And Justice for All? Racial and Ethnic Disparities in Federal Drug Courts in California and the US

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And Justice for All?
Racial and Ethnic Disparities in Federal Drug Courts in California and the US

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Abstract

This study uses data obtained from the United States Sentencing Commission for fiscal years 2003, 2007, and 2012 to examine racial and ethnic disparities in drug crime sentencing. The authors use linear regression to assess disparities in sentence length between African-American and white offenders and Latino and non-Latino offenders and a binary logistic regression model to assess black/white and Latino/non-Latino disparities in the odds of receiving a sentence below the range stipulated by the Federal Sentencing Guidelines.

At the national level, the study found significant racial disparities that disadvantage African-American offenders in sentence length and odds of a below-range sentence. The study observed no disparities between African-American and white offenders in California for sentence length in 2003 or 2012, or for below-range odds in any of the three years. Nationally, ethnic disparities that disadvantaged Latino offenders were found in both sentence length and odds of a below-range sentence.

In California, Latino offenders tended to receive longer sentences than others in 2003 and 2007 and had lower odds of a sentence below the guideline range in 2012. The years included in this study bracket the Supreme Court case, United States v. Booker, but we found no clear impact of the case with regard to racial or ethnic disparities in sentencing outcomes.
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Introduction

The legitimacy of the United States criminal justice system is predicated on a belief in the fairness of that system. This belief may lead Americans to assume that similar cases will result in similar sentencing outcomes, regardless of extralegal factors. This paper sets out to test whether this is the case, with regard to the treatment of drug offenders in federal criminal courts both nationwide and specifically in California.

This paper addresses three main research questions: First, to what extent do racial and ethnic factors influence sentencing decisions for drug offenders in California’s federal courts? Second, does California differ from the rest of the nation in this regard? And finally, has the extent of racial and ethnic sentencing disparities changed following the Supreme Court case United States v Booker, which introduced greater flexibility and discretion into the system of federal criminal sentencing?

The Federal Sentencing Guidelines and United States v. Booker

Congress enacted Federal Sentencing Guidelines in 1987 following their creation by the new United States Sentencing Commission, which itself was created by Congress by the Sentencing Reform Act of 1984. The guidelines created a complex calculus intended to standardize federal sentencing with two ultimate purposes: “honesty in sentencing,” meaning that the full sentence given will be served (abolishing parole); and reducing “unjustifiably wide” sentencing disparity for identical crimes (Breyer 1988). These guidelines did not eliminate judicial or prosecutorial discretion in sentencing. Having determined the Guideline sentence range into which a defendant should fall, judges could choose to depart—either upward or downward—from the guideline range in “unusual circumstances” (Steffensmeier and Demuth 2000; Wilkins and Steer 1993).

The United States Sentencing Commission’s guidelines policy §5K1.1 allows for a sentence below the guidelines if the government files a motion “stating that the defendant has provided substantial assistance in the investigation or prosecution of another person who has committed an offense” (US Sentencing Commission 2013, p. 8). In other words, federal prosecutors can re-
quest, and judges can agree to, sentence reductions for defendants in exchange for their help in an ongoing case (Hartley, Maddan, and Spohn 2007). This may include assistance by means of activities such as provision of information, testimony in court or before a grand jury, or undercover work (Maxfield and Kramer 1998).

In 2004, the Supreme Court ruled in *Blakely v. Washington* that judges were prohibited from taking into account facts not found by a jury in determining whether or not to depart from the Federal Sentencing Guidelines (*Blakely v. Washington* 2004). Two subsequent cases brought by the federal government against Freddie Booker and Duncan Fanfan, who had their sentences protected from departure based on judges’ determination of facts, challenged this ruling. The cases were consolidated into *United States v. Booker*.

The Court delivered two rulings in *Booker*. First, the Federal Sentencing Guidelines’ provisions that allow judges to enhance sentences without facts reviewed by a jury violate the Sixth Amendment’s guarantee of trial by jury; and second, the Federal Sentencing Guidelines, heretofore mandatory, would now be advisory (*United States v. Booker* 2005). In the wake of *Booker*, US federal courts saw a flourishing of departures, both above and below the now-advisory guidelines. Below-range sentences almost doubled by the end of fiscal year 2006 (Hofer 2007).

Given that one of the original purposes of the Federal Sentencing Guidelines was to reduce racial and ethnic sentencing disparities, an increase in such disparities could potentially result from the relaxation of the guidelines. The effect of this growth in departures on racial and ethnic minorities, thus far, has been subject to debate, with the only consensus being that results are “messy” (Engen 2011; Sessions and US Sentencing Commission 2010; Ulmer, Light, Kramer 2011). This paper seeks to add empirical evidence to the discussion regarding whether the extent of racial and ethnic sentencing disparities has changed after *Booker* in California or nationwide.

**Racial and Ethnic Disparities in Federal Drug Sentencing:**

**Theoretical Frameworks**

The process of criminal sentencing combines what Max Weber describes as “formal rationality,” the application of rules and structure, and “substantive rationality,” which entails discretionary decision making (Steffensmeier and Demuth, 2000; Weber et al. 1978). Sentencing guidelines emphasize formal rationality, with specific sentence ranges corresponding to certain combinations of legally relevant variables such as instant offense and prior criminal record (Savelsberg 1992). Encouragingly, several studies have found that the most influential factors in sentencing are these legally relevant variables (Chen 2014; Steffensmeier and Demuth, 2000; Ulmer and Johnson 2004). However, evidence indicates that extralegal factors—such as a defendant’s gender, age, race, or ethnicity—appear to influence sentencing outcomes (Johnson 2003; Steffensmeier, Ulmer, Kramer 1998).

**Focal Concerns and Extralegal Factors Influencing Sentencing Decisions**

Focal concerns theory provides a basis for understanding the role of extralegal factors. This perspective sets forth three main considerations that judges take into account when determining an offender’s sentence: blameworthiness, protection of the community (which is related to the dangerousness of the offender), and “practical constraints” such as resources available to the court (Steffensmeier et al. 1998). Given that the assessment of these focal concerns must be made with incomplete information, judges and other members of the courtroom workgroup, in-
cluding prosecutors and defense attorneys, may fall back on assumptions or stereotypes in their determination of how severely a defendant should be punished (Albonetti 1991; Engen and Gainey 2000; Steffensmeier et al. 1998).

Kramer and Ulmer (2002) concluded that the second focal concern listed above—dangerousness—probably contributes most to disparities in the likelihood of receiving downward departures from sentencing guidelines in Pennsylvania. Focal concerns theory provides an explanation for why punishments for young minority males, who are perceived as more violent and dangerous, have been found to be significantly more severe than for older, white, and female defendants with similar offenses and criminal histories (Spohn and Holleran 2000; Steffensmeier et al., 1998).

Drawing in part on this theoretical framework, an extensive body of research has examined the influence of race and ethnicity on sentencing outcomes using Federal Sentencing Guidelines statistics, data from states with sentencing guidelines, such as Pennsylvania and Minnesota (see, e.g., Johnson 2005; Kramer and Ulmer 2002; Moore and Miethe 1986), and state data on sentencing under other models, including mandatory minimum sentencing laws (see, e.g., Chen 2014; Ulmer, Kurlychek, Kramer 2007). Studies of judicial departures from the Federal Sentencing Guidelines have consistently found that for cases prior to 2005, African-American and Latino offenders were generally less likely than white offenders to receive downward departures (Everett and Wojtkiewicz 2002; Johnson 2003; Kramer and Ulmer 1996; Mustard 2001; Steffensmeier and Demuth, 2000).

Further studies have found that Latino offenders have significantly greater odds than non-Latino offenders of receiving an upward departure, but that African-American offenders tend to have lower odds than white offenders of receiving an upward departure, despite both African-American and Latino offenders having significantly lower odds than white and non-Latino offenders, respectively, of receiving downward departures (Engen, Gainey, Crutchfield, Weis 2003).

It is important to study the effect of ethnicity separately from the effect of race, particularly during the current period of rapid growth in the Latino population in California and nationwide. From 2000 to 2010, the total population of California increased from 33,871,648 to 37,253,956. In that time, the Latino population of California increased from 10,966,556 to 14,013,719 (Ennis, Rios-Vargas and Albert, 2011). The Latino population in California increased by 27.8 percent in the previous decade, and this growth accounted for 90 percent of California’s total population growth in that time.

The Latino population of the United States increased by 15.2 million, a 43 percent increase, between 2000 and 2010, according to the US Census Bureau (Ennis et al. 2011). This rate of change makes the Latino population one of the fastest growing in the nation, exhibiting a growth rate four times the national average. Recent studies using data from Pennsylvania (Steffensmeier and Demuth 2001) and the federal courts (Doerner and Demuth 2010; Steffensmeier and Demuth 2000) indicate that Latino defendants receive the harshest penalties, all else being equal. Steffensmeier and Demuth (2001) attribute this finding to “the specific social and historical context facing Latino Americans,” noting that this population currently faces high and increasing “overall levels of prejudice and racism . . . in reaction to the high rate of immigration” (Steffensmeier and Demuth 2001, 170).

This explanation is consistent with racial/ethnic threat theory, which suggests that the relative sizes of majority and minority groups in a given population will affect social and political outcomes. As minority populations increase relative to majority populations, the majority feel that
the status quo is threatened (Blalock 1967). Racial/ethnic threat theory has been used to explain how certain measures of social control, such as the implementation of sentencing policies, tend to increase in concert with a growing minority population, until that population has reached a certain critical mass and has enough political and social power to counteract the effect.¹

The current study seeks to contribute to this discussion by examining data from both before and after the Federal Sentencing Guidelines were made advisory, rather than mandatory, by the Supreme Court ruling in United States v. Booker. While this paper does not test racial/ethnic threat theory directly, the analysis examines the role of racial and ethnic disparity, before and after Booker, both nationwide and specifically in California, which has the nation’s largest population of Latino Americans (Brown and Lopez 2013). Findings from California may provide some indication of what lies ahead for states with quickly growing Latino populations.

**The Liberation Hypothesis and Unwarranted Disparities in Drug Offense Sentencing**

Previous research has found that sentence disparity between black and white offenders and Latino and non-Latino offenders tends to be harsher in drug cases than in nondrug cases (Mustard 2001; Steffensmeier and Demuth, 2000). The increased disparity found in drug cases may be explained, in part, by the liberation hypothesis. This theory, developed by Kalven and Zeisel (1966), holds that jurors (or, in this case, any judicial actors determining a sentence) are “liberated” from legal constraints in less serious cases in which evidence is “weak or contradictory,” allowing them more room for discretion (Spohn and Cederblom 1991). In their analysis of violent felony cases in Detroit, Spohn and Cederblom (1991) find that liberation hypothesis holds with regard to the decision to incarcerate.

African-American defendants accused of less serious offenses were incarcerated more often, all else being equal, than white defendants (Spohn and Cederblom 1991). However, the hypothesis is not confirmed in their analysis of sentence length (Spohn and Cederblom 1991). Further studies have found support for the liberation hypothesis in California’s application of Three Strikes sentences, with disparities between black and white offenders increasing as the seriousness of the offense decreases (Chen 2008). Because past research has found that the strongest evidence of bias in sentencing is present for less serious offenses, this study focuses specifically on sentencing for nonviolent drug offenses.

**Hypotheses**

Using the data and methods detailed below, this study tests the following theoretically informed hypotheses:

*Hypothesis 1:* All else equal, in each year studied, African-American offenders will typically receive longer sentences than white offenders.

*Hypothesis 2:* All else equal, in each year studied, African-American offenders will typically have lower odds of receiving sentences below the guideline range than white offenders.

*Hypothesis 3:* All else equal, in each year studied, Latino offenders will typically receive longer sentences than non-Latino offenders.

¹ For example, studies have found an association between the application of habitual offender sentencing policies and the relative size of the black population in Florida (Crawford, Chiricos, and Kleck 1998) and the Latino population in California (Chen 2014).
Hypothesis 3a: This effect will be greater in California than nationally, due to California’s relatively large Latino population.

Hypothesis 4: All else equal, in each year studied, Latino offenders will typically have lower odds of receiving sentences below the guideline range than non-Latino offenders.

Hypothesis 4a: This effect will be greater in California than nationally due to California’s relatively large Latino population.

Hypothesis 5: Racial and ethnic disparities in sentencing outcomes will be greater in 2007 and 2012, after the Supreme Court’s ruling in United States v. Booker (2005), than in 2003, before the ruling made Federal Sentencing Guidelines advisory rather than mandatory.

Data and Methods

This study was conducted using datasets for fiscal years 2003, 2007, and 2012, provided by the United States Sentencing Commission. These years were chosen in order to study sentencing data from two years before and two years after Booker, as well as in the most recent year available. These data include all offenders sentenced in federal criminal courts for each included year. The 2003 dataset includes documentation on 70,258 cases sentenced under the Sentencing Reform Act, including demographic information, sentencing data, case identifiers, and departure information. The 2007 dataset includes the same information for the 72,868 cases sentenced in the fiscal year. The 2012 dataset documents 84,173 cases with all the same information.

These datasets were each filtered to include only drug offenses, in an effort to narrow a large complex range of offense types and focus on a category where sentencing disparities are most likely to arise according to the liberation hypothesis. The filter category includes trafficking, manufacturing, and importing drugs. Another filter was subsequently applied to each dataset, limiting analysis solely to cases sentenced in California’s four districts: North, East, Central, and South.

We applied this filter, not only to provide a specific study of California’s sentencing practices, but to reduce regional heterogeneity in sentencing conventions. After the application of these filters, the 2003, 2007, and 2012 datasets included 1,828 cases, 2,025 cases, and 2,767 cases, respectively. We performed further analysis on the datasets filtered to drug offenses, but not to California for the purpose of comparing California’s sentencing outcomes to broader national sentencing trends.

Our analysis for each dataset used both a linear regression model and a binary logistic regression model. The analyses included both legally relevant and extralegal independent variables, descriptive statistics for which can be found in Table 1. The dependent variable in the linear regression analyses is sentence length in months, which is converted to natural-logarithm form to account for the positive skew of the variable distribution.

In each year, sentence length for federal drug offenders in California ranged from 0.03 months to 470 months, with an average length between 49.9 and 54.4 months. In the logistic regression model, for each year we used a dummy variable measuring the odds of a sentence below the guideline range (as a departure from the guidelines prior to Booker and a lower sentence than recommended by the guidelines post-Booker). The paucity of sentences above the guidelines,

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2 In Table 1, means and standard deviations are displayed for continuous variables. Frequencies are provided for categorical variables. N varies between variables due to missing data.
Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>California</th>
<th>National</th>
<th>California</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean (SD)</td>
<td>N</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Sentence Length</td>
<td>1828</td>
<td>49.88 (57.56)</td>
<td>24705</td>
<td>77.81 (77.19)</td>
</tr>
<tr>
<td>Guideline Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Sentence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within range</td>
<td>557</td>
<td>15878 (49875)</td>
<td>4</td>
<td>149 (149)</td>
</tr>
<tr>
<td>Above</td>
<td>4</td>
<td>9448 (9448)</td>
<td>708</td>
<td>9448 (9448)</td>
</tr>
<tr>
<td>Sub. asst./Govt.</td>
<td>207</td>
<td>1636 (1636)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sponsored</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below range</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
<td>749</td>
<td>2.10 (3.68)</td>
<td>6768</td>
<td>2.62 (4.13)</td>
</tr>
<tr>
<td>Cocaine</td>
<td>314</td>
<td>5968 (5968)</td>
<td>5355</td>
<td>323 (323)</td>
</tr>
<tr>
<td>Crack</td>
<td>96</td>
<td>1835 (1835)</td>
<td>37</td>
<td>37 (37)</td>
</tr>
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<td>Heroin</td>
<td>80</td>
<td>4417 (4417)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meth</td>
<td>413</td>
<td>1.80 (1.80)</td>
<td></td>
<td></td>
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<tr>
<td>Drug Offense</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Categories</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal History</td>
<td>1772</td>
<td>25859 (25859)</td>
<td>1990</td>
<td>2.20 (3.74)</td>
</tr>
<tr>
<td>Points</td>
<td>(3.68)</td>
<td>(4.13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marijuana Wt.</td>
<td>1505</td>
<td>20007 (20007)</td>
<td>1877</td>
<td>2.55E+07 (2.55E+07)</td>
</tr>
<tr>
<td>Equiv. (grams)</td>
<td>(3.61E+08)</td>
<td>(4.88E+08)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1765</td>
<td>26325 (26325)</td>
<td>2013</td>
<td>33.03 (10.23)</td>
</tr>
<tr>
<td>(10.60)</td>
<td></td>
<td>(9.80)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>1606</td>
<td>23205 (23205)</td>
<td>1772</td>
<td>2.77E+07 (2.77E+07)</td>
</tr>
<tr>
<td>Female</td>
<td>221</td>
<td>3267 (3267)</td>
<td>238</td>
<td>3267 (3267)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>1605</td>
<td>17432 (17432)</td>
<td>1762</td>
<td>2.55E+07 (2.55E+07)</td>
</tr>
<tr>
<td>Black</td>
<td>158</td>
<td>7608 (7608)</td>
<td>171</td>
<td>7608 (7608)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Latino</td>
<td>696</td>
<td>14900 (14900)</td>
<td>404</td>
<td>2.55E+07 (2.55E+07)</td>
</tr>
<tr>
<td>Latino</td>
<td>1128</td>
<td>11450 (11450)</td>
<td>1113</td>
<td>11450 (11450)</td>
</tr>
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</table>

Table continues on next page
Table 1. Descriptive Statistics, continued

<table>
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<th>2012 California</th>
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<tr>
<td></td>
<td>N</td>
<td>Mean (SD)</td>
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<tr>
<td>Sentence Length (Mo.)</td>
<td>1946</td>
<td>54.377 (47.49)</td>
</tr>
<tr>
<td>Guideline Range of Sentence</td>
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<td></td>
</tr>
<tr>
<td>Within range</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above</td>
<td>435</td>
<td>8562</td>
</tr>
<tr>
<td>Sub. asst./ Govt. sponsored</td>
<td>14</td>
<td>162</td>
</tr>
<tr>
<td>Below range</td>
<td>1314</td>
<td>6842</td>
</tr>
<tr>
<td>Drug Offense Categories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
<td>490</td>
<td>5447</td>
</tr>
<tr>
<td>Cocaine</td>
<td>377</td>
<td>4470</td>
</tr>
<tr>
<td>Crack</td>
<td>85</td>
<td>2400</td>
</tr>
<tr>
<td>Heroin</td>
<td>111</td>
<td>1547</td>
</tr>
<tr>
<td>Meth</td>
<td>844</td>
<td>3575</td>
</tr>
<tr>
<td>Criminal History Points</td>
<td>1980</td>
<td>2.38 (4.25)</td>
</tr>
<tr>
<td>Marijuana Wt. Equiv. (grams)</td>
<td>1756</td>
<td>2.41E+07 (1.75E+08)</td>
</tr>
<tr>
<td>Age</td>
<td>2075</td>
<td>33.36 (10.57)</td>
</tr>
<tr>
<td>Sex</td>
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</tr>
<tr>
<td>Male</td>
<td>1686</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>376</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
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<tr>
<td>White</td>
<td>1759</td>
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<tr>
<td>Black</td>
<td>130</td>
<td></td>
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<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
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<tr>
<td>Non-Latino</td>
<td>209</td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td>484</td>
<td></td>
</tr>
</tbody>
</table>

both pre- and post-Booker, made meaningful study of upward departures and above-range sentences impossible.

In 2003, 2007, and 2012 in the California datasets filtered to drug offenders, only 4, 11, and 14 cases, respectively, sentenced above the guideline range. Data on sentences below the guidelines, which include substantial assistance departures and government-sponsored below-range sentences, along with other below-range sentences, are more extensive: in 2003, not including substantial assistance and other government-sponsored departures, 207 offenders received downward departures from the Federal Sentencing Guidelines compared to 557 sentenced within the guidelines; in 2007, 272 offenders received sentences below the guideline recommendation, compared to 587 who were sentenced within the guideline range; and in 2012, 312 offenders were sentenced below the guideline range, compared to 435 within.
Notably, as shown in Table 1, the number of substantial assistance and government sponsored below-range sentences far exceeds the number of sentences in any of the other categories each year: there are 708, 1,064, and 1,314 in the years 2003, 2007, and 2012 respectively.

Legally relevant variables in this analysis include the extent and severity of the offender’s criminal history (measured using the “Criminal History Points” variable, as an aggregation of prior offenses carrying one, two, and three points each), the type of drug crime for which offender is charged (using dummy variables for cocaine, crack, heroin, and methamphetamine offenders relative to marijuana offenders), and the amount of drug for which offender is charged (using “Marijuana Weight Equivalency,” a conversion measure designed by the US Sentencing Commission, which, somewhat subjectively, calculates for a given drug the equivalent weight of marijuana in grams). Extralegal variables include the offender’s age in years and dummy variables for sex, race (limited to black and white), and ethnicity (limited to Latino and non-Latino).

Bivariate analysis was conducted on the California data to determine uncontrolled correlation between several independent variables and sentence length. For example, in 2003, 2007, and 2012, African-American offenders received on average about 38, 44, and 16 month longer sentences, respectively, than white offenders ($p < 0.001$). In 2003 and 2007, bivariate analysis did not return statistically significant results with regard to sentence length disparity between Latino and non-Latino offenders, but in 2012, Latino offenders received on average about 10-month-longer sentences than non-Latino offenders ($p < 0.05$). The disparity between female and male offenders was very large and significant in each year. In 2003, without holding other variables constant, female offenders received on average 22-month-shorter sentences than male offenders ($p < 0.001$). In 2007, female offenders received on average about 26-month-shorter sentences than male offenders ($p < 0.001$). In 2012, without holding other variables constant, female offenders typically received sentences shorter by about 18 months than those given to male offenders ($p < 0.001$).

**Findings**

**Sentence Length**

After transforming the sentence length variable to the natural-logarithm form, a normal distribution of the variable was approximated and linear regression analysis was appropriate. Due to this transformation of the dependent variable, the coefficients returned by the regression analysis must be converted using the exponential function ($e^\beta$). The converted coefficients describe the percentage change in sentence length associated with a one-unit change in the independent variable at the mean values of the other independent variables.

**2003**

Tables 2 and 3 display the results for the linear regression with sentence length in months as the dependent variable, performed on the 2003 and 2007 datasets for both California and the entire United States. The $R^2$ value for the 2003 California-only model is 0.553, indicating that roughly 55 percent of the sample’s variation in sentence length can be attributed to the included variables. Notably, neither the black nor Latino dummy variable is found to be statistically significant in 2003, meaning that there is no significant black/white or Latino/non-Latino disparity, specifically with regard to federal drug crime sentences in California.
Table 2. Analysis of Sentence Length, 2003

<table>
<thead>
<tr>
<th></th>
<th>CA 2003</th>
<th>National 2003</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>eβ</td>
</tr>
<tr>
<td></td>
<td>(SE)</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1.891</td>
<td>6.626 ***</td>
</tr>
<tr>
<td></td>
<td>0.093</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.008</td>
<td>1.008 ***</td>
</tr>
<tr>
<td></td>
<td>0.002</td>
<td></td>
</tr>
<tr>
<td>Female (Reference = Male)</td>
<td>-0.261</td>
<td>0.770 ***</td>
</tr>
<tr>
<td></td>
<td>0.077</td>
<td></td>
</tr>
<tr>
<td>Black (ref. = White)</td>
<td>0.085</td>
<td>1.089</td>
</tr>
<tr>
<td></td>
<td>0.109</td>
<td></td>
</tr>
<tr>
<td>Latino (ref. = non-Latino)</td>
<td>0.074</td>
<td>1.077</td>
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<tr>
<td></td>
<td>0.058</td>
<td></td>
</tr>
<tr>
<td>Criminal History Points</td>
<td>0.087</td>
<td>1.091 ***</td>
</tr>
<tr>
<td></td>
<td>0.007</td>
<td></td>
</tr>
<tr>
<td>Cocaine (ref. = Marijuana)</td>
<td>1.473</td>
<td>4.362 ***</td>
</tr>
<tr>
<td></td>
<td>0.068</td>
<td></td>
</tr>
<tr>
<td>Crack (ref. = Marijuana)</td>
<td>1.596</td>
<td>4.933 ***</td>
</tr>
<tr>
<td></td>
<td>0.126</td>
<td></td>
</tr>
<tr>
<td>Heroin (ref. = Marijuana)</td>
<td>1.767</td>
<td>5.853 ***</td>
</tr>
<tr>
<td></td>
<td>0.114</td>
<td></td>
</tr>
<tr>
<td>Meth (ref. = Marijuana)</td>
<td>1.776</td>
<td>5.906 ***</td>
</tr>
<tr>
<td></td>
<td>0.060</td>
<td></td>
</tr>
<tr>
<td>Marijuana Eq. Weight</td>
<td>0.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Most other variables included are significant. Legally relevant variables had the effect one would expect. Each additional criminal history point possessed by an offender, all else equal, is associated with a nine percent increase in sentence length ($p < 0.001$). Offenders charged with crimes involving powder cocaine, crack, heroin, and meth, all else equal, are likely to receive sentences 336 percent, 393 percent, 485 percent, and 490 percent longer than comparable offenders charged with crimes involving marijuana.

Extralegal variables with statistically significant effects on sentence length include age and gender. Surprisingly, considering the controls for criminal history, each additional year added to an offender’s age, all else equal, results in a 0.8 percent longer sentence ($p < 0.001$). Consistent with bivariate findings, with other legal and extralegal factors controlled, female offenders are likely to receive sentences about 23 percent shorter than male offenders ($p < 0.001$).

In an analysis of nationwide sentencing statistics, using the same variables and regression tools, we found all included variables to be statistically significant at $p < 0.001$. Notably, in the nationwide analysis, African-American offenders were likely to receive sentences about 17 per-
Table 3. Analysis of Sentence Length, 2007

<table>
<thead>
<tr>
<th></th>
<th>CA 2007</th>
<th>National 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef. (SE)</td>
<td>Coef. (SE)</td>
</tr>
<tr>
<td>Intercept</td>
<td>2.079 7.996</td>
<td>2.079</td>
</tr>
<tr>
<td>Age</td>
<td>0.004 1.004</td>
<td>0.004</td>
</tr>
<tr>
<td>Female (Reference = Male)</td>
<td>-0.463 0.629</td>
<td>-0.463</td>
</tr>
<tr>
<td>Black (ref. = White)</td>
<td>0.239 1.270</td>
<td>0.239</td>
</tr>
<tr>
<td>Latino (ref. = non-Latino)</td>
<td>1.474 4.367</td>
<td>1.474</td>
</tr>
<tr>
<td>Criminal History Points</td>
<td>0.089 1.093</td>
<td>0.089</td>
</tr>
<tr>
<td>Cocaine (ref. = Marijuana)</td>
<td>1.578 4.845</td>
<td>1.578</td>
</tr>
<tr>
<td>Crack (ref. = Marijuana)</td>
<td>1.307 3.695</td>
<td>1.307</td>
</tr>
<tr>
<td>Heroin (ref. = Marijuana)</td>
<td>1.721 5.590</td>
<td>1.721</td>
</tr>
<tr>
<td>Meth (ref. = Marijuana)</td>
<td>0.000 1.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Marijuana Eq. Weight</td>
<td>-0.025 0.975</td>
<td>-0.025</td>
</tr>
</tbody>
</table>

percent longer than white offenders and Latino offenders were likely to receive sentences about 8 percent longer than non-Latino offenders, all else equal.

2007

The 2007 California-only regression model returned an $R^2$ value of 0.558, meaning that, similar to 2003, about 56 percent of sentence length variation in the filtered dataset can be attributed to the included independent variables. In 2007, legally relevant variables continue to be highly statistically significant with regard to sentence length. Each additional criminal history point on an offender’s prior record typically earns the offender a 9 percent longer sentence ($p < 0.001$). Similar to the findings using the 2003 data, offenders charged with offenses involving powder cocaine, crack, and heroin typically receive 385 percent, 269 percent, and 459 percent, longer sentences, respectively, than equivalent offenders charged for marijuana ($p < 0.001$), while methamphetamine offenders’ sentences are not discernably different from those of marijuana offenders.
With regard to extralegal variables, age is no longer statistically significant in 2007, and female offenders continue to receive significantly shorter sentences, all else equal, than male offenders, now receiving sentences 37 percent shorter ($p < 0.001$). Changes can be observed with regard to the race and ethnicity variables, neither of which had statistically a significant coefficient in 2003. In 2007, African-American offenders’ sentences are about 27 percent longer than white offenders’ sentences, and Latino offenders are likely to receive sentences roughly 337 percent longer than non-Latino offenders, all else equal ($p < 0.001$). The high degrees of disparity and statistical significance indicate a sharp departure in sentencing patterns for African-American and especially Latino defendants between 2003 and 2007.

Analysis of nationwide data for 2007, filtered to drug crimes, reveals trends similar to those in 2003. All included variables remain statistically significant ($p < 0.001$). All else equal, black offenders are likely to receive sentences about 14 percent longer than comparable white offenders, and Latino offenders are likely to receive sentences about 134 percent longer than comparable non-Latino offenders.3

2012

Results for the linear regressions performed for the 2012 California and national datasets are presented in Table 4. These findings are presented separately from the 2003 and 2007 data because a change in some coding conventions for USSC datafiles renders the $R^2$ value and coefficients estimated in the analysis not directly comparable. However, conclusions can still be drawn regarding the influence of the legally relevant and extralegal variables included in the model. The California-only linear regression model produced an $R^2$ value of 0.321, meaning that the model explains roughly 32 percent of the variation in sentence length for that year.

As in previous years, legally relevant variables are, unsurprisingly, highly statistically significant. Each criminal history point associated with an offender’s background typically nets a 5 percent longer sentence, all else equal ($p < 0.001$). Offenders charged with crimes involving powder cocaine ($p < 0.001$), crack ($p < 0.001$), heroin ($p < 0.01$), and methamphetamine ($p < 0.001$) receive sentences roughly 50 percent, 76 percent, 49 percent, and 134 percent longer than equivalent offenders charged for marijuana.

While the coefficients discussed here cannot be directly compared to those estimated in the 2003 and 2007 models, analysis of the 2012 dataset finds that several extralegal variables continue to significantly affect sentence length. Disparity remains greatest with regard to gender, with female offenders receiving roughly 50 percent shorter sentences than equivalent male offenders ($p < 0.001$). Echoing findings from 2003 (but not 2007), disparity between equivalent black and white offenders, with regard to federal drug sentencing in California, is not statistically significant. However, based on the analysis of the 2012 California-only dataset, all else equal, Latino offenders typically receive sentences 40 percent longer than non-Latino offenders ($p < 0.001$). This marks a change from the lack of significant disparity observed in 2003 and 2007.

Nationwide in 2012, with the dataset filtered only to drug offenses, all variables remain significant at $p < 0.001$. In this model, African-American offenders typically receive sentences about 19 percent longer than white offenders, all else equal. Further, Latino offenders typically receive sentences roughly 21 percent longer than comparable non-Latino offenders.

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3 It is not discernable from the data why the disparities in sentence length for Latino offenders spiked to such a great extent in 2007, but a sharp increase was observed in both California and national analyses for this year.
Table 4. Analysis of Sentence Length, 2012

<table>
<thead>
<tr>
<th></th>
<th>CA 2012</th>
<th>National 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>e^β</td>
</tr>
<tr>
<td></td>
<td>(SE)</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>3.206</td>
<td>24.680***</td>
</tr>
<tr>
<td>Age</td>
<td>-0.004</td>
<td>0.996</td>
</tr>
<tr>
<td>Female (Reference = Male)</td>
<td>-0.688</td>
<td>0.503***</td>
</tr>
<tr>
<td>Black (ref. = White)</td>
<td>0.091</td>
<td>1.095</td>
</tr>
<tr>
<td>Latino (ref. = non-Latino)</td>
<td>0.334</td>
<td>1.397***</td>
</tr>
<tr>
<td>Criminal History Points</td>
<td>0.048</td>
<td>1.049***</td>
</tr>
<tr>
<td>Cocaine (ref. = Marijuana)</td>
<td>0.406</td>
<td>1.501***</td>
</tr>
<tr>
<td>Crack (ref. = Marijuana)</td>
<td>0.566</td>
<td>1.761***</td>
</tr>
<tr>
<td>Heroin (ref. = Marijuana)</td>
<td>0.398</td>
<td>1.489**</td>
</tr>
<tr>
<td>Meth (ref. = Marijuana)</td>
<td>0.852</td>
<td>2.344***</td>
</tr>
<tr>
<td>Marijuana Eq. Weight</td>
<td>0.000</td>
<td>1.000***</td>
</tr>
</tbody>
</table>

**Downward Departures and Below-Range Sentences**

The dependent variable in these binary logistic regression analyses is Downward Departure or Below-Range Sentence, which represents sentences that are shorter than those required (in 2003) or recommended (in 2007 and 2012) by the Federal Sentencing Guidelines. The model produces odds ratios for each independent variable, representing increased or decreased chances of receiving a sentence below the Guidelines.

**2003**

The results of the logistic regressions performed on 2003 and 2007 datasets for both California and the entire United States appear in Tables 5 and 6. In the 2003 California-only model, four of the variables have statistically significant effects on the odds of receiving a downward departure from the Federal Sentencing Guidelines. Three of these are legally relevant variables repre-
Table 5. Analysis of Downward Departures and Below-Guidelines Sentences, 2003

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.137</td>
<td>3.116 ***</td>
<td>-0.464</td>
<td>0.629 ***</td>
</tr>
<tr>
<td>Age</td>
<td>-0.007</td>
<td>0.993</td>
<td>-0.001</td>
<td>0.999</td>
</tr>
<tr>
<td>Female (Reference = Male)</td>
<td>0.778</td>
<td>2.178 ***</td>
<td>0.430</td>
<td>1.537 ***</td>
</tr>
<tr>
<td>Black (ref. = White)</td>
<td>-0.281</td>
<td>0.755</td>
<td>-0.429</td>
<td>0.651 ***</td>
</tr>
<tr>
<td>Latino (ref. = non-Latino)</td>
<td>0.193</td>
<td>1.213</td>
<td>-0.336</td>
<td>0.715 ***</td>
</tr>
<tr>
<td>Criminal History Points</td>
<td>-0.007</td>
<td>0.993</td>
<td>0.019</td>
<td>1.019 ***</td>
</tr>
<tr>
<td>Cocaine (ref. = Marijuana)</td>
<td>-0.265</td>
<td>0.767</td>
<td>0.202</td>
<td>1.224 ***</td>
</tr>
<tr>
<td>Crack (ref. = Marijuana)</td>
<td>-1.347</td>
<td>0.260 ***</td>
<td>0.144</td>
<td>1.154 **</td>
</tr>
<tr>
<td>Heroin (ref. = Marijuana)</td>
<td>-1.818</td>
<td>0.162 ***</td>
<td>0.020</td>
<td>1.020</td>
</tr>
<tr>
<td>Meth (ref. = Marijuana)</td>
<td>-1.052</td>
<td>0.349 ***</td>
<td>0.183</td>
<td>1.201 ***</td>
</tr>
<tr>
<td>Marijuana Eq. Weight</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>1.000 **</td>
</tr>
</tbody>
</table>

senting drug type, with crack, heroin, and methamphetamine offenders having 74 percent, 84 percent, and 65 percent lower odds of receiving a downward departure, respectively, than marijuana offenders (p < 0.001 for all three). Women have 118 percent greater odds of receiving a downward departure than men (p < 0.001). Racial and ethnic variables in the 2003 California-only model are not statistically significant. In California federal drug sentencing in 2003, African-American offenders’ odds of receiving a downward departure are not significantly different than those for white offenders, and Latino offenders’ odds of a downward departure are not significantly different than those for non-Latinos. The same logistic regression was performed without filtering the dataset to California. Here, all but one of the variables had statistically significant effects on the odds of a downward departure. Nationwide, female offenders have 54 percent higher odds than male offenders of receiving downward departures (p < 0.001). Compared to white offenders, African-American and Latino defendants had 35 percent and 28 percent lower odds, respectively, of receiving sentences more lenient than those prescribed by the Guidelines (p < 0.001 for both).
Table 6. Analysis of Downward Departures and Below-Guidelines Sentences, 2007

<table>
<thead>
<tr>
<th></th>
<th>CA 2007</th>
<th>National 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>Coef.</td>
</tr>
<tr>
<td></td>
<td>(SE)</td>
<td>(SE)</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.277</td>
<td>-0.408</td>
</tr>
<tr>
<td></td>
<td>3.585 ***</td>
<td>0.665 ***</td>
</tr>
<tr>
<td>Age</td>
<td>-0.002</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>0.998</td>
<td>1.005 **</td>
</tr>
<tr>
<td></td>
<td>0.006</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>0.260</td>
<td>0.071</td>
</tr>
<tr>
<td>Female (Reference = Male)</td>
<td>0.720</td>
<td>0.323</td>
</tr>
<tr>
<td></td>
<td>2.054 **</td>
<td>1.381 ***</td>
</tr>
<tr>
<td></td>
<td>0.236</td>
<td>0.047</td>
</tr>
<tr>
<td>Black (ref. = White)</td>
<td>-0.263</td>
<td>-0.377</td>
</tr>
<tr>
<td></td>
<td>0.769</td>
<td>0.686 ***</td>
</tr>
<tr>
<td></td>
<td>0.328</td>
<td>0.051</td>
</tr>
<tr>
<td>Latino (ref. = non-Latino)</td>
<td>-0.012</td>
<td>-0.305</td>
</tr>
<tr>
<td></td>
<td>0.988</td>
<td>0.737 ***</td>
</tr>
<tr>
<td></td>
<td>0.166</td>
<td>0.040</td>
</tr>
<tr>
<td>Criminal History Points</td>
<td>-0.007</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>0.993</td>
<td>0.996</td>
</tr>
<tr>
<td></td>
<td>0.018</td>
<td>0.004</td>
</tr>
<tr>
<td>Cocaine (ref. = Marijuana)</td>
<td>-0.756</td>
<td>0.303</td>
</tr>
<tr>
<td></td>
<td>0.469 ***</td>
<td>1.354 ***</td>
</tr>
<tr>
<td></td>
<td>0.174</td>
<td>0.043</td>
</tr>
<tr>
<td>Crack (ref. = Marijuana)</td>
<td>-1.245</td>
<td>0.252</td>
</tr>
<tr>
<td></td>
<td>0.288 ***</td>
<td>1.286 ***</td>
</tr>
<tr>
<td></td>
<td>0.371</td>
<td>0.056</td>
</tr>
<tr>
<td>Heroin (ref. = Marijuana)</td>
<td>-1.700</td>
<td>0.319</td>
</tr>
<tr>
<td></td>
<td>0.183 ***</td>
<td>1.375 ***</td>
</tr>
<tr>
<td></td>
<td>0.385</td>
<td>0.074</td>
</tr>
<tr>
<td>Meth (ref. = Marijuana)</td>
<td>-1.006</td>
<td>0.210</td>
</tr>
<tr>
<td></td>
<td>0.366 ***</td>
<td>1.234 ***</td>
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<tr>
<td></td>
<td>0.161</td>
<td>0.046</td>
</tr>
<tr>
<td>Marijuana Eq. Weight</td>
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<td>0.000</td>
</tr>
<tr>
<td></td>
<td>1.000 **</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

2007

In California federal drug courts in 2007, six variables, including only one extralegal factor, affect the odds of a sentence below the Federal Sentencing Guidelines with statistical significance. As expected, given our prior findings, female offenders’ odds of receiving sentences below the recommended guidelines ranges are twice as high as the odds for men (p < 0.01). Cocaine, crack, heroin, and methamphetamine offenders have 53 percent, 71 percent, 82 percent, and 63 percent, lower odds of receiving downward departures, respectively, than marijuana offenders (p < 0.001 for all four). The coefficients for black and Latino were not significant, again indicating a lack of bias against these defendants in California with regard to below-guidelines sentences.

In a nationwide regression for the 2007 dataset, eight variables had significant effects on the odds of a below-range sentence. Among these are three extralegal variables. Women have 38 percent higher odds of receiving lowered sentences than men. Black and Latino offenders’ odds
of a below-range sentence are 31 percent and 26 percent lower, respectively, than those for whites (p < 0.001 for both), indicating disparities that are consistent in significance and slightly smaller in magnitude with those found in 2003.

2012

The results from the logistic regression performed for the 2012 California-only and national datasets are displayed in Table 7. In California in 2012, only three variables returned a statistically significant result, and none of these was significant at p < 0.001. Each additional criminal history point was associated with about a 4 percent longer sentence (p < 0.05). Unsurprisingly, the Female dummy variable continued to be significant; women’s odds of a below-range sentence were about 213 percent higher than men’s (p < 0.01). And in 2012, in contrast to the lack of significant findings from 2003 and 2007, Latinos’ chances of receiving below-guidelines sentences were 67 percent lower than those for whites (p < 0.01). No statistically significant differences between black and white offenders in the odds of receiving a shortened sentence were observed in California in 2012.

In the nationwide logistic regression performed on the 2012 dataset, all of the variables associated with drug type have statistically significant effects. As in 2003 and 2007, female offenders have higher odds of receiving sentences below the guidelines (65 percent higher than those for men; p < 0.001). Also consistent with the results from 2003 and 2007 African-American and Latino offenders nationwide remain less likely than white offenders to experience leniency in sentencing, with odds of a below-range sentence 21 percent and 31 percent lower, respectively, than those for whites (p < 0.001 for both).

Discussion and Conclusions

Racial Disparity and African-American Defendants

These data represent snapshots of criminal drug sentencing for almost a decade. The analyses of nationwide sentence length and downward departure/below-range sentencing statistics confirm the presence of persistent bias against racial and ethnic minorities in sentencing outcomes. In the nationwide models, both African-American and Latino offenders consistently receive longer sentences than white offenders, controlling for legally relevant variables.

These findings support Hypothesis 1, which predicted African-American offenders will typically receive longer sentences than white offenders. In California, however, disparity between the sentence lengths given to black and white offenders is not statistically significant in 2003 or 2012, though it is significant in 2007. Overall, it appears that African-American drug defendants are less disadvantaged in California federal courts than in federal courts in the nation as a whole.4

Logistic regression models for each year support the emerging conclusion that, with regard to African-American offenders relative to white offenders, federal drug courts in California are rel-

4 While these results appear to indicate less bias against African Americans in the sentencing process in California than nationwide, this conclusion should be made cautiously. The coefficient on the black dummy variable is consistently positive, and the possibility exists that the lack of significance associated with race in 2003 and 2007 is due to the smaller sample size that was used in these regression analyses rather than an absence of disparity.
<table>
<thead>
<tr>
<th></th>
<th>CA 2012</th>
<th></th>
<th>National 2012</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>$\sigma$</td>
<td>Coef.</td>
<td>$\sigma$</td>
</tr>
<tr>
<td></td>
<td>(SE)</td>
<td></td>
<td>(SE)</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.518</td>
<td>1.679</td>
<td>-0.174</td>
<td>0.840  *</td>
</tr>
<tr>
<td></td>
<td>0.486</td>
<td></td>
<td>0.001</td>
<td>1.001</td>
</tr>
<tr>
<td>Age</td>
<td>0.007</td>
<td>1.007</td>
<td>0.001</td>
<td>1.001</td>
</tr>
<tr>
<td></td>
<td>0.010</td>
<td></td>
<td>0.002</td>
<td></td>
</tr>
<tr>
<td>Female (Reference = Male)</td>
<td>0.757</td>
<td>2.132  **</td>
<td>0.503</td>
<td>1.653  ***</td>
</tr>
<tr>
<td></td>
<td>0.355</td>
<td></td>
<td>0.064</td>
<td></td>
</tr>
<tr>
<td>Black (ref. = White)</td>
<td>-0.573</td>
<td>0.564</td>
<td>-0.231</td>
<td>0.793  ***</td>
</tr>
<tr>
<td></td>
<td>0.446</td>
<td></td>
<td>0.070</td>
<td></td>
</tr>
<tr>
<td>Latino (ref. = non-Latino)</td>
<td>-0.852</td>
<td>0.427  **</td>
<td>-0.368</td>
<td>0.692  ***</td>
</tr>
<tr>
<td></td>
<td>0.304</td>
<td></td>
<td>0.055</td>
<td></td>
</tr>
<tr>
<td>Criminal History Points</td>
<td>0.036</td>
<td>1.037  *</td>
<td>0.006</td>
<td>1.006</td>
</tr>
<tr>
<td></td>
<td>0.022</td>
<td></td>
<td>0.005</td>
<td></td>
</tr>
<tr>
<td>Cocaine (ref. = Marijuana)</td>
<td>0.027</td>
<td>1.028</td>
<td>0.477</td>
<td>1.611  ***</td>
</tr>
<tr>
<td></td>
<td>0.316</td>
<td></td>
<td>0.053</td>
<td></td>
</tr>
<tr>
<td>Crack (ref. = Marijuana)</td>
<td>-0.258</td>
<td>0.772</td>
<td>0.401</td>
<td>1.494  ***</td>
</tr>
<tr>
<td></td>
<td>0.472</td>
<td></td>
<td>0.076</td>
<td></td>
</tr>
<tr>
<td>Heroin (ref. = Marijuana)</td>
<td>-0.324</td>
<td>0.723</td>
<td>0.508</td>
<td>1.662  ***</td>
</tr>
<tr>
<td></td>
<td>0.481</td>
<td></td>
<td>0.078</td>
<td></td>
</tr>
<tr>
<td>Meth (ref. = Marijuana)</td>
<td>0.273</td>
<td>1.314</td>
<td>0.725</td>
<td>2.065  ***</td>
</tr>
<tr>
<td></td>
<td>0.250</td>
<td></td>
<td>0.056</td>
<td></td>
</tr>
<tr>
<td>Marijuana Eq. Weight</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Table 7. Analysis of Downward Departures and Below-Guidelines Sentences, 2012

At least a year studied is the black dummy variable statistically significant, meaning that in no year was clear evidence found to support Hypothesis 2, that there is disparity in black and white offenders’ odds of receiving a sentence below the guideline range. The nationwide models tell an interesting story. In 2003, 2007, 2012, African-American offenders, all else equal, have 35 percent, 31 percent, and 21 percent lower odds than white offenders of receiving a sentence below the guideline range. Though significant levels of racial disparity to the detriment of African-American offenders thus unequivocally exist in the national models, there appears to be a general decline in the extent of disparity over time.

In summary, when the analysis is narrowed to California, neither Hypothesis 1 nor Hypothesis 2 is supported. This suggests that there may be less bias against African-American offenders in California’s federal courts than elsewhere in the US federal court system. Strong evidence of bias exists nationally, but—based on samples taken from only three years over nearly a decade—it appears that the disparity may be shrinking.
Ethnic Disparity and Latino Offenders

From 2003 to 2007 to 2012, Latino offenders in California moved from receiving sentences not significantly different from their non-Latino counterparts to receiving sentences 337 percent and 40 percent longer, controlling for legally relevant factors, than non-Latino offenders. Nationwide in 2003, 2007, and 2012, Latino offenders received roughly 8 percent, 134 percent, and 21 percent longer sentences than non-Latino offenders, respectively. The results of the 2007 and 2012 sentence length analyses for California, as well as the national sentence length analyses for all three years, therefore support Hypothesis 3: on the whole, Latino offenders do, in fact, receive considerably longer sentences than comparable non-Latino offenders.\(^5\)

Furthermore, the appearance of ethnic disparities in the likelihood of a below-guidelines sentence in California in 2012, along with the persistent disparity in this area nationwide, support Hypothesis 4: all else equal, Latino offenders typically have lower odds of receiving sentences below the guideline range than non-Latino offenders. Sentencing disparities in California exceed those found nationwide in 2007 and 2012 for sentence length and in 2012 for below-range sentence odds; however, the other analyses did not reveal significant ethnic disparities in California. Therefore, only limited confirmation was found for Hypothesis 4a.

These findings provide only modest support for ethnic threat theory with regard to federal drug sentencing. Nationwide, Latino offenders’ odds of receiving a sentence below the Guideline range have remained relatively constant. In 2003, 2007, and 2012, Latino offenders have 28 percent, 26 percent, and 31 percent lower odds than non-Latino offenders of receiving a sentence below the guidelines. As with the national model for black versus white offenders, this model shows clear disparities between Latino and non-Latino offenders, but there is no indication, as ethnic threat theory would predict, that it is increasing with the growing Latino population.

No Apparent Effect of Booker

*United States v. Booker*, among other effects, rendered the Federal Sentencing Guidelines nonmandatory. Prior to the case, federal judges were bound by the US Sentencing Commission to sentence offenders within the matrix created by the guidelines, using a formula involving points associated with prior offenses, points assigned to the current offense, and other factors in an attempt to make federal sentencing conventions more uniform and fight the influence of extra-legal considerations in sentencing. A comparison of the 2003 and 2007 analyses of sentence length in California would appear to lend support to Hypothesis 5, which predicted that racial and ethnic disparities would increase after the *Booker* decision.

In California, neither the black nor the Latino dummy variable had a significant effect on sentence length in 2003, but both were significantly associated with longer sentences in 2007. However, while the disparities associated with Latino ethnicity persisted in 2012, those associated with black race were no longer significant in 2012. In California, no disparity in sentence length associated with Latino ethnicity was found in 2003, but significant disparities were observed in 2007 and 2012. This last pattern might be consistent with Hypothesis 5, although it is unclear why the largest difference would be seen in 2007.

Nationwide, the logistic regression models reveal significant but declining levels of disparity in the odds of a downward departure or below-range sentence for African Americans from 2003

\(^5\)It remains unclear why the estimated sentence length disparities in both California and nationally were so much larger in 2007 than in either 2003 or 2012.
to 2007 to 2012. These disparities are also significant in each of the three years for Latino offenders, but with no clear increase or decrease over time. In California, no statistically significant disparities in the odds of a downward departure or below-guidelines sentence were found for either African Americans or Latinos in 2003, two years before *Booker*, or in 2007, two years after the decision. Therefore, we conclude that the *United States v. Booker* decision had no discernable effect on racial or ethnic sentencing disparities in federal drug sentencing in California or nationwide.

**Directions for Future Research**

This study used a sentence length variable that excluded lengths of zero, meaning that it did not account for any disparity between black and white offenders’ chances of incarceration. Further research is needed to assess the impact of race on the decision to incarcerate, an area where disparities that do not appear in sentence length may be present. Another important avenue for further research would be a comparison of the consequences of decisions by different courtroom officials to deviate from the sentences recommended in the Federal Sentencing Guidelines. Prosecutorial decision making is the source of substantial assistance/government sponsored departures and below-guidelines sentences, while other sentence reductions—which are consistently far fewer in number—result from the exercise of judicial discretion.6

Future research should explore how much disparity can be attributed to each of these sources. This knowledge would contribute to efforts to address sentencing disparities at their origin(s). In addition, though this research lends very modest support to the ethnic threat theory in sentencing, more direct tests, such as analyses using multilevel modeling to estimate the influence of specific contextual extralegal factors, could provide more conclusive findings. Finally, using three years of data spaced four to five years apart, we can only draw tentative conclusions regarding apparent patterns over time. Analysis should be performed on more years of data to confirm the presence or absence of clear and continuing trends in sentencing disparities.

**Conclusion**

This analysis reveals a considerable difference between California and nationwide federal drug sentencing practices. Courts in California have exhibited less ethnic and racial bias than those in the nation as a whole. This analysis is most striking with regard to African-American drug offenders. Despite consistent findings of sentencing disparity between black and white offenders nationally, African-American offenders in California, according to these analyses, tend to get fairer results in federal court (with the exception of racial disparities in sentence length in 2007).

California is less impressive with regard to ethnic disparity. Perhaps in response to the state’s large and growing Latino population, California’s federal courts imposed longer sentences on Latino offenders relative to non-Latino offenders in 2007 and 2012, and were considerably less

6 In analyses not reported here, the authors compared models in which the dependent variable for downward departures and below-range sentences included substantial assistance and other government-sponsored sentence reductions with models in which these forms of reductions were excluded. Few significant findings resulted from the latter model, but this could either have been due to their lack of actual effect, or to the very small number of below-range sentence reductions that remain in the datasets when government-sponsored reductions are excluded.
likely to give below-guidelines sentences to Latino offenders than to whites in 2012. This study reveals consistently significant levels of both racial and ethnic disparities originating in the federal drug courts nationally, as well sentencing outcome disparities in California’s federal drug courts that appear to have surfaced more recently.

It is not clear whether the disparities observed recently in California are outliers or indicators of a disturbing emergent trend, but future analyses should be conducted to determine whether they persist. The racial and ethnic disparities found in both the national and state analyses should be a focus of concern, further investigation, and policy efforts to reduce any bias that may have produced them.
References


