Report to the Legislature Pursuant to Penal Code Section 1170.45

2005 REPORT ON THE DISPOSITION OF CRIMINAL CASES ACCORDING TO THE RACE AND/OR ETHNICITY OF THE DEFENDANT

ADMINISTRATIVE OFFICE OF THE COURTS

THE DISPOSITION OF CRIMINAL CASES ACCORDING TO THE RACE AND ETHNICITY OF THE DEFENDANT

A REPORT TO THE CALIFORNIA LEGISLATURE PURSUANT TO PENAL CODE SECTION 1170.45

2005

Judicial Council of California
Administrative Office of the Courts
Office of Court Research

This report has been prepared and submitted to the California Legislature pursuant to Penal Code 1170.45.

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**Judicial Council of California
Administrative Office of the Courts**

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Background

In 1997 the California Legislature enacted Penal Code section 1170.45, which directs the Judicial Council to report annually on the statewide disposition of criminal cases according to the race and ethnicity of defendants.

For the 2005 report to the Legislature, the Office of Court Research at the Administrative Office of the Courts analyzed adult felony disposition data for 2003, the last year for which complete annual data are available from the California Department of Justice. This report focuses primarily on patterns of disposition at three stages of criminal case processing: (1) conviction, (2) charge reduction, and (3) incarceration (i.e., the decision whether to incarcerate or impose a less severe sentence). Throughout this report, the combined term *race/ethnicity* and the phrase *race or ethnicity* are employed in a manner consistent with U.S. Census Bureau's categorizations.[1]

Summary of Findings

General Effects of Race/Ethnicity on Case Disposition

- Legally prescribed factors—the type and seriousness of offense, the defendant's prior criminal record, and whether the charge was reduced—were found to exert the strongest influence on all three case processing outcomes. In other words, more serious offenses, prior records and more charges against defendants are all associated with more severe dispositions of cases.

- After controlling for legally prescribed factors, the study found that the defendant's characteristics of race/ethnicity, gender, and age still affect sentencing outcomes.

- There is, however, no single, consistent effect of race/ethnicity on case processing outcome. At one stage in the processing of cases, race/ethnicity may exert one effect, while at another stage it may exert a different effect. For example, an examination of dispositions of violent offenses shows that, while young African Americans and Hispanics were *less* likely to be convicted of violent offenses than whites, once convicted of such charges they were *more* likely to receive a prison sentence.

- The specific effects of race/ethnicity, then, are highly contextual and depend on a range of factors including the age of the defendant, the stage of case processing, and even the type of offense.

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[1] In 1997 the Office of Management and Budget announced a revised standard for federal data on race and ethnicity. The revision established a minimum of five categories: American Indian or Alaskan Native; Asian; Black or African American; Native Hawaiian or other Pacific Islander; and white. See U.S. Census Bureau, Population Division, Special Population Staff, *http://www.census.gov/population/www/socdemo/race/racefactcb.html*. Due to the small percentage of American Indian defendants in the data set used for this study, this group is included only in descriptive analysis. In addition, a combined category, Asian/Pacific Islander, is used in the analysis to refer to defendants of Asian or Native Hawaiian/other Pacific Islander ethnicity.

Effects of Gender and Age on Case Disposition

After controlling for legally prescribed factors, the following effects of gender and age were identified as statistically significant at the .05 level:[2]

- Gender was the most consistently influential variable among defendant characteristics. Men were much more likely to be imprisoned and less likely to have their charges reduced than women.

- Defendants under age 18 were less likely than young-adult defendants (aged 18 to 29) to have their charges reduced, and more likely to receive prison sentences.[3]

- Older defendants (aged 30 and up) were as likely as young-adult defendants to have their charges reduced, and less likely to be convicted and imprisoned.

Combined Effects of Race/Ethnicity and Age on Case Disposition

- Compared to legal factors such as prior record and seriousness of offense, race/ethnicity alone had a minor effect on sentencing outcomes. In combination with gender and age, however, race/ethnicity showed more complex effects.

- The main effects of race/ethnicity, after controlling for legal factors, were the following:
  - Hispanics were more likely to be convicted and, once convicted, to receive prison sentences than both whites and African Americans; and
  - African Americans were less likely to be convicted than both whites and Hispanics.

- When racial/ethnic differences were examined by age group, the differences in outcomes become more pronounced. The effect of race/ethnicity on disposition depended on the age group and the stage in case processing:
  - Asian, African-American and Hispanic male defendants aged 18 to 29 were less likely than white male defendants of the same age group to have their charges reduced.
  - Hispanic males aged 18 to 29 were more likely to be convicted than both white and African American males in the same age group.
  - Older (aged 30 and up) Asian and Hispanic male defendants were as likely as their white counterparts to receive a charge reduction, but older African-American male defendants were less likely than older Hispanics and whites to receive a charge reduction.
  - Young (aged 18 to 29) Hispanic and African-American male defendants were more likely than their white counterparts to receive prison sentences. There were no

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[2] In other words, the odds of the observed differences across groups occurring by chance are less than 1 in 20.
[3] Although the database used for this study comes from the "Adult Criminal Justice Statistical System," it contained 91 records of individuals who were under 18—their ages ranging from 14 to 17—at the time of offense.

statistically significant differences between the likelihoods that young Hispanic males and young African-American males would receive prison sentences.

- · While both young and older Hispanic male defendants were more likely than their white counterparts to receive prison sentences, older African-American males were less likely than whites to receive prison sentences.

- ▪ Statistically significant differences in case dispositions for different racial/ethnic groups, depending on the offense type, also were found:

  - · Young-adult (aged 18 to 29) Asian, African-American, and Hispanic male defendants charged with violent offenses were less likely than their white counterparts to receive a charge reduction. Young African-American and Hispanic male defendants charged with drug offenses also were less likely than whites to receive a charge reduction. No racial/ethnic disparities were found for young male defendants charged with property offenses.

  - · The effect of race/ethnicity on conviction was smaller and less consistent than its effects on the other two case processing outcomes.

  - · Both young and older African-American male defendants charged with violent offenses were less likely than their white counterparts to be convicted, but older Hispanic male defendants charged with violent offenses were more likely to be convicted than whites.

  - · Both young and older Asian male defendants charged with property offenses were more likely to be convicted than their white counterparts.

  - · Male defendants from Asian, African-American, and Hispanic groups—except for the older Asians—convicted of violent offenses were more likely than their white counterparts to receive prison sentences.

  - · For property offenses, both young and older Hispanic male defendants were less likely to receive prison sentences than their white counterparts.

  - · For drug offenses, both young and older Hispanic males were more likely than whites to receive prison sentences.

Review of Previous Research

A great deal of research on sentencing outcomes over the last 30 years has focused on untangling the complex relationship between race/ethnicity and sentence severity. The studies varied in their methodological sophistication and the conclusions they drew. Research in the 1960s on the relationship between race and sentencing found that race exerted a significant effect on sentencing outcomes. However, many of those early studies failed to control for relevant legal factors associated with sentencing outcome, such as prior record and seriousness of offense (Hagan, 1974). Research conducted later, throughout the 1970s, employed controls for legal factors. The findings from that research suggested that the apparent effect of race on sentencing outcome in prior studies was largely an artifact of the failure to control for legally relevant variables (in particular, prior record).

Research conducted in 1980s and later is characterized by the use of more sophisticated statistical techniques that are intended to explore the possibility of indirect effects of race on sentencing. For example, race may indirectly affect sentencing because it has an effect on pretrial release status—which, in turn, influences sentencing. Interaction effects also have been identified, including the interaction between race and age in producing disparate sentences.

In general, this research has shown consistently that legal factors have large effects on sentencing outcomes, while the role of race/ethnicity in sentencing outcomes is less clear. Zatz (1987) notes that most of the studies found relatively subtle race/ethnicity effects—showing, for example, that race affected sentence severity indirectly through its effect on variables such as pretrial status and type of attorney, or that race interacted with other variables to produce harsher sentences for racial minorities for some types of crimes (e.g., less serious crimes), in some types of settings (e.g., the South), or for some types of defendants (e.g., the unemployed) (Zatz, 1987; Spohn, 2000).

Most studies have focused only on sentencing, yet different stages of case processing should be studied to examine different points at which a disparity may enter the justice system (Crutchfield, Bridges, and Pitchford, 1994). Many researchers have suggested that disparities are likely to be greatest at early decision-making points where race/ethnicity is most proximate in the causal chain to the case processing decision (e.g., pretrial release). For example, Demuth's (2003) study of 75 of the most populous counties in the United States found, using data from the State Court Processing Statistics, that Hispanic defendants received less favorable decisions in pretrial release than white and African-American defendants.

To contribute to these studies on the effects of race/ethnicity in early criminal case processing, this report examines racial/ethnic differences not only in sentencing outcomes but also at earlier decision points, such as charge reduction and conviction, in the state of California.

Disportionality and Discrimination

Although the words *disproportionality* and *discrimination* are sometimes used interchangeably, they are not synonymous. In the context of the criminal justice system, *disproportionality* refers to differences in the proportions of case processing outcomes (e.g., arrest, conviction, or incarceration) for racial and ethnic groups *relative to their numbers in the general population*. Discrimination, on the other hand, refers to differential treatment of groups on the basis of illegitimate factors, such as race/ethnicity, which lead to disproportionate outcomes (Spohn, 2000).

Although disproportionate representation of minority groups in the criminal justice system would be a necessary condition to show discrimination, it is not a sufficient condition. Disproportionate representation in the criminal justice system might reflect the socioeconomic conditions in which different groups live—differential levels of poverty, unemployment, or education—or could result from different levels of participation in criminal activity.

Data from individual states, as well as federal-level data, consistently show that minorities, especially African Americans and Hispanics, are overrepresented in prison populations relative to their numbers in the U.S. population (Souryal and Wellford, 1997). Whether the observed disproportionality in prison populations stems from disproportionate involvement of these groups in criminal activity and/or from disparate or discriminatory treatment by the criminal justice system has yet to be resolved (Spohn, 2000).

This study alone would be insufficient to determine whether discrimination exists in the disposition of minority defendants. Pursuant to Penal Code 1170.45, it can report on the disposition of felony cases according to the race/ethnicity of the defendant. It can also control for certain legal variables that are available in the data set, such as prior record and severity of offense. Because the number of variables and categories of data are necessarily limited, however, this study cannot control for all observed differences in sentencing.
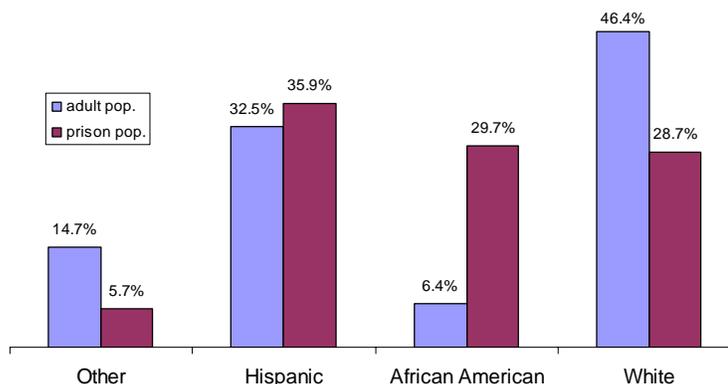
Disproportionality in the Arrest and Imprisonment of Minorities

Figure 1 shows that in 2003 African Americans made up 29.7 percent of the state prison population but just 6.4 percent of the state's adult population. In other words, African Americans were represented in the prison population at nearly five (4.6) times their proportion in the adult population. Hispanics represented 35.9 percent of the prison population and 32.5 percent of the state's adult population. The relationship was reversed for the white and "others" categories.[4]

California State Department of Justice data show a similar pattern in felony arrests. **Figure 2** shows that African Americans made up 21 percent of the felony arrestees, as compared to

Figure 1:
African Americans and Hispanics are over-represented in the prison population in California compared to their numbers in the state's general population.

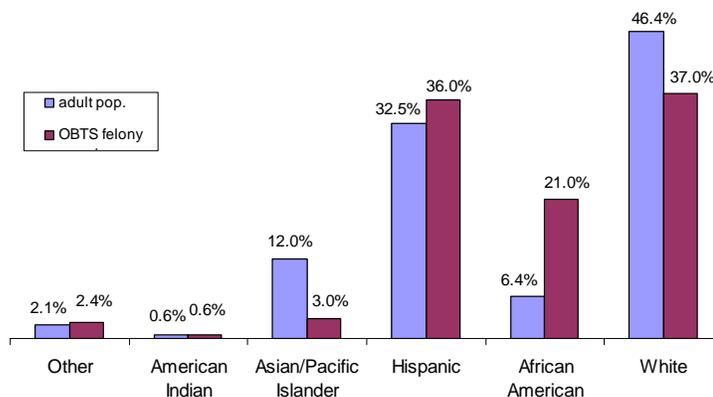*Source: California Prison Census and U.S. Census Bureau*

6.4 percent of the adult population. A similar though less pronounced pattern was observed for the Hispanic group, while the pattern was reversed for the Asian/Pacific Islander and white groups.

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[4] The "others" category was not broken down into ethnic groups by the Department of Corrections.

Figure 2:
African Americans and Hispanics in California are also overrepresented in felony arrests compared to their numbers in the state's general population.

Source: California Department of Justice and U.S. Census Bureau

Legend: adult pop. | OBTS felony

Other: 2.1% / 2.4%
American Indian: 0.6% / 0.6%
Asian/Pacific Islander: 12.0% / 3.0%
Hispanic: 32.5% / 36.0%
African American: 6.4% / 21.0%
White: 46.4% / 37.0%

Identifying "Similarly Situated" Defendants

Given the clear disproportionality in the arrest and imprisonment of different groups, the critical question for any assessment of disposition by race/ethnicity is the degree to which *similarly situated* offenders receive dissimilar sentencing outcomes solely due to the race or ethnicity of the defendant. In other words, to properly assess the impact of race/ethnicity in sentencing outcomes, it is necessary to control for any factors relevant to criminal case processing decisions (e.g., type of offense, prior record) so as to ensure that *like* defendants are being compared to one another. For example, one would expect a defendant convicted of a more serious felony to receive a more severe sentence than a defendant convicted of a less serious felony. Similarly, one would expect a defendant with a more serious prior record to receive a more severe sentence than a defendant convicted of the same crime with no prior record.

The primary focus of this study is an analysis, by defendants' race/ethnicity, of outcomes at distinct decision points of case processing. Variables contained in the California Department of Justice database made it possible to control for relevant legal factors such as prior record, type of offense, and severity of offense, which dictate specific sentences mandated by California's sentencing laws. While the introduction of these variables into the analysis improves the evaluation of dispositions by ensuring comparison of similarly situated defendants, there remain differences within the control variables that cannot be measured or controlled for.

For example, the "offense type" variable makes it possible to avoid comparing defendants charged with violent crimes with those charged with property offenses or drug offenses. However, within the category "violent offenses" there are differences among offenses that are not measured and may be relevant to sentencing.

Similarly, the "prior record" variable makes it possible to avoid comparing defendants who have one or more prison commitments to those who have only "miscellaneous priors" with no prison commitments. Yet, even while allowing for the comparison of defendants with similar prior records, the variable does not distinguish between a defendant with one prior prison commitment and a defendant with three prior prison commitments—both of which are lumped into the category "one or more prior prison commitments."

Analysis of Sentencing Differences

Source of Data

To examine dispositions by race and ethnicity, this report uses the Offender-Based Transaction Statistics (OBTS) report files maintained by the Criminal Justice Statistics Center of the California Department of Justice. The OBTS includes information on official arrests and on disposition of arrests and court actions. Approximately 1,014 law enforcement agencies reported dispositions of adult felony arrests in 2003. However, the data do not represent the total number of adult felony arrests or the total number of dispositions during 2003. Although approximately 65 to 75 percent of total dispositions are reported annually statewide, the OBTS data generally describe aggregated statewide processing of adult felony arrests.

Figure 3 on page 9 shows the distinct stages of felony case processing, from arrest to court disposition. The OBTS file for 2003 contains a total of 316,377 records; in other words, 316,377 individuals arrested for felony-level offenses in calendar year 2003 or earlier received a disposition in calendar year 2003. Males were overrepresented (79 percent) compared to their proportion in the general population of California. In addition, young people were disproportionately involved in the criminal justice system, with almost 70 percent of felony defendants age 20 to 39, whereas barely 30 percent of the general population fell in this age range.

About 17 percent of the arrestees were released at the law enforcement or prosecution level— that is, their cases did not proceed to court. Among those individuals who proceeded to the court system, 83 percent were convicted and sentenced. The majority (61 percent) of the convicted offenders were sentenced to some combination of jail and probation. Prison sentences represented 17 percent of the outcomes, and probation-only sentences represented another 15 percent.

Limitations of the Findings

It is important to note that a sentencing outcome is the consequence of many intermediate and interdependent steps within the criminal justice system, from arrest to sentencing. Therefore, studies of sentencing outcomes involve extremely complex issues that are dependent on a variety of factors external to the courts, such as federal policies (e.g., border interdictions), local law enforcement policies, and district attorney charging and plea practices. Under California's determinate sentencing law, sentencing itself is among the least discretionary stages in the adjudication of a criminal case.

An example that illustrates this point is the manner in which most felony cases are disposed of in the California trial courts. In California, only 5 percent of felony cases reach trial with the majority of these criminal trials being resolved by jury trial. This trial rate for felony cases varies by the type of offense (e.g., violent offense vs. drug offense) and from county to county because of a variety of local factors that influence decisions to try cases. Nonetheless, about 95 percent of felony cases statewide are disposed of before trial, mostly by plea agreements between defense counsel and the District Attorney. The trial court judge still must review and approve many plea agreements made between defense counsel and the District Attorney; however, the sentences for these cases are not determined exclusively by the judge. The findings in this report, therefore,
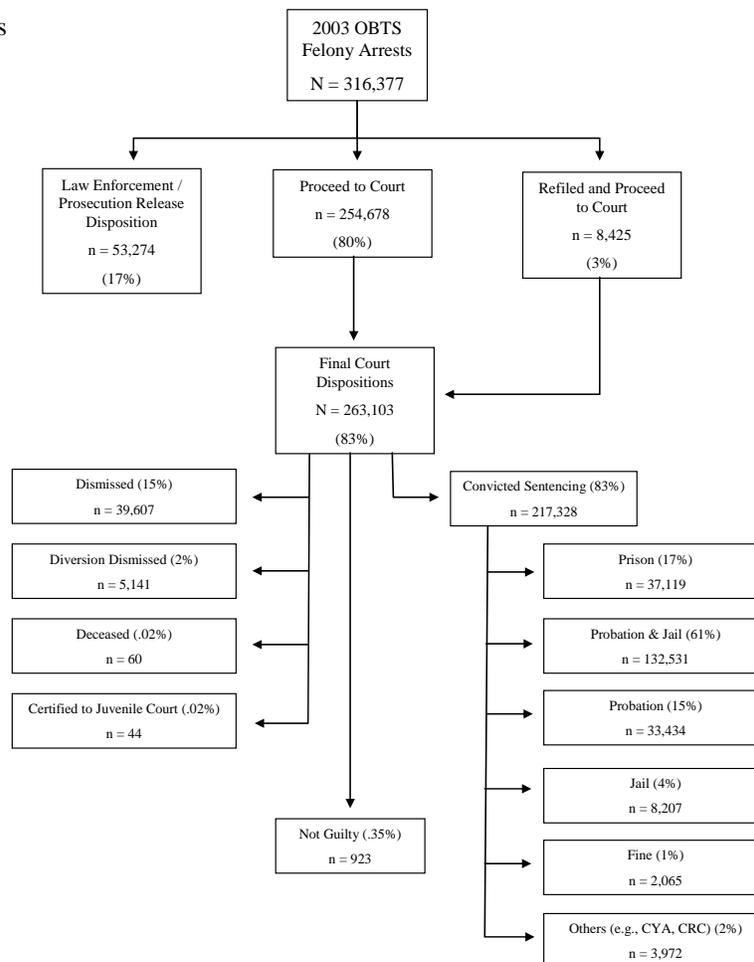
reflect sentencing outcomes for felony cases that may not be based on the unilateral discretion of a trial court judge.

In addition, the Criminal Justice Statistics Center highlighted the following characteristics of the OBTS data file, which should be taken into consideration in analyzing and interpreting this data set:

- OBTS data are based on the year of disposition regardless of when the felony arrest occurred, and therefore may be reported a year or more after the actual arrest.

- The data do not represent the total number of adult felony arrests or the total number of dispositions during a given year. The Department of Justice estimates that approximately 65 to 75 percent of total dispositions of adult felony arrests are reported annually statewide.

- Dispositions of adult felony arrests in state correctional institutions are excluded from county-level totals.

- In December 1998, the Santa Barbara County district attorney requested that the Department of Justice include a letter with the released Santa Barbara County data expressing the district attorney's "long-standing and deep concerns about the accuracy" of the arrest and disposition information contained in the OBTS file.

- Despite the underreporting of dispositions, the Criminal Justice Statistics Center is confident that the arrest disposition data received do generally describe statewide processing of adult felony arrestees.

- Comparisons of county and local data should be made with caution, since the level of reporting may vary between jurisdictions and from year to year.

- Only the final disposition of an arrest event is included in the OBTS file; intermediate dispositions—such as diversion programs, suspended proceedings, reopenings, retrials, and subsequent actions—are not included.

- OBTS data on state institutional commitments may vary from data compiled and reported by other state agencies because of differences in their data collection systems and criteria. For example, the California Department of Corrections counts as dispositions the defendants admitted to its institutions, even though a given defendant may have been convicted and sentenced in two or more counties. The Criminal Justice Statistics Center, on the other hand, counts each commitment as a separate disposition.

- If a person is arrested for multiple offenses, the OBTS file contains only the offense that is most "serious" based on the severity of possible punishment. If there are multiple court dispositions, the OBTS file contains only the most serious court disposition and the associated offense.

- The OBTS file indicates only the type of sentence (e.g., felony sentence, misdemeanor sentence, infraction) and a broad sentence classification (e.g., probation, jail, prison) for each conviction. There is no measure of sentence severity (e.g., length of prison sentence).

- Caution should be used when comparing conviction and nonconviction dispositions, since budget constraints necessitated the processing of conviction dispositions on the basis of priority.

- Information on prior records is incomplete since it is computed only for "new offenders"—those who had a first arrest after August 1982.

- Low counts for Los Angeles, Sacramento, San Bernardino, and Ventura Counties are the result of technical difficulties.

Figure 3:
Numbers of offenders at distinct case processing stages in OBTS

2003 OBTS Felony Arrests
N = 316,377

Law Enforcement / Prosecution Release Disposition
n = 53,274
(17%)

Proceed to Court
n = 254,678
(80%)

Refiled and Proceed to Court
n = 8,425
(3%)

Final Court Dispositions
N = 263,103
(83%)

Dismissed (15%)
n = 39,607

Diversion Dismissed (2%)
n = 5,141

Deceased (.02%)
n = 60

Certified to Juvenile Court (.02%)
n = 44

Not Guilty (.35%)
n = 923

Convicted Sentencing (83%)
n = 217,328

Prison (17%)
n = 37,119

Probation & Jail (61%)
n = 132,531

Probation (15%)
n = 33,434

Jail (4%)
n = 8,207

Fine (1%)
n = 2,065

Others (e.g., CYA, CRC) (2%)
n = 3,972

Description of the OBTS Data

The following is a demographic profile of the population of felony defendants who received dispositions in 2003 and are documented in the OBTS file.
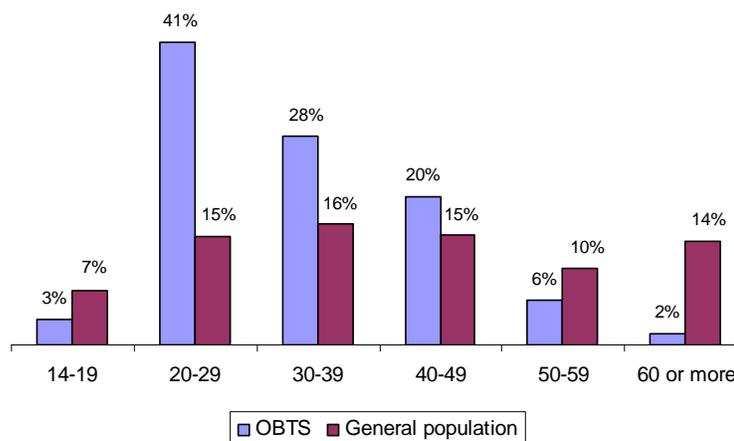
Gender

Males made up 79 percent of the defendants reported to have received dispositions in 2000; females made up 21 percent. These proportions are consistent with those reported by other agencies, such as the Bureau of Justice Statistics of the U.S. Department of Justice in its biannual *Felony Sentences in State Courts* study. The proportion of felony defendants in the OBTS file who are male is high compared to the 49.8 percent males in the general population of California.[5]

Age

The OBTS file contains the date of birth and date of arrest for each felony defendant. "Age" values therefore represent age at the time of arrest. These values were classified into the following age categories used by the U.S. Department of Justice: 14–19, 20–29, 30–39, 40–49, 50–59, and 60 or greater. The average age of a felony defendant at the time of sentencing was 33 years, with persons aged 20–29 (41 percent) and 30–39 (28 percent) being arrested most frequently. **Figure 4** shows the complete distribution by age of all felony defendants in the OBTS file and compares that to the distribution of the general population.

Figure 4:
Defendants in the OBTS file are predominantly young. Almost 70 percent of the defendants in the OBTS file are aged 20 to 39, whereas only about 30 percent of the general population falls within that age range.

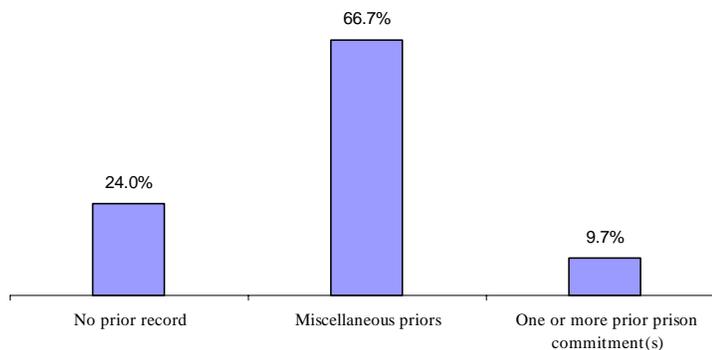Compared to the California population as a whole, persons aged 20 to 39 were arrested for felony-level offenses at a disproportionately high rate, whereas persons aged 14 to 19 and 50 or greater were arrested at a disproportionately lower rate. Persons aged 40 to 49 were arrested at rates slightly higher than indicated by their proportions in the general population.

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[5] U.S. Census Bureau, *Census 2000*, Summary File 1.

Figure 5:
Two-thirds of the defendants in the OBTS file had prior records but no prior prison commitments. Almost one-quarter of the defendants in the OBTS file had no prior record, while almost 10 percent had previously been sentenced to prison.

Prior criminal record

The OBTS contains a field for the type of prior record, if any, for each felony arrestee. Information is limited to whether the arrestee has prior prison commitments, a miscellaneous prior record, or no prior record (**Figure 5**). A "miscellaneous" prior record is a criminal record that does not include a prior prison commitment.

Most of the records that contained valid information for the prior-record field were records of defendants disposed at the court level. Among those defendants ($N = 266,736$), 67 percent had miscellaneous prior records, while almost 10 percent had one or more prior prison commitments. The remaining 24 percent of felony arrestees in the OBTS file had no identified prior records. Note that information on prior records is available only for those who had a first arrest after August 1982.
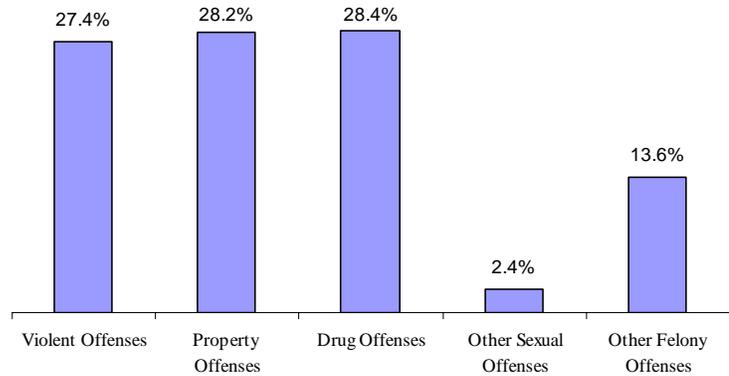
Type of offense at arrest

Offense data in the OBTS file that had been provided at the time of arrest were reclassified into five major offense groupings: violent, property, drug, other sexual offenses (those not included in the violent offense category), and other felony offenses (**Figure 6**). These groupings were based in large part on the categories used by the Bureau of Justice Statistics of the U.S. Department of Justice for its biannual *Felony Sentences in State Courts* study.

Examples of offenses included in the violent offense group are homicide, rape, robbery, and assault. Offenses in the property offense group include burglary, theft, forgery, and arson. The drug offense group includes all felony-level drug offenses. "Other sexual offenses" include lewd or lascivious behavior, unlawful sexual intercourse, and other sex violations not captured by the violent offense category. Offenses in the "other felony offenses" group include all weapons offenses and a range of additional offenses such as DUI and vandalism. About 84 percent of the offenses at arrest were equally distributed among violent offenses, property offenses, and drug offenses, with "other sexual offenses" and "other felony offenses" making up the remaining 16 percent of the arrests in the database.

Figure 6:
The charges against about 85 percent of the defendants in the OBTS fall into three broad categories: violent offenses, property offenses, and drug offenses. The remaining charges consist of "other felonies"—13.6 percent—and "other sexual offenses"—2.4 percent.

27.4%   28.2%   28.4%   13.6%

                                    2.4%

Violent Offenses   Property   Drug Offenses   Other Sexual   Other Felony
                    Offenses   Offenses   Offenses
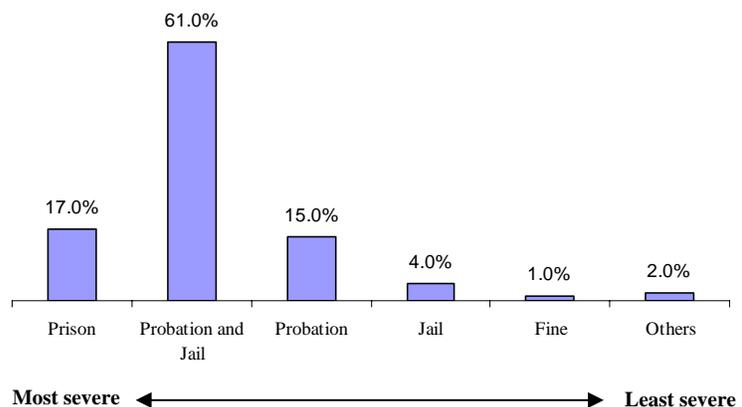
Disposition Information

The OBTS file provides two types of sentence information about the disposition of felony cases—a broad sentence categorization (e.g., prison, jail, probation), referred to hereinafter as severity of sentence, and the type of sentence (e.g., felony, misdemeanor). Since the file does not provide data on sentence length, we ranked the two types of available sentencing information by severity in the following manner.

Severity of sentence
For the severity-of-sentence variable, prison was ranked as the most severe and fine as the least severe (**Figure 7**). About 17 percent of the defendants convicted of a felony-level offense received a prison sentence, while 61 percent received probation and jail. The lesser sentences—probation only, jail only, and fine—were imposed in approximately 20 percent of the cases. The following sentence categories together accounted for about 2 percent and were grouped in the "others" category: CRC (California Rehabilitation Center), CYA (California Youth Authority), "Prison term suspended," and "other."

61.0%

Figure 7:
The majority (61 percent) of defendants in the OBTS were sentenced to probation and jail. Seventeen percent of defendants received the most severe sentence—prison—while 1 percent received the least severe sentence—a fine.

17.0%   15.0%
                            4.0%   1.0%   2.0%

Prison   Probation and   Probation   Jail   Fine   Others
         Jail

Most severe ◀——————————————————▶ **Least severe**
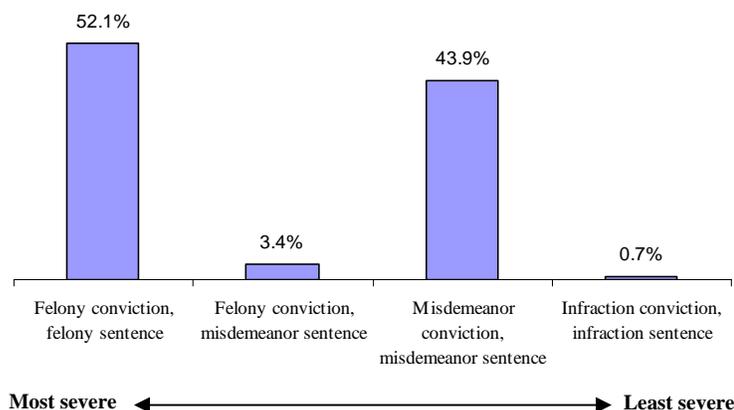
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Type of sentence

The OBTS file also contains a field, called "type of sentence" in this report, that provides a comparison between the level of conviction (felony, misdemeanor, or infraction) and the level of sentence (felony, misdemeanor, or infraction). Unlike the severity-of-sentence variable, which includes defendants convicted of a crime and those who had their cases dismissed or were acquitted, the type-of-sentence variable is limited to convictions.

A defendant convicted of a felony can receive either a felony-level sentence or a misdemeanor-level sentence. A defendant convicted of a misdemeanor receives a misdemeanor-level sentence, and an infraction conviction results in an infraction-level sentence. We ranked the available information from "felony conviction, felony sentence" to "infraction conviction, infraction sentence." In the 2003 file, approximately 2 percent of the cases had information missing from this field. **Figure 8** shows the types of sentences for the remaining cases.

Of defendants *arrested* for felony-level offenses, the majority (52.1 percent) received a felony conviction with a felony-level sentence; about 3 percent received a felony conviction with a misdemeanor-level sentence; and 44 percent received a misdemeanor conviction with a misdemeanor-level sentence. Less than 1 percent of the defendants received an infraction conviction with an infraction-level sentence.

Figure 8:
A majority of defendants arrested for felony-level offenses received a felony conviction and a felony-level sentence, while about 3 percent received a felony conviction but a misdemeanor-level sentence.

Analytic Approach

The analysis presented here examines the influence of race/ethnicity on the disposition of criminal cases at three stages of case processing:

1. Charge reduction, i.e., downward departure between arrest charge and court disposition;
2. Conviction—compared to dismissals and not-guilty verdicts; and
3. Prison sentence—compared to other, less severe sentences.

The study uses multivariate analyses to examine the effects of both legal factors (such as offense type and prior record) and defendant characteristics (including race/ethnicity, gender, and age) on the case processing outcomes.[6]

This procedure allows for evaluation of the impact of defendant characteristics on the outcomes for similarly situated offenders. Using this method, it is possible to identify statistically significant differences in the disposition of criminal cases that are not attributable to prior record, severity of offense, or other legal factors that influence case disposition.

Legal factors controlled for in this study include:

- Prior record
  - One or more prior prison commitments
  - Miscellaneous priors
  - No prior record

- Offense type
  - Violent offense
  - Property offense
  - Drug offense
  - Other sexual offense
  - Other type of offenses

- Multiple charges at arrest
  - Two or more charges
  - One charge

- Offense severity
  - Department of Justice (DOJ) hierarchy of severity
    (Ordinal ranking of severity from 1,100 to 179,500, with 1,970 values based on DOJ hierarchy index)

- Charge reduction[7]
  - No reduction of charge
  - Reduction of charge

In addition to studying the direct effects of a particular defendant characteristic, the study also analyzed the interaction among race/ethnicity, gender, and age, as well as the interaction among these defendant characteristics in relation to offense type.

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[6] Dummy county variables were included in the multivariate analyses to control for different outcomes across counties. This prevents the confounding of practices that differ among jurisdictions with the effects of race/ethnicity.

[7] Although charge reduction is one of the outcomes that this report evaluates in relation to race/ethnicity, it also may be used to predict the other two outcomes: convictions and prison sentencing.

Findings

Main Effects of Gender, Age, and Race/Ethnicity

This section presents the results from logistic regression analyses estimating the effect of the defendant characteristics on charge reduction, conviction, and incarceration, controlling for the influence of the legal factors and county-level variations. Legal factors as a group made by far the largest contribution in predicting the disposition outcomes.[8] However, even after controlling for the legal-factor variables, some defendant characteristic variables still had statistically significant effects in predicting disposition at all three stages of case processing.

Because odds ratios tend to overstate the probability of frequent events, the authors converted the odds ratios from the logistic regression analyses to estimated probabilities (Zhang and Yu, 1998). The following tables of results compare the probabilities of each case processing outcome for defendants of different subgroups (e.g., gender, age group, race/ethnicity) while holding all other legal variables constant.[9]

Table 1 shows that gender alone has a statistically significant relationship with the case processing outcomes. The analysis compares male defendants' probabilities of the three case processing outcomes to those of a defendant with the same legal conditions but with the variable for gender changed to female. Holding all other factors constant, the probability of getting a charge reduction was 0.502 for male defendants and 0.520 for female defendants.

Table 1: Main Effect of Gender across Sentencing Outcomes

Case Disposition Outcome	Probability for males	Probability on the outcomes if defendants had been female
1) Charge reduction	0.502	0.520
2) Conviction	0.859	0.838
3) Prison sentence	0.110	0.060

Table 2 compares the probabilities of case processing outcomes for three age groups when other legal factors were held constant. For this study *juvenile status* is defined as being under the age of 18 at the time of the offense. There are a total of 91 individuals ranging in age from 14 to 17 in the 2003 OBTS file. Juvenile defendants were less likely to have their charges reduced than young-adult defendants (aged 18 to 29). The probability of receiving a charge reduction increased from 0.323 for juvenile defendants to 0.612 if they had been young adults when other legal variables and the county control variable were held constant. Juvenile defendants were less likely than young adults to be convicted but, once convicted, were more likely to receive prison sentences. The probability of receiving a prison sentence decreased from 0.535 for juvenile

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[8] See Appendix A for the logistic regression results and discussions of the application of odds ratio versus risk ratio in this study.

[9] Findings are tabulated only for those effects that were found to be statistically significant at the level of .05. See note X for further information on statistical significance.

defendants to 0.200 if the defendant had been a young adult convicted of crimes with the same level of severity, with all other factors held constant.

Table 2: Main Effect of Age Group across Sentencing Outcomes

Case Processing Outcome	Probability for juvenile defendants	Probability on the outcome if juvenile defendants had been young adults	Probability for older adults	Probability on the outcome if older defendants had been young adults
1) Charge reduction	0.323	0.612	0.491	0.494
2) Conviction	0.679	0.860	0.836	0.856
3) Prison sentence	0.535	0.200	0.095	0.101

Older defendants (aged 30 and up) were as likely as young-adult defendants to have their charges reduced, but were less likely to receive prison sentences—a finding consistent with the limited research literature addressing this issue. In a 1996 report released by the U.S. Department of Justice, juveniles transferred to adult court were more likely than other adults to be sentenced to prison (Levin, Langan, and Brown, 1996). More recently, a study reporting on juvenile felony defendants from 39 urban counties in 19 states found that juveniles, once convicted, were more likely than adults to receive sentences of incarceration in state prisons (Rainville and Smith, 2003).

Table 3: Main Effect of Race/Ethnicty on Charge Reduction

	Probability of getting charge reduction	Probability of getting charge reduction if defendants had been white
African American	0.447	0.506
Hispanic	0.514	0.52

In terms of the main effect of race/ethnicity on the probability of charge reduction, Table 3 shows that African-American defendants were less likely than both white and Hispanic defendants to have their charges reduced. While the probability of charge reduction was .447 for African-American defendants, the probability increased to .506 for white defendants facing charges of the same level of severity, with all other conditions held constant. On the other hand, Table 4 shows that African-American and white defendants were less likely to be convicted than Hispanic defendants. Table 5 shows that whites were more likely to receive a prison sentence than African American defendants but were less likely to receive a prison sentence than Hispanic defendants.

Table 4: Main Effect of Race/Ethnicty on Conviction

	Probability of getting convicted	Probability of getting convicted if defendants had been white
African American	0.821	0.839
Hispanic	0.877	0.866

Table 5: Main Effect of Race/Ethnicty on Prison Sentencing

	Probability of getting prison sentence	Probability of getting prison sentence if defendants had been white
African American	0.113	0.12
Hispanic	0.103	0.096

Interactive Effects of Race, Ethnicity, Gender, Age, and Offense Type[10]

When racial/ethnic differences were examined by age group and gender, the differences in outcomes were more pronounced. The racial/ethnic differences in charge reduction and imprisonment were larger among young-adult male defendants than in the older group.

Table 6: Interaction Effect of Gender, Age, and Race/Ethnicty on Charge Reduction

	Probability of getting charge reduction	Probability of getting charge reduction if defendants had been white
Male defendants aged 18-29		
African American	0.459	0.52
Asian American	0.506	0.547
Hispanic	0.511	0.528
Male defendants aged>=30		
African American	0.421	0.463
Asian American	0.572	0.555
Hispanic	0.495	0.49

Table 6 shows that young Asian, African-American, and Hispanic male defendants (aged 18 to 29) were all less likely than white male defendants of the same age group to have their charges reduced. The probability of charge reduction was .459 for young male African-American defendants and .520 when the variable for race is changed to that of whites, with all other factors held constant.

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[10] Due to the small number of juvenile defendants in the OBTS file, this group was not included in further analysis regarding the interaction effects of race/ethnicity, gender, and age group.

Table 7: Interaction Effect of Gender, Age, and Race/Ethnicity on Prison Sentencing

	Probability of getting prison sentence	Probability of getting prison sentence if defendants had been white
Male defendants aged 18-29		
African American	0.143	0.128
Hispanic	0.11	0.098
Male defendants aged>=30		
African American	0.158	0.175
Hispanic	0.13	0.122

Similar patterns were found in prison sentencing. Table 7 shows that young African-American and Hispanic male defendants were more likely to receive a prison sentence than older African-American and Hispanic male defendants, when compared to their white counterparts. For example, the probability of receiving a prison sentence was 0.143 for young African-American male defendants and 0.128 for young white defendants facing the same charges, with all other factors held constant; in contrast, older African-American male defendants were *less* likely to be imprisoned than whites in the same age group. The probability of receiving a prison sentence was 0.158 for older African-American male defendants and 0.175 for older white defendants facing similar charges, with all other factors held constant.

Table 8: Interaction Effect of Gender, Age, and Race/Ethnicty on Conviction

	Probability of getting convicted	Probability of getting convicted if defendants had been white
Male defendants aged 18-29		
African American	0.837	0.859
Hispanic	0.887	0.878
Male defendants aged>=30		
African American	0.809	0.828
Hispanic	0.868	0.849

Looking at conviction, Table 8 indicates that younger defendants and older defendants showed similar patterns. In general, African-American defendants were less likely than white defendants to be convicted, while Hispanic defendants were more likely than white defendants to be convicted.

Table 9: Interaction Effect of Gender, Age, Race/Ethnicty and Offense Type on Charge Reduction

	Probability of getting charge reduction	Probability of getting charge reduction if defendants had been white
Male defendants aged 18-29 w/ Violent offenses		
African American	0.605	0.666
Asian American	0.643	0.702
Hispanic	0.650	0.673
Male defendants aged>=30 w/ Violent offenses		
African American	0.655	0.684
Asian American	0.798	0.765
Hispanic	0.709	0.705
Male defendants aged 18-29 w/ Property offenses --> No significant differences found across ethnic groups		
Male defendants aged>=30 w/ Property offenses		
African American	0.502	0.484
Asian American	0.494	0.526
Hispanic	0.543	0.500
Male defendants aged 18-29 w/ Drug offenses		
African American	0.255	0.297
Asian American	0.288	0.322
Hispanic	0.278	0.313
Male defendants aged>=30 w/ Drug offenses --> No significant differencs found across ethnic grups		

An examination of the effect of race/ethnicity on sentencing by the three major offense types—violent, property, and drug—also reveals statistically significant differences. Table 9 compares the probabilities of charge reduction (across all races and ethnicities) by major offense type, for both young and older male defendants, while holding all other legal and county-level factors constant.

Among young male defendants charged with violent offenses, African-American, Asian, and Hispanic defendants all were less likely than their white counterparts to receive a charge reduction. Young African-American, Asian, and Hispanic male defendants charged with drug-related offenses also were less likely than their white counterparts to receive a charge reduction. No statistically significant racial/ethnic differences were found among young male defendants committing property offenses.

The charge reduction results for older male defendants were less consistent. Older African-American male defendants charged with violent offenses were less likely than their white counterparts to receive a charge reduction. Older Hispanic male defendants charged with property offenses were more likely than their white counterparts to receive a charge reduction. For drug offenses, no racial/ethnic differences were found in the older group.

Table 10: Interaction Effect of Gender, Age, Race/Ethnicty and Offense Type on Conviction

	Probability of getting convicted	Probability of getting convicted if defendants had been white
Male defendants aged 18-29 w/ Violent offenses		
African American	0.838	0.865
Asian American	0.878	0.871
Hispanic	0.892	0.884
Male defendants aged>=30 w/ Violent offenses		
African American	0.799	0.823
Asian American	0.850	0.824
Hispanic	0.877	0.844
Male defendants aged 18-29 w/ Property offenses		
African American	0.889	0.900
Asian American	0.913	0.893
Hispanic	0.921	0.917
Male defendants aged>=30 w/ Property offenses		
African American	0.859	0.867
Asian American	0.891	0.861
Hispanic	0.901	0.892
Male defendants aged 18-29 w/ Drug offenses		
African American	0.789	0.814
Asian American	0.799	0.808
Hispanic	0.827	0.817

Table 10 shows how the differences between whites' and other racial/ethnic groups' probabilities of being convicted of crimes in the major offense categories varied depending on the age and the racial/ethnic background of the defendant, except in the case of Hispanics. For every offense type and every age group listed in Table 10, Hispanics were more likely to be convicted than their white counterparts (although, in general, the racial/ethnic effect on conviction was smaller than that on charge reduction).

For other groups, the effect of race/ethnicity on charge reduction varied depending on the age group and the offense type. Both young and older African-American male defendants accused of violent offenses were less likely than their white counterparts to be convicted. Both young and older Asian male defendants accused of property offenses were more likely than their white counterparts to be convicted. Young African-American and older Asian male defendants with drug offenses were less likely than their white counterparts to be convicted.

Table 11: Interaction Effect of Gender, Age, Race/Ethnicty and Offense Type on Prison Sentence

	Probability of getting prison sentence	Probability of getting prison sentence if defendants had been white
Male defendants aged 18-29 w/ Violent offenses		
African American	0.176	0.126
Asian American	0.090	0.071
Hispanic	0.105	0.089
Male defendants aged>=30 w/ Violent offenses		
African American	0.129	0.106
Asian American	0.034	0.036
Hispanic	0.072	0.063
Male defendants aged 18-29 w/ Property offenses		
African American	0.110	0.115
Asian American	0.069	0.082
Hispanic	0.102	0.113
Male defendants aged>=30 w/ Property offenses		
African American	0.186	0.224
Asian American	0.134	0.134
Hispanic	0.163	0.201
Male defendants aged 18-29 w/ Drug offenses		
African American	0.118	0.123
Asian American	0.077	0.068
Hispanic	0.125	0.087
Male defendants aged 30 w/ Drug offenses		
African American	0.154	0.211
Asian American	0.098	0.093
Hispanic	0.174	0.144

Table 11 indicates that race/ethnicity exerted a stronger effect on prison sentencing than on the other two case processing outcomes. African-American, Asian, and Hispanic male defendants convicted of violent offenses were more likely than whites to receive prison sentences except in the case of older Asian defendants.

Looking at property offenses, both young and older Hispanic male defendants were less likely than their white counterparts to receive prison sentences. On the other hand, both young and older Hispanic male defendants with drug offenses were more likely than their white counterparts to receive prison sentences. Older African-American male defendants with either property or drug offenses were less likely than their white counterparts to be imprisoned.

Discussion

This study shows that there is not a simple relationship between criminal case disposition and the race/ethnicity of the defendant. By distinguishing between legal and extralegal variables, it is possible to examine the interactions between factors such as the seriousness of the offense and the racial/ethnic characteristics of defendants.

The findings contained in this report indicate that legal factors—including seriousness of offense, prior record, and charge reduction—have the strongest impact on sentencing outcomes. After controlling for legal factors, the race/ethnicity, gender, and age of defendants still affect the disposition of these cases. However, the direction of these effects is not consistent. At a certain point in the disposition of cases, members of one racial/ethnic group may be more likely to receive a favorable outcome than members of other racial/ethnic groups; at another point, less likely.

Adding to the complexity of the effects of race/ethnicity on dispositions is the fact that outcomes tend to vary depending on the age of the defendant. For example, both older and younger male African-American defendants accused of committing violent offenses were less likely to be convicted than white males accused of the same type of crime. Once convicted of a violent offense, however, African-American males were more likely to receive prison sentences than white males.

Finally, information regarding extralegal factors other than race/ethnicity, gender, and age are absent from these analyses, even though research has shown that socioeconomic variables such as employment status, educational level, and poverty all interact with race/ethnicity in influencing sentencing outcomes (Spohn, 2000). Future research should incorporate this type of information into the analysis of criminal case disposition in order to better illuminate the conditions, types of offenders, and other factors with which race/ethnicity interacts that make a difference in case processing outcomes.

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Appendix

Logistic Regression Results of the Main Effects

Table A shows the logistic regression models for the three case processing outcomes. It shows the main effects of gender, age, and race/ethnicity, along with the effects of the legal variables. The odds ratio is approximately the same as the risk ratio or relative risk (i.e., risk expressed in probability) when the incidence of an outcome in the study population is less than 10 percent (Zhang and Yu, 1998). In this study, the incidence of receiving a prison sentence for this sample is close to 10 percent; therefore, the odds ratio can be interpreted as a risk ratio. For example, the odds (probability) of receiving a prison sentence for male defendants are 1.92 times greater than those for female defendants, while controlling for all other variables. The odds of getting prison sentences for defendants with prior records are 2.56 times greater than those for defendants without prior records.

However, the incidence of receiving a charge reduction and conviction is 50 to 80 percent, and the odds ratio derived from the logistic regression can no longer approximate the risk ratio. For these two outcomes, the odds ratio cannot be interpreted in terms of probability. Since the odds ratio is less intuitive to interpret, the authors transformed the odds ratios to estimated probabilities, and the results were discussed in the body of the report.

Table B shows the pseudo-r-square of blocks of defendant characteristics, legal factors, and county dummy variables in predicting three disposition outcomes. The pseudo-r-square allows for a comparison if the relative contribution of the different variables to the overall probabilities. In general, legal factors as a group made the largest contribution in predicting all three disposition outcomes. Compared to the analysis of charge reduction and conviction, the analysis of prison sentence outcome was the most robust model. When all variables were included in logistic regression, the final model accounted for 26 percent of variance in predicting prison sentence outcomes.

Table A. Main Effects of Defendant Characteristics and Legal Factors on Charge Reduction, Conviction, and Prison Sentence

	Charge Reduction (1-yes, 0-no)	Conviction (1-yes, 0-no)	Prison Sentence (1-yes,0-no)
Main effect	Odds ratio (z statistics)	Odds ratio (z statistics)	Odds ratio (z statistics)
Defendant demogrphics			
male (vs. female)	0.931	1.176	1.922
	(-6.26)**	(11.26)**	(29.29)**
juvenile(age<18) (vs. young adult 18-29)	0.303	0.343	4.594
	(-4.50)**	(-3.9)**	(4.43)**
older adult(age30+)	0.987	0.855	0.93
	(-1.35)	(-12.72)**	(-4.58)**
API (vs. Caucasian)	0.954	1.011	1.009
	(-1.80)	-0.35	0.19
African American	0.788	0.882	0.941
	(-17.2)**	(-7.25)**	(-2.74)**
Hispanic	0.976	1.109	1.078
	(-2.15)*	(6.89)**	(4.11)**
Native American	1.081	0.961	0.951
	-1.26	(-0.52)	-0.47
Other/Unknown	0.899	0.851	0.810
	(-3.33)**	(-4.14)**	(-3.42)**
Legal factors			
Misc. priors (vs. No priors)	0.676	1.583	2.562
	(-34.91)**	(32.30)**	(37.34)**
one/more prior prison commi.	0.361	2.022	19.830
	(-53.91)**	(28.23)**	(99.34)**
Multiple arrest charges (vs. Only one charge)	1.211	1.29	1.451
	(19.73)**	(20.15)**	(23.36)**
reduced charge	N/A	1.559	0.180
		(34.75)**	(-98.21)**
Property offense (vs. Violent)	0.509	1.75	1.222
	(-51.59)**	(30.82)**	(9.55)**
Drug offense	0.177	0.979	0.617
	(-125.46)**	(-1.23)	(-21.63)**
Other sexual offense	0.221	1.586	1.684
	(-46.66)**	(10.13)**	(12.40)**
Other offense	0.453	1.551	1.085
	(-45.02)**	(19.07)**	(2.68)*
Hierarchy	1	0.999	0.999
	(25.46)**	(-43.27)**	(-63.36)**
County dummy variables			
57 dummy county var.			
Chi-squared	28908.89 (p<.001)	17402.37 (p<.001)	41024.44 (p<.0001)
Pseudo R-square	**0.09**	**0.09**	**0.26**
N	220780	220296	183021
** significant at 1%			

Table B: Contribution of Blocks of Variables (Defendant Demographics, Legal Factor, and County Dummy Variables) in Predicting Three Disposition Outcomes (in pseudo R-square)	Charge Reduction	Conviction	Prison Sentence
I. Defendant demographics	0.01**	0.01**	0.03**
II. Legal factors	0.07**	0.03**	0.20**
III. County dummy variables	0.01**	0.05**	0.03**
Final model: Pseudo R-square	0.09	0.09	0.26
** significant at 1%			