive attitudes (Grasmick et al., 1992), and support for corporal punishment for juveniles and capital punishment (Grasmick and McGill, 1994). Clues to the relationship between religious fundamentalism and support for punitiveness emerge from Emerson and Smith's (2000) research on evangelical Christians.² Their work outlines how religious fundamentalists emphasize individual and spiritual solutions to social and political problems that minimize the importance of the structural forces that perpetuate racial inequality (Emerson and Smith, 2000). Evangelicals' worldview inhibits a full understanding of "racialization," or structural racism, because their beliefs tend to "minimize and individualize" racism, blame individuals for racial problems, obscure inequality's role in exacerbating racial problems, and lead them to support overly simplistic "unidimensional" solutions (Emerson and Smith, 2000: 170). Support for long prison sentences for individual offenders fits well with this worldview, providing a direct, individualized, and utilitarian response to the perceived moral failings that lead to crime, while ignoring the socioeconomic structures that reinforce inequality and racial oppression.

But links between religious fundamentalism and punitiveness are not as direct as they might seem. As King's (2008) work has illustrated, support for more punitive state responses to offending is partly contingent on which groups are most likely to be targeted by state sanctions. King examined the prevalence of local enforcement of hate crime laws—laws likely to punish majority group offenders whose offenses targeted minorities—and found a negative association between religious fundamentalism and political conservatism and hate-crime law enforcement. This work provides compelling evidence that religious and political characteristics are

not directly linked to support for punitiveness but are instead contingent on the groups which state sanctions are most likely to affect.³

Current study

We examine whether the differential timing of the baby booms and variation in the fertility decline between the black and white populations created prime conditions for mass incarceration to emerge. From this vantage, this study helps illuminate the more fundamental mechanisms that allowed appeals to law and order politics to be successful. Using state-level decennial data from 1970 to 2010, we build upon existing scholarship by examining whether state-level variation in the population dynamics characterizing the black and white populations contributed to rising incarceration rates within states over time. Importantly, our analyses treat these fundamental demographic changes as antecedent factors, allowing us to first consider whether differential age structures are associated with incarceration and to then consider the extent to which these shifts contributed to changes in more proximate sociopolitical forces, namely religious fundamentalism, conservatism, and Republican Party strength. Finally, we examine whether these proximate mechanisms account for the effect of racial age structures on incarceration.

Methods

Data

Consistent with prior research, the analyses utilize state-level decennial data drawn primarily from the US Census. We rely on decennial data as the population dynamics proposed here are unlikely to be captured through annual estimates (as changes in age structure should become salient over longer intervals). We use 1970 as our starting point as consistent measures of age and racial composition are not available for earlier decades. Our analytic sample consists of data on 50 states measured at five time points, generating a pooled sample of 250 state-years. Descriptive statistics are presented in Table 1.

Incarceration rate

The dependent variable is the size of the incarcerated population, measured as the number of prisoners under state jurisdiction per 100,000 population as reported by the Bureau of Justice Statistics. In order to preserve temporal ordering, we heed the advice of Campbell et al. (2015) and measure the outcome variable as the average of the incarceration rate two, three, and four years beyond the decennial year. We use the overall size of the incarcerated population rather than new admissions to capture state level policy and administrative processes.⁴ The variable

Table 1. Means and standard deviations over time and across states (N = 250).

	Overall mean	Overall SD	Between SD	Within SD
Ln incarceration rate	4.739	0.78	0.37	0.69
Percent black	9.531	9.314	9.333	1.022
Ln percent Hispanic	1.172	1.157	0.999	0.596
Ln violent crime	5.845	0.614	0.527	0.321
Determinate sentencing	0.204	0.404	0.290	0.283
Urbanicity	69.268	14.765	14.404	3.724
Tax base	9.609	0.842	7.784	10.901
Socioeconomic inequality	0.399	0.042	0.02	0.51
White/black age disparity	1.334	0.127	0.098	0.081
Political ideology	45.234	15.614	13.886	7.355
Republican strength	22.930	26.413	12.197	22.941
Ln fundamentalism	-2.634	1.091	1.089	0.465

SD: standard deviation; Ln: log-transformed.

has been log transformed to the base e in the regression models to reduce skew and ensure multivariate normality.⁵

Population age disparity

The focal independent variable, *white/black age disparity*, is the ratio of the median age of the white population relative to the median age of the black population, as enumerated by the decennial census. It is coded such that a value of 1.0 indicates no age disparity. Values exceeding 1.0 indicate that the median age of whites is greater than that of blacks, while values less than 1.0 indicate that the population is older than the white population. In no case was the ratio less than 1.0.⁶

Proximate determinates of incarceration

Drawing from the extant research on the social and political determinants of incarceration, the key predictors in the analyses include measures of political partisanship, crime control, and sentencing policy. We focus specifically on measures of *Republican strength*, *political ideology*, and *religious fundamentalism*. *Republican strength* is constructed from two pieces of information: (1) whether the state had a Republican governor (1 = Republican governor; 0 = non-Republican governor) and the percent of Republicans in the state legislature (combining the upper and lower houses). The measure was created by multiplying the dummy variable for Republican governor by the percent of Republicans in the legislature. When the observed decennial year was also an election year, the measure was calculated using the incoming elected official's party identification.^{7,8}

Citizen ideology is the mean position on a liberal-conservative scale of the current electorate in a state, constructed by Berry et al. (2007). It is measured by

identifying the ideological position of each member of Congress in each year using interest group ratings, followed by the estimation of citizen ideology in each district using an ideology score for each district's incumbent, an estimated score for a challenger to the incumbent, and election results that are assumed to reflect the ideological division in the electorate. The citizen ideology scores are then weighted to each candidate's share of support within a district, followed by averaging the scores of each district to compute a liberalism–conservatism state score. Scores range between 0 and 100, with lower scores reflecting a greater degree of conservatism. This variable is measured at each of the decennial years.

Religious fundamentalism measures the number of adherents to fundamental religious bodies relative to the state population as recorded by the Association for Religious Data Archives. Total adherents are considered all church members, including full members, their children and the estimated number of other participants who are not considered members (e.g., individuals who have been baptized or those who regularly attend services) as reported by fundamentalist religious organizations in each state. These data are measured decennially for 1980, 1990, 2000, and 2010. The data for 1970 come from the 1971 survey (the first year of available data).⁹

Control variables

The regression models control for a number of factors likely to influence incarceration and typically included in state level analyses. *Racial and ethnic composition* is measured through two variables—the percent non-Hispanic blacks and the percent of Hispanics in each state. Given the skewed distribution of the percent Hispanic, this variable is log transformed in the regression models.¹⁰ *Violent crime* is measured as the natural log of the average rate of assaults, rapes, homicides and robberies per 100,000 population in the decennial year, and the two years preceding the decennial year, as reported in the FBI's Uniform Crime Report. We chose the three-year average because higher rates of violence might take time to generate sufficient political momentum to seriously affect electoral outcomes and policy. *Urbanicity* is measured as the percent of the population characterized as living in an urban area. *Determinant sentencing* is a dummy variable that measures whether or not a state allows the discretionary release of prisoners prior to the end of the judge's sentence. Note that all values in, 1970 equal zero because the first determinant sentencing policies were not implemented until 1976. *Economic inequality* is measured through the GINI coefficient. Higher values indicate a greater degree of economic inequality. *Tax base* is the natural log of residents' mean income for each state.

Analytic strategy

Consistent with much of the prior work examining incarceration trends over time, we employ state-level fixed effects regression models to examine how changes in

population age structures characterizing the black and white population influence incarceration rates within states over time. Unlike other modeling strategies, fixed effects regressions hold constant time-invariant factors that vary between states, thus removing much of the potential threat posed by unobserved state-level heterogeneity. Our regression models estimate the net effect of differences in black and white age structures on incarceration rates while holding constant key theoretical predictors and period effects that capture the growth, stabilization, and retraction of interaction rates over time. Departing from recent work in this area (e.g., Brown, 2016; Campbell et al., 2015; Jacobs and Carmichael, 2001), we do not directly examine periodization in the effects of age structure over time. This decision is deliberate, as the effects of the population dynamics hypothesized here should occur at a much slower pace than many of the more proximate social dynamics (Fox and Piquero, 2003). For instance, changes in the relative ages of the black and white population required decades of above-average level fertility to eventually influence incarceration whereas significant shifts in the strength of the Republican Party, for instance, were more abrupt, sometimes swinging sharply across one or two election cycles as governorships and legislative power changed hands (Campbell et al., 2015; Cate, 2010). Moreover, we do not anticipate that the *effect* of age structure operated differently over time; rather, we expect that these population dynamics laid the groundwork for more proximal sociopolitical factors to emerge.

Our analyses unfold through three sets of regression models. The first model establishes the role of population age structure in explaining incarceration rates from 1970 to 2010. The second set of models examines how changes in the age structure of the black and white populations contributed to changes in religious fundamentalism, Republican strength in state legislatures, and state-level political ideology over time. The third set of models incorporates these variables as mediators, assessing whether and how changes in these key processes influenced the relationship between population age structure and incarceration trends over the past five decades. All models control for year and year squared to capture the overall incarceration trend during this time period.¹¹ As the dependent variable is log-transformed, the coefficients for the non-transformed variables in the models can be interpreted as the expected proportional change in the size of the incarcerated population for a one-unit increase in the predictor variable over time. Multiplying these coefficients by 100 yields the expected percent change in the size of the incarcerated population given a one-unit increase in the predictor variable. Coefficients for the log-transformed variables can be interpreted as the expected percent change in the size of the incarcerated population for a one-percent increase in the predictor variable over time.

Results

Table 2 presents the results of the baseline fixed effects model predicting the expected change in the size of the incarcerated population as a function of the

Table 2. Fixed effects regression of incarceration rates on population age disparity and socioeconomic control variables, 1970–2010.

	b	SE
Intercept	5.408	2.745*
Percent black	.008	.018
Ln percent Hispanic	-.058	.058
Ln violent crime rate	.061	.073
Determinate sentencing (=1)	-.047	.059
Urbanicity	.007	.006
Tax base	-.135	.278
Socioeconomic inequality	-.568	1.367
White/black age disparity	.364	.181*
Year	4.65	1.17***
Year ²	-.001	.000***
R ²	.913	

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed).

SE: standard error; b: coefficient; Ln: log-transformed.

median ages of the black and white populations and the control variables. Consistent with expectation, this model reveals a strong, positive relationship between population age disparity and incarceration rates. As the gap between the median age of blacks and whites increases within states over time, incarceration rates also increased. While the interpretation of the median age ratio is not immediately intuitive, the coefficient indicates that a doubling of the median age of whites (relative to blacks) is associated with a 36.4% increase in the size of the incarcerated population. Of course, population dynamics do not unfold at such an extreme rate and instead the coefficient might be interpreted in more conservative terms—in this sense, the coefficient tells us that a modest 10% increase in the relative age of the white population, as was observed in many Southern states, was associated with a 3.6% increase in incarceration rates over time.

Table 3 presents the parameter estimates from the models in which Republican strength (Model 1), political ideology (Model 2), and religious fundamentalism (Model 3) have each been regressed on the median age ratio and the sociodemographic controls to help illuminate whether and how changes in the population age structure of states helped contribute to the well-documented proximate correlates of the incarceration boom. Two noteworthy trends emerge here. First, we find no evidence that the median age disparity between blacks and whites had any notable influence on the growth of the Republican Party's strength within states over time.¹² Second, the models uncover clear evidence that the growing age disparity between blacks and whites had a profound influence on both political ideology and religious fundamentalism. To wit, as the age disparity between blacks and whites increased, states became less liberal and more fundamentalist. Specifically, a one-unit increase in the median age ratio was associated with an 11.4-point decrease in

Table 3. Fixed effects regression of republican strength, political ideology, and religious fundamentalism on population age disparity and socioeconomic control variables, 1970–2010.

	Republican strength		Political ideology		Religious fundamentalism	
	b	SE	b	SE	B	SE
Intercept	172.53	299.62	−108.253	95.481	−.271	1.650
Percent black	−2.795	1.954	−.284	.617	.003	.011
Ln percent Hispanic	−3.236	6.614	−2.649	2.105	−.023	.036
Ln violent crime rate	−10.994	8.234	−1.209	2.422	−.027	.044
Determinate sentencing (=1)	2.286	6.388	−13.758	6.369*	−.088	.036*
Urbanicity	.331	.705	.207	.226	−.007	.003*
Tax base	−1.522	30.303	−49.26	47.55	−.212	.167
Socioeconomic inequality	−167.368	149.108	20.56	9.65*	−.332	.822
White/black age disparity	−1.976	19.758	−11.430	6.411 ^t	.324	.111*
Year	0.929	2.029	−1.102	.647 ^t	.014	.011
Year ²	.007	.032	.021	.010*	−.000	.000*
R ²	.061		.081		.308	

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed); ^t $p < .10$.

SE: standard error; b: coefficient; Ln: log-transformed; R²: coefficient of determination.

political ideology (or, an 11.4-point *increase* in conservatism) and a 32.4% increase in religious fundamentalism.

Table 4 presents the results of four regression models in which these more proximate mechanisms are incorporated as mediators to examine whether and how the relationship between population dynamics and incarceration can be explained by the prevailing social and political forces that emerged in response to the growing demographic divide between blacks and whites. These models indicate that the inclusion of both political ideology and religious fundamentalism partially attenuate the effect of the median age ratio. For instance, the coefficient for age structure diminishes by roughly 4% ($[-.364-.349]/.364$) with the inclusion of political ideology (although retaining statistical significance) and by 23% with the inclusion of religious fundamentalism. However, only religious fundamentalism emerges as a significant predictor of incarceration in these models, suggesting that increasing religious fundamentalism is the likely mechanism linking population age structure to incarceration. Model 4 presents the results of the full regression equation in which all predictor variables and all mediators are entered simultaneously. The coefficient for age disparity is diminished by 30.5% and is no longer significant. Consistent with the prior model, only religious fundamentalism emerges as a significant predictor of incarceration rates, further highlighting its power in explaining incarceration growth over the past five decades.

Table 4. Fixed effects regression of incarceration rates on population age disparity, republican strength, political ideology, religious fundamentalism, and socioeconomic control variables, 1970–2010.

	Model 1		Model 2		Model 3		Model 4	
	b	SE	b	SE	b	SE	b	SE
Intercept	5.408	2.745 [†]	5.276	2.759 [†]	5.478	2.719*	5.182	2.732 [†]
Percent black	.009	.018	.009	.018	.008	.018	.010	.018
Ln percent Hispanic	-.071	.061	-.074	.061	-.072	.060	-.073	.073
Ln violent crime rate	.068	.075	.064	.076	.073	.075	-.458	1.361
Determinate sentencing (=1)	-.049	.058	-.050	.058	-.027	.059	-.026	.059
Urbanicity	.006	.006	.007	.006	.008	.006	.008	.006
Tax base	-.135	.278	-.109	.282	-.079	.028	-.038	.280
Socioeconomic inequality	-.568	1.367	-.678	1.374	-.482	1.355	-.454	1.364
White/black age disparity	.364	.181*	.349	.181 [†]	.279	.183	.253	.189
Year	.066	.019***	.065	.018**	.062	.019**	.059	.019**
Year ²	-.002	.000*	-.001	.000**	-.001	.000**	-.001	.000**
Republican strength	.001	.001	—	—	—	—	.001	.001
Political ideology	—	—	-.001	.002	—	—	-.002	.002
Religious fundamentalism	—	—	—	—	.259	.119*	.283	.121*
R ²	.913		.913		.916		.916	

* $p < .05$; ** $p < .01$; *** $p < .001$; [†] $p < .10$.

SE: standard error; b: coefficient; Ln: log-transformed; R²: coefficient of determination.

Discussion

America's fluid demographic fabric generates shifting social terrains fraught with tensions rooted in the nation's checkered history of racial conflict. As our analyses show, population dynamics did not unfold evenly across racial groups, and in states with greater demographic divides, incarceration rates were higher than states with smaller demographic divides. Growing age disparities between blacks and whites seem to have fueled higher levels of religious fundamentalism and political conservatism. Religious fundamentalism's emphasis on individual responsibility and notions of deservedness, and political conservatism's affinity for individualism and rejection of socially-centered explanations of crime, helped fuel the political fires that drove the carceral state's construction.

While some recent accounts of mass incarceration's rise and persistence contend that liberal elites drove America's imprisonment binge (Murakawa, 2014), our findings highlight the importance of a more sociological culprit—divergent race/age structures that buttressed historical racism and provided a demographic boost to conservative power. Any influence that federal officials were likely to yield in

state-level criminal justice policy was filtered through local social and political contexts, where the vast majority of all American prisoners are held. Within states, race, ideology, and religion interacted with local political structures in ways that generated momentum for criminal justice policies that drove imprisonment rates up 500% in a mere two decades and helped sustain them at levels unthinkable just a generation prior. The magnitude of this shift was partly possible because demographic forces combined with local political contexts to create conditions favorable to higher incarceration rates.

Although legal and cultural barriers had historically provided convenient filters that limited and framed African Americans' plight in the US, new post-Civil Rights realities ensured that white Americans would be conscious of black Americans. Legal battles intended to implement civil rights on the ground unfolded in state and federal courts across the US, providing ready reminders to white Americans that blacks were indeed entering mainstream institutions, including schools, politics, and labor markets (Simon, 2007). Though most white Americans still lived in highly segregated areas (Massey and Denton, 1993), media attention on urban crime and disorder painted an especially bleak and racialized portrait of rising violent crime and black neighborhoods (Beckett and Sasson, 2000). In state contexts with larger demographic divides, these forces were especially potent, stoking support for punitive responses to crime rooted in a worldview that linked crime to the individual moral failings of black offenders and rendered the effects of historical racism conveniently inconspicuous.

Our findings stress the sometimes under-appreciated importance of Christian fundamentalists in understanding American penalty and highlight the need to account for how fundamentalism and race interact to shape punishment in the US. Though Green's (2013, 2015) take on recent activism among US religious elites suggests that they could prove important in rethinking mass incarceration, our findings suggest that America's particular brand of evangelical Protestant fundamentalism is bound in complex ways to the nation's racial and punitive order. Although Greenberg and West (2001) long ago identified religious fundamentalism as an important correlate of state incarceration rates, subsequent theory building has largely ignored fundamentalism's role in shaping the carceral state. Christian fundamentalists in America seem to have an elective affinity for structural racism and one of its pillars—incarceration. This may seem surprising because religious reformers have historically been important leaders in demanding more humane punishments that emphasized redemption and forgiveness (Oshinsky, 1996). But as Emerson and Smith's (2000) work highlights, evangelical Christians in the US rarely "rock the boat" because their cultural toolkit marginalizes structural explanations for socioeconomic phenomena, and because America's political economy, with its emphasis on the Protestant ethic and individual agency, was forged to fit this worldview.

Exploring how generational dynamics and the powerful historical forces that shape them (e.g., wars, economic booms and busts) interact to condition subsequent trends in law and policy could provide an exciting layer to social science

research. Our findings highlight how generational effects, rooted in differential age structures and the historical experiences of those groups, provides an essential layer of historical complexity and depth to understanding political outcomes. From this vantage point, generational effects might explain why war metaphors (e.g., War on Poverty, War on Crime) resonated with generations whose formative years occurred in the celebrated period following America's Second World War victories (Simon, 2007), but were less successful with later generations for whom America's wars were less politically appealing. In fact, generational dynamics might help explain recent declines in incarceration and growing support for alternatives to imprisonment. Fewer US voters were adults when violent crime rates increased steadily throughout much of the 1970s and 1980s, and their experiences in an era of sharp declines in criminal offending might now make them less supportive of harsh punishments. Thus, the effects of certain events and factors (e.g., violent crime) likely operate across longer temporal horizons than many analyses and theories assume.

Our findings help make sense of the perplexingly potent appeal that law and order politics sustained for over two decades. Social movements often lose steam after successful efforts to change law and policy (Amenta et al., 2010), but the law and order movement's successes were remarkable for their magnitude and duration. This makes more sense when we consider how demographic tides helped fuel the religious fundamentalism and conservatism that under-girded the construction of America's carceral state. Momentum for "law and order" approaches was likely abetted by demographic forces that stoked generational racial tensions still festering in the wake of the Civil Rights Movement and were likely cemented by the rising crime and urban decay that plagued America's highly segregated urban areas. As Campbell and Schoenfeld (2013) have suggested, once the war on crime reached fever pitch by the early 1990s, it created new sources of momentum that now sustain mass incarceration's stubborn persistence despite its mounting costs and the historical drop in violent crime. As its size and reach grew, the web of offenders ensnared in the carceral state's grasp has continuously expanded (Gottschalk, 2014), and now reaches a growing proportion of subjects who were once far less likely to face extensive formal state sanctions, including whites, women, and the elderly.

Our findings lend further support to accounts of penal change that emphasize racial conflict, and highlight the need to take demographic forces seriously in understanding long-term shifts in law and policy. As Muller (2012) suggests, explaining how racial conflict shapes punishment requires a careful account of shifts in the nature of minority *and* majority groups over time. The aging and whitening of Southern states that resulted from black outmigration and a Southern white "baby bust" might have further exacerbated long-festering racial tensions. These dynamics likely made such states ripe for the racially charged law and order brand of politics that drove prison growth and the emergence and ultimate dominance of a Republican Party willing to embrace the most extreme and racial brands of the war on crime. Once support for imprisonment on a massive

scale took hold in states that were especially receptive, newly energized institutional and political processes helped spread and ingrain an especially punitive and aggressive correctional ethos in state and federal government (Campbell and Schoenfeld, 2013). For subsequent generations, mass incarceration and the seemingly race-neutral ideological structures that support it have become largely normalized, despite recent reform efforts in a handful of states.

Political conservatism resonates throughout the sociology of punishment literature as a key factor in explaining incarceration, in both historical case studies (e.g., Lynch, 2010) and quantitative analyses (Greenberg and West, 2001). As King (2008) has argued, religious and political conservatism operate in mutually reinforcing ways that explain differential enforcement of the law contingent on which groups those laws are intended to protect. Not surprisingly, we found a strong ($r = .56$) correlation between religious fundamentalism and ideological conservatism. Though the two exert independent effects on state incarceration rates, they seem to operate in mutually supportive ways. Theories of punishment would be well served if they could better account for *why* political conservatism thrived when and where it did, and how fundamentalism and conservatism might reinforce each other within American institutions. State-level historical research suggests that punitive crime control policies that abetted prison expansion took hold just as more liberal movements seemed to be gaining ground (Campbell, 2016; Lynch, 2010). The population dynamics we identify might provide some clues to the forces that buoyed the “law and order” strands of conservatism that ultimately helped generate America’s uniquely punitive approach to crime.

Demography is not destiny, and we are not arguing that shifting age structures were the primary force driving America’s imprisonment binge. Differential age structures alone could not account for the magnitude or duration of incarceration’s growth, but when considered against the nation’s longer racial history, and within the context of America’s political institutions, the war on crime’s appeal makes more sense. It is difficult to imagine America waging such a prolonged and expensive war on crime without race at the center of the story, and our findings provide an added layer of depth and complexity to our efforts to account for how racial tensions conditioned penal change. Growing age disparities across racial lines added an especially potent charge to American crime politics and similar tensions might also extend to other political realms, especially immigration politics. Race and age might help explain how support for prison expansion gained traction at the same time that support for other branches of government stagnated and eroded. Calls to reduce taxes for the nation’s wealthiest citizens helped restructure federal and state tax structures in ways certain to reduce public services such as public and secondary education that were more relevant to younger populations with higher fertility rates. As scholars grapple with understanding rising inequality in the latter 20th-century and beyond, it will be useful to situate the political outcomes linked to those changes within a demographic context of growing differences between blacks and whites.

Notes

1. We draw on a longer time series in this figure to better illustrate the extent to which the baby boom affected the median ages of whites and blacks during over past 70 years. Providing an extended timeframe helps contextualize recent trends within the broader historical data.
2. Christian fundamentalists in the US include people of many races and ethnic backgrounds but as a group they are overwhelmingly (90%) white (Emerson and Smith, 2000).
3. Some scholars have suggested that religious fundamentalism does not necessarily equate to punitive social policies (Melossi, 2001) and others note that some Christian fundamentalists have been instrumental in supporting recent reforms (Green, 2013, 2015). We are not suggesting that religion or fundamentalism are inherently punitive but that evangelical Protestants in the US are more prone to support more punitive policies within the American context.
4. Admissions likely capture the greater propensity of local governments to send offenders to state prison, but the actual size of the prison population reflects how states invest resources in the long-term maintenance and operation of facilities.
5. We focus on overall incarceration rates, rather than racial disparities in incarceration, because the processes outlined here suggest that differential age structures contributed to the growth and persistence of punitive criminal justice practices that resulted in high incarceration rates. These demographic trends do not necessitate that older whites become increasingly tough on young blacks, rather that the age disparities contributed to a political rhetoric in which law and order politics and prison expansion took center stage. Thus, the study of prison expansion can be viewed as independent from the study of the people who were most likely to populate prisons.
6. The assorted issues with incorporating ratios into regression models are well documented in the empirical literature (see Firebaugh and Gibbs, 1985; Kronmal, 1993). Most notably, ratio measures risk generating spurious correlations in situations in which neither of the constituent terms are significantly associated with the outcome. However, we are most concerned with the *relative difference* between black and white age structures, making a ratio a more intuitive measure of age disparity than available alternatives. With these limitations in mind, we also estimated the models substituting the ratio for (1) a model in which we included the white median age, the black median age, and their product term and (2) the difference between the median ages of the black and white population. The results for both models comport with those presented here. The first model revealed that neither white nor black median age were directly associated with incarceration, but their product term was negative (suggesting that incarceration rates rose higher in states where blacks aged more slowly than whites). The difference score was positive and statistically significant, indicating that larger disparities in the median ages of blacks and whites within states overtime were associated with larger increases in incarceration rates.
7. We acknowledge that this measure is problematic, as it treats all states with non-Republican governors as equal, regardless of the composition of the legislature. We incorporate this measure in our models to remain consistent with prior state-level

analyses of incarceration. However, we also replicated these models by incorporating a dummy variable for Republican governor, a separate measure of the percent Republican in the legislature, and their product term. The results of these supplementary models are identical to those reported here (models available upon request).

8. The Nebraska state legislature is unicameral, and lawmakers are not officially affiliated with parties. In years when there was a Democratic governor, Nebraska was assigned a value of 0. In years when there was a Republican governor, Nebraska was assigned a value of 50%. This coding strategy allowed for Nebraska to be retained in the analyses. Subsequent models excluding Nebraska produced nearly identical results to those reported below, making it unlikely this coding decision unduly influenced the findings (available upon request).
9. Religious fundamentalism is treated as a mediating variable in the regression models. Thus, measuring this variable in 1971 retains the hypothesized temporal ordering in our models as (1) age disparity is measured one year prior and (2) incarceration is measured two years after.
10. In subsequent models, we included polynomial terms for percent black and percent Hispanic. Neither the main effect nor the polynomial was statistically significant for either variable. For sake of model parsimony, we removed the polynomials in the results presented here.
11. Decennial year time indicators were nearly collinear with the measure of age disparity and could not be reliably measured. While not without limitation, the approach utilized here provides some correction for period effects.
12. Given the measurement of Republican strength, we attempted to model this association through a number of alternative specifications including adding a small constant and logging the scale and examining only the percentage in the state legislature while controlling for the presence of a Republican governor. In each case, we failed to detect an association between racial age disparity and Republican strength.

References

- Alexander M (2010) *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. New York: The New Press.
- Amenta E, Caren N, Chiarello E, et al. (2010) The political consequences of social movements. *Annual Review of Sociology* 36: 287–307.
- Baker JO and Booth AL (2016) Hell to pay: Religion and punitive ideology among the American public. *Punishment & Society* 18(2): 151–176.
- Barker V (2009) *The Politics of Imprisonment: How the Democratic Process Shapes the Way America Punishes Offenders*. New York: Oxford University Press.
- Beckett K (1997) Making crime pay: Law and order in contemporary American politics. In: Tonry M and Morris N (eds) *Studies in Crime and Public Policy*. Oxford: Oxford University Press.
- Beckett K and Sasson T (2000) *The Politics of Injustice: Crime and Punishment in America*. Thousand Oaks, CA: Pine Forge Press.
- Berry WD, Ringquist EJ, Fording RC, et al. (2007) The measurement and stability of state citizen ideology. *State Politics and Policy Quarterly* 7(2): 111–132.

- Blalock HM (1967) *Toward a Theory of Minority Group Relations*. New York: John Wiley & Sons.
- Blumer H (1958) Race prejudice as a sense of group position. *Pacific Sociological Review* 1(1): 3–7.
- Bobo L and Hutchings V (1996) Perceptions of racial competition: Extending Blumer's theory of group position in a multiracial social context. *American Sociological Review* 61: 951–972.
- Brown EK (2016) Toward refining the criminology of mass incarceration: Group-based trajectories of U.S. states, 1977–2010. *Criminal Justice Review*. DOI: 10.1177/0734016815627859.
- Campbell MC (2016) Are All Politics Local? A Case Study of Local Conditions in a Period of “Law and Order” Politics. *The ANNALS of the American Academy of Political and Social Science* 664(1): 43–61.
- Campbell MC and Schoenfeld HA (2013) The transformation of America's penal order: A historicized political sociology of punishment. *American Journal of Sociology* 119(4): 1375–1423.
- Campbell MC, Vogel M and Williams J (2015) Historical contingencies and the evolving importance of race, violent crime and region in explaining mass incarceration in the United States. *Criminology* 53(2): 180–203.
- Cate SD (2010) *Untangling prison expansion in Oregon: Political narratives and policy outcomes*. MA Thesis, Political Science, University of Oregon, Eugene, OR, USA.
- Chambliss WJ (1999) *Power, Politics and Crime*. Boulder, CO: Westview Press.
- Clear TR and Frost NA (2013) *The Punishment Imperative: The Rise and Failure of Mass Incarceration in America*. New York: New York University Press.
- Colby SL and Ortman JM (2014) *The baby boom cohort in the United States: 2012 to 2060*. *Current Population Reports, P25-1141*. Washington, DC: U.S. Census Bureau.
- Danigelis NL, Hardy M and Cutler SJ (2007) Population aging, intracohort aging, and sociopolitical attitudes. *American Sociological Review* 72(5): 812–830.
- Emerson MO and Smith C (2000) *Divided by Faith: Evangelical Religion and the Problem of Race in America*. Oxford: Oxford University Press.
- Enns PK (2014) The public's increasing punitiveness and its influence on mass incarceration in the United States. *American Journal of Political Science* 58(4): 857–872.
- Firebaugh G and Gibbs JP (1985) User's guide to ratio variables. *American Sociological Review* 50(5): 713–722.
- Fox JA and Piquero AR (2003) Deadly demographics: Population characteristics and forecasting homicide trends. *Crime & Delinquency* 49(3): 339–359.
- Garland D (1990) *Punishment and Modern Society: A Study in Social Theory*. Chicago: University of Chicago Press.
- Garland D (2001) *The Culture of Control: Crime and Social Order in Contemporary Society*. Chicago: University of Chicago Press.
- Goodman P, Page J and Phelps M (2015) The long struggle: An agonistic perspective on penal development. *Theoretical Criminology* 19(3): 315–335.
- Goodman P, Page J and Phelps M (2017) *Breaking the Pendulum: The Long Struggle over Criminal Justice*. New York: Oxford University Press.
- Gottschalk M (2006) *The Prison and the Gallows: The Politics of Mass Incarceration in America*. Cambridge: Cambridge University Press.

- Gottschalk M (2014) *Caught: The Prison State and the Lockdown of American Politics*. Princeton, NJ: Princeton University Press.
- Grasmick HG, Davenport E, Chamlin MB, et al. (1992) Protestant fundamentalism and the retributive doctrine of punishment. *Criminology* 30(1): 21–45.
- Grasmick HG and McGill AL (1994) Religion, attribution style, and punitiveness: Toward juvenile offenders. *Criminology* 32(1): 23–46.
- Green DA (2013) Penal optimism and second chances: The legacies of American Protestantism and the prospects for penal reform. *Punishment & Society* 15(2): 123–146.
- Green DA (2015) US penal-reform catalysts, drivers, and prospects. *Punishment & Society* 17(3): 271–298.
- Greenberg DF and West V (2001) State prison populations and their growth, 1971–1991. *Criminology* 39(3): 615–653.
- Griffin LJ (2004) Generations and collective memory revisited: Race, region and memory of civil rights. *American Sociological Review* 69: 544–557.
- Jacobs D and Carmichael JT (2001) The politics of punishment across time and space: A pooled time-series analysis of imprisonment rates. *Social Forces* 80(1): 61–91.
- Jacobs D and Helms R (2001) Toward a political sociology of punishment: Politics and changes in the incarcerated population. *Social Science Research* 30(2): 171–194.
- King R (2008) Conservatism, institutionalism, and the social control of intergroup conflict. *American Journal of Sociology* 113(5): 1351–1393.
- Kronmal RA (1993) Spurious correlation and the fallacy of the ratio standard revisited. *Journal of the Royal Statistical Society. Series A (Statistics in Society)* 156: 379–392.
- Lacey N and Soskice D (2015) Crime, punishment and segregation in the United States: The paradox of local democracy. *Punishment & Society* 17(4): 454–481.
- Lynch M (2010) *Sunbelt Justice: Arizona and the Transformation of American Punishment*. Stanford, CA: Stanford Law Books.
- Massey DS and Denton NA (1993) *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, MA: Harvard University Press.
- Mather M (2012) Fact sheet: The decline in US fertility. Available at: www.prb.org/Publications/Datasheets/2012/world-population-data-sheet/fact-sheet-us-population.aspx (accessed 18 September 2010).
- McGirr L (2001) *Suburban Warriors: The Origins of the New American Right*. Princeton, NJ: Princeton University Press.
- Melossi D (2001) The cultural embeddedness of social control: Reflections on the comparison of Italian and North-American cultures concerning punishment. *Theoretical Criminology* 5(4): 403–424.
- Miller LL (2008) *The Perils of Federalism: Race, Poverty, and the Politics of Crime Control*. Oxford: Oxford University Press.
- Muller C (2012) Northward migration and the rise of racial disparity in American incarceration, 1880–1950. *American Journal of Sociology* 118(2): 281–326.
- Murakawa N (2014) *The First Civil Right: How Liberals Built Prison America*. New York: Oxford University Press.
- National Research Council. Committee on Law and Justice, Division of Behavioral and Social Sciences and Education (ed.) (2014) *The Growth of Incarceration in the*

- United States: Exploring Causes and Consequences*. Washington, DC: The National Academies Press.
- Oshinsky DM (1996) *Worse than Slavery: Parchman Farm and the Ordeal of Jim Crow Justice*. New York: Free Press.
- Page J (2011) *The "Toughest Beat:" Politics, Punishment, and the Prison Officers Union in California*. New York: Oxford University Press.
- Perkinson R (2010) *Texas tough: The rise of America's prison empire*. New York: Metropolitan Books.
- Schuman H and Scott J (1989) Generations and collective memories. *American Sociological Review* 54(3): 359–381.
- Simon J (2007) *Governing through Crime: How the War on Crime Transformed American Democracy and Created a Culture of Fear*. New York: Oxford University Press.
- Tamura R, Simon C and Murphy KM (2012) *Black and white fertility, differential baby booms: The value of civil rights*. MRPA paper No. 40921.
- Vogel M and Porter LC (2016) Toward a demographic understanding of incarceration disparities: Race, ethnicity, and age structure. *Journal of Quantitative Criminology* 32(4): 515–530.
- Wacquant L (2006) *Deadly Symbiosis: Race and the Rise of Neoliberal Penalty*. Oxford: Polity Press.

Michael C Campbell has worked as an assistant professor in the Department of Criminology and Criminal Justice at the University of Missouri-St. Louis since 2012. His research builds sociological and criminological theories using historical and mixed methods to examine how politics and institutions shape legal change. His work has been published in the *American Journal of Sociology*, *Law and Society Review*, *Criminology* and other sociological and criminological academic journals.

Matt Vogel is Assistant Professor of Criminology and Criminal Justice at the University of Missouri – St. Louis and a researcher at OTB – Research for the Built Environment, Technological University of Delft. His research examines contextual influences on adolescent behavior and the relationship between population dynamics and crime. His research has recently appeared in *Criminology*, *Journal of Quantitative Criminology*, and *Social Forces*.