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Intersectionality of Race, Ethnicity, Gender, and Age on Criminal Punishment

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Abstract

Race, ethnicity, gender, and age are core foci within sociology and law/criminology. Also prominent is how these statuses intersect to affect behavioral outcomes, but statistical studies of intersectionality are rare. In the area of criminal sentencing, an abundance of studies examine main and joint effects of race and gender but few investigate in detail how these effects are conditioned by defendant's age. Using recent Pennsylvania sentencing data and a novel method for analyzing statistical interactions, we examine the main and combined effects of these statuses on sentencing. We find strong evidence for intersectionality: Harsher sentences concentrate among young black males and Hispanic males of all ages, while the youngest females (regardless of race/ethnicity) and some older defendants receive leniency. The focal concerns model of sentencing that frames our study has strong affinity with intersectionality perspectives and can serve as a template for research examining the ways social statuses shape inequality.

Keywords

intersectionality, criminal punishment, inequality, theory, race, ethnicity, gender, age

Theories of intersectionality are increasingly prominent in recent sociological work on the effects of race, ethnicity, gender, age, and other social characteristics on inequality outcomes. Intersectional approaches addressing the effects of these statuses on criminal behavior and/or punishment have also become more commonplace in criminological research (e.g., Gaub and Holtfreter 2015). Such theories recognize that these social statuses do not simply operate in social life independently, but intersect with each other and, therefore, cannot be studied fully in isolation (McCall 2005). In the area of *criminal sentencing*, several studies have examined how race and gender interact to influence sentencing, but only a handful of studies have assessed how race/ethnicity and gender effects might be conditioned by the defendant's age (Doerner and Demuth 2010; Steffensmeier, Ulmer, and Kramer 1998; Warren, Chiricos, and Bales 2012). These studies have advanced research on intersectionality but have limitations that hamper a full understanding of how social statuses might intersect to create harsher sentencing for some groups compared with others. As detailed below, these limitations include insufficient attention to the

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conditioning role of age, incomplete analyses of intersectionality as applied to Hispanics, and reliance on federal sentencing data whose punishment patterns may not generalize to defendants convicted in state courts.

We address these shortcomings and the scarcity of intersectionality research more generally by using sentencing data from Pennsylvania to examine the intersection of the effects of race/ethnicity (black, white, Hispanic), gender, and age on sentencing, focusing on how each of these statuses might contextualize one another. The Pennsylvania data are advantageous because they involve recent data (2003–2010) that reflect contemporary sentencing patterns and recent demographic changes, and cover a large enough sample of defendants for studying multi-group intersectional outcomes. The primary research question is whether criminal punishment is differentially mobilized on the basis of these important social statuses, singly and in combination. How does age shape the sentencing of black and Hispanic males as compared with white males? Do racial/ethnic disparities in sentencing for males and females vary depending on the age of defendants? Do these statuses interact to deepen punishment for some race-gender-age subgroups while softening it for others? A conceptual model oriented around the focal concerns of sentencing, together with the notion of intersectionality regarding race/ethnicity, gender, and age, theoretically frames our study.

Our study goes beyond prior research on the intersectionality-sentencing issue and contributes to extant work on criminal punishment in several key ways. First, we examine a more detailed differentiation of age effects (with adequate sample size for meaningful comparisons) and how they interrelate with race, ethnicity, and gender, than any other sentencing study. By collapsing age into overly broad groupings (e.g., under vs. over age 30; for example, Kramer and Ulmer 2009; Warren et al. 2012) that do not take into account potentially unique *teen adult* (ages 18–20) or "elder" (50+) effects, prior research has neglected the varied ways in which defendant's age may contextualize and clarify race/ethnicity and gender effects on sentencing outcomes. Second, we include Hispanics and examine how age and gender contextualize the sentencing of Hispanics relative to other groups. Third, we apply a novel, more effective, and parsimonious analytic method for studying intersectionality compared with prior sentencing research. Fourth, we illuminate our statistical findings with qualitative data from interviews of Pennsylvania county judges that further confirm intersectionality in judicial decision-making and how combinations of status characteristics shape focal concerns in ways that are unique and not present when separate status characteristics are considered in isolation. This qualitative component responds to calls for mixed-methods approaches to intersectional studies of sentencing, allowing us to sensitize our quantitative data on judicial decision-making to better "uncover the key motivations and justifications at specific decision points" (Gaub and Holtfreter 2015:307).[1]

Last, in the context of theorizing about intersectional effects, we clarify the focal concerns' conceptual framework on punishment decision-making that represented a central contribution of the Darrell Steffensmeier et al. (1998) article. In light of its widespread application in sentencing research today, our treatment aims to better elucidate the underlying theoretical postulates of the focal concerns framework, its connection to broader sociological themes, such as stratification, culture, and social typing, *and its strong affinity with the notion of intersectionality*. As we review below, focal concerns perspective (FCP) proposes mechanisms by which social statuses combine and interact to influence criminal justice punishment decisions, advantaging some and disadvantaging others.

Previous Research[2]

Research on the effects of legal, case processing, and extralegal variables on sentencing outcomes reveals important variation in sentences given to convicted offenders (for reviews, see Doerner and Demuth 2010; Spohn 2000; Ulmer 2012). There is consensus that the largest portion

of this variation is accounted for by differences in legal characteristics, such as criminal history and offense severity. Nonetheless, net of legal factors, there is considerable evidence that social status characteristics, such as the defendant's race, ethnicity, gender, and age also influence sentencing.

Race/Ethnicity and Gender Effects

Reviews of the sentencing literature on race effects conclude that on average, black and Hispanic defendants are more likely to be sentenced to prison or jail than whites and somewhat more likely to receive longer prison sentences (Feldmeyer et al. 2015; Harris et al. 2009; Spohn 2000). Compared with race effects, *gender* effects are more consistently found in statistical sentencing studies—namely, that adult female defendants receive more lenient sentences than males (see reviews by Brennan and Spohn 2009; LaFrentz and Spohn 2006). A number of studies have examined the interactive effects of gender and race on sentencing (e.g., Steen, Engen, and Gainey 2005; Steffensmeier and Demuth 2006). These studies suggest that similar to white female defendants, black and Hispanic females are sentenced more leniently than their male counterparts, and harsher black and Hispanic penalties in sentencing observed among male defendants are much weaker or non-existent for females.

Age Effects

Prior sentencing research typically controls for defendant's age as a continuous variable and assumes that age is inversely related to sentence severity, but few studies make age the focus of their analysis. Darrell Steffensmeier, John Kramer, and Jeffrey Ulmer (1995) were the first to discover a curvilinear relationship between age and sentencing, demonstrating that offenders in their 20s and early 30s were sentenced most harshly, while offenders in their 50s or older receive especially lenient sentences; falling between these two extremes are the youngest offenders (ages 18–20) and offenders in their late 30s and 40s. It appears that judges see very young or *teen-adult* offenders (ages 18–20) as more impressionable and more likely to be harmed by imprisonment than "young adult" offenders (i.e., ages 21–29), while they see older offenders as less dangerous and less risky prospects for release into the community.

Joint Effects of Race/Ethnicity, Gender, and Age

Last, research on the interactive effects of race, gender, and age on sentencing outcomes is especially scarce. The first such study by Steffensmeier and colleagues (1998) of sentencing in Pennsylvania found that race, gender, and age combine to form an important source of sentencing disparity. Focusing in particular on how race and gender effects were conditioned by defendant's age (18–29, 30–49, 50+), they found that race and gender differences are smaller among older defendants and greater among younger defendants, with young black males (ages 18–29) sentenced more harshly than other groups. Using federal sentencing data, Jill Doerner and Stephen Demuth (2010) built on the study by Steffensmeier and colleagues (1998) by including Hispanic ethnicity and found that young black (21–29) and Hispanic males (18–20; 21–29) have the highest odds of incarceration and that, in general, black and Hispanic males overall receive longer sentence lengths. Using broad age categories (under and over 30), two other studies (Kramer and Ulmer 2009; Warren et al. 2012) have found that black and Hispanic males under age 30 tend to receive harsher sentences.

Our study goes beyond prior research in the area by providing a theoretical template for considering the intersectionality question and by addressing shortcomings in the extant research on the topic. First, there has been insufficient attention to how age conditions the effects of gender

and race/ethnicity on sentencing. Prior research has not adequately accounted for age curvilinearity in assessments of the joint effects of race-gender and age on sentencing outcomes. Studies have used either overly broad age categories, such as under or over age 30 (Kramer and Ulmer 2009; Warren et al. 2012) or have used finer age categories (e.g., 18–29) but which still obscure important differences between teen adults (18–20) and young adult offenders (21–29; Steffensmeier et al. 1998). These approaches may mask important intersectional effects as these critical ages are likely to have important interactions with other status characteristics. Similarly, prior research on intersectionality has yet to systematically examine how the effects of race on the sentencing of males and females vary across the age range. As an example, several studies have concluded that race effects are muted for females compared with males (Brennan and Spohn 2009; Steffensmeier and Demuth 2006) but have not evaluated whether these race effects vary across the age range.

Second, there has been insufficient attention to Hispanics in intersectional analyses of sentencing, especially at the state level where the overwhelming bulk of defendants are adjudicated. Due to data constraints (e.g., small sample sizes), studies of intersectionality have omitted Hispanics altogether (Steffensmeier et al. 1998), used overly broad age groupings to study Hispanics (Kramer and Ulmer 2009; Warren et al. 2012), confounded white and Hispanic effects by coding practices that classify some Hispanic defendants as white (Kramer and Ulmer 2009), or focused only on age by race effects for males (LaFrentz and Spohn 2006). Studying age effects for females is difficult because of small *N*'s for females in some race/ethnicity-age groups.

Doerner and Demuth's (2010) study of intersectional effects on federal sentencing practices is unique because it incorporates Hispanics in their assessment and also considers an age range that included teen adults (ages 18–20). Their study represents a major advance but has important analytic concerns. First, their treatment does not consider fully how age might condition the effects of race/ethnicity and gender on sentencing—including, for example, whether the effects of age vary within each race-gender group separately (e.g., are teen adult black males sentenced more leniently than young adult black males?). Second, their findings based on federal sentencing practices may have limited generalizability to state-level sentencing practices where most criminal cases (roughly 95 percent) are adjudicated because (1) the detailed rules in the U.S. Sentencing Guidelines leave comparatively little room for discretion and (2) the considerable differences in types of offenders that are typically represented in federal as compared with state courts (e.g., immigration-related violations in federal courts vs. common-law offenses in state courts). Third, an added concern is that the overwhelming majority of defendants (85 percent) convicted in federal courts are sentenced to incarceration (compared with about 45 percent in Pennsylvania), leaving little variation to explain in the crucial in-out decision where most disparity in sentencing takes place (Ulmer, Painter-Davis, and Tinik 2014).

Theoretical Framework and Expectations

Focal Concerns and Sentencing

Our study is framed by the *focal concerns* theory of judicial decision-making, the roots of which can be traced to Darrell Steffensmeier's (1980) early work (Steffensmeier, Kramer, and Streifel 1993), and which was later named and elaborated by Steffensmeier et al. (1998). The key notion is that judges and other court actors are guided by three focal concerns in reaching sentencing decisions: blameworthiness, protection of the community, and practical implications of the resulting decision. *Blameworthiness* is associated with defendant culpability and having the punishment fit the crime or "harm" it has caused. *Protection of the community* draws on similar concerns but emphasizes the goals of incapacitation and general deterrence, and on assessments about offenders' future behavior, such as dangerousness or recidivism. *Practical constraints and*

consequences include concerns about the organizational costs incurred by the justice system (e.g., prison capacity, disruption of ties to children, ability of the defendant to "do the time," and potential impact of offender recidivism on the court's standing in the public's eye). Importantly, the defendant's present offense and prior criminal conduct are expected to play the most prominent role in the assessment of blameworthiness and community protection in determining sentences (Steffensmeier et al. 1998). Organizational factors within the courts and the correctional system also shape the assessment of practical constraints, as well as definitions of blameworthiness and community protection. However, all of these focal concerns may be influenced by the offender's position in the social structure in ways that contribute to disparate treatment of some status categories relative to others.

In light of its widespread contemporary use, several key features of FCP are worth clarifying. First, FCP is an integrative rather than competing framework for incorporating insights from various perspectives on court decision-making. Although particular theoretical treatments differ (e.g., conflict theory, racial or group threat theory, organizational efficiency theory), most focus on assessing the likelihood that criminal punishment may reflect (1) inequalities of class, status, or power in the larger society and (2) various organizational interests and practical concerns of justice officials (Steffensmeier and Demuth 2006). FCP integrates such theoretical treatments.

Second, FCP draws broadly on sociological theory and research on the etiology of bias, and on key tenets from attribution and labeling theories in particular. Attribution theory and social-cognitive research argue that individuals almost automatically characterize others into "groups" leading to possible bias or distortion in information processing and decision-making (Higgins and Molden 2003). Labeling theory has generally argued that stereotypes about criminals within social control agencies can influence the applications of formal criminal labels (Farrell and Holmes 1991; Steffensmeier and Terry 1973). Expectancies and scripts linking types of actors with classes of legitimate or illegitimate behaviors are a primary basis of social control by police or courts. To accommodate the often sizable and conflicting information we are exposed to, we primarily simplify that information into a series of heuristics, generalizations, stereotypes, and theories that we use to make decisions and navigate our way through life (Hayes 1962). We interpret our perceptions in light of these features of our cognitive landscape, and this strongly shapes how we react and make decisions. These cognitive shortcuts are common in organizational behavior and decisions (Scott 2008), such as those of court actors. Through the interpretive process that psychologists refer to as "motivated cognition" (Higgins and Molden 2003), organization officials see what they want to see and hear what they want to hear—that is, they are not so much deciders but rather primarily perceivers or construers.

Third, as applied to sentencing, FCP accounts for a decision-making environment that is repetitive yet characterized by considerable uncertainty and complexity (Farrell and Holmes 1991; Steffensmeier 1980). The sentencing environment is repetitive in the sense that court caseloads tend to be sizable and dominated by "routine" cases involving conventional crimes or offenders (e.g., assault, theft). The ambiguity and complexity stem mainly from the multiple and sometimes conflicting sentencing goals faced by judges (see focal concerns above), by conflicting conceptions of justice and punishment philosophy held by court actors, and from the difficulty inherent in predicting the risk and seriousness of recidivism. Added uncertainty *may* arise because there sometimes is little definitive information on the background and character of the defendant (Albonetti 1991). However, FCP argues that this is not the *only* or main source of uncertainty, nor the necessary cause of reliance on attributions, stereotypes, and other perceptual shortcuts. It also appears that even with greater information about defendants and cases, judges and other court actors cannot easily digest the information that they do have at their disposal (Steffensmeier and Demuth 2006). Detailed pre-sentence reports or information brought out at trial may in fact produce an overload of information that is difficult to cognitively process, prioritize, or use (Wilkins 1980).

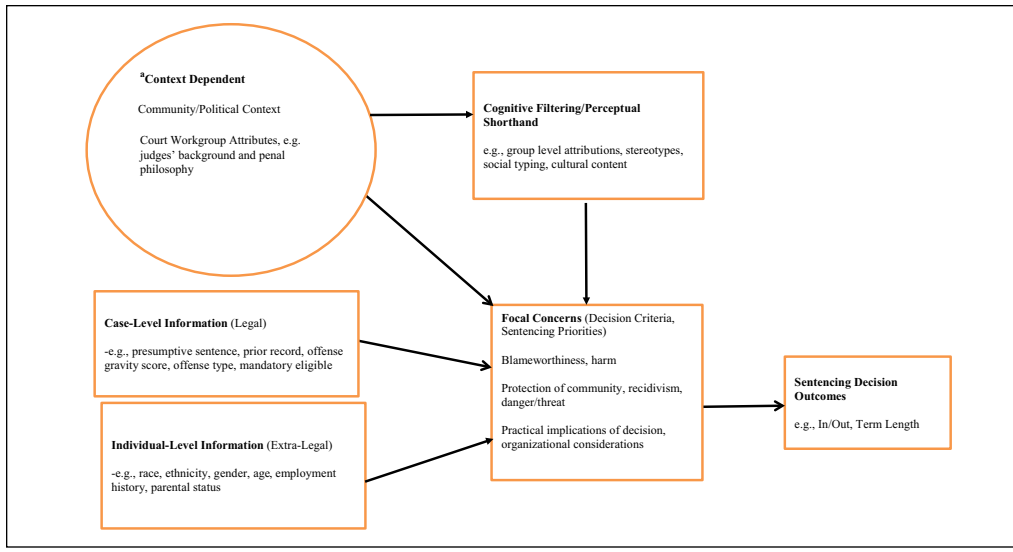

Figure 1. Focal concerns model of sentencing.
[a]Beyond purview of current study.

Fourth, FCP posits that court actors develop *cognitive filters*—a "*perceptual shorthand*"—to manage the uncertainty and competing pressures that characterize the sentencing environment by utilizing stereotypes and typescripts linked to case and defendant characteristics (Steffensmeier et al. 1998:768). It is reasonable to assume that judges, both as citizens and as elected officials, may share in the general stereotyping in the community, and that group-based attributions (e.g., based on race, ethnicity, gender, or age) will intertwine with the focal concerns outlined above to influence judges' sentencing decisions. Scripts or attributions, for example, associating certain demographic groups as more or less crime prone (e.g., young black males vs. older white females) may lead to greater or lesser sentence severity by triggering emotions of fear or sympathy in ways that heighten or lessen concerns about the danger the defendant poses and the perception that he or she is more deserving of punishment and control. In effect, judges (and prosecutors) make situational imputations about defendants' character and expected future behavior and assess the implications of these imputations for the focal concerns described above.

Applying FCP to Race-Gender-Age Effects

Figure 1conveys key elements of FCP in context of our intersectional analysis.

For our purposes here, the main premise is that the meaning, relative emphasis and priority, and situational interpretation of the focal concerns are shaped not only by legally relevant factors but also by the defendants' gender, age, racial/ethnic status, singly, and in combination—that is, by their *intersectionality*. Regarding *gender*, more lenient sentencing decisions may be imposed on women because court actors view females as less dangerous than males, tend to see women's crimes as an outgrowth of their own victimization (e.g., by coercive men or drugs), and believe the social costs of detaining women are higher as they are more likely than males to have child care responsibilities and mental or health problems that could not be treated in a jail setting (Brennan and Spohn 2009; Steffensmeier 1980; Steffensmeier et al. 1993). Also, women are perceived to maintain community ties more so than males (e.g., with parents) and are more closely bonded to conventional institutions that also serve to reduce the likelihood of recidivism.

Concerning *race-ethnicity*, harsher sentences are likely to be imposed on black and Hispanic defendants than white defendants because of court actors' beliefs that blacks and Hispanics are more dangerous, more likely to recidivate, and more adaptable to prison. Research reveals that court officials (and society-at-large) often view black and Hispanic offenders as violence-prone, threatening, disrespectful of authority, and more criminal in their lifestyles (Bridges and Steen 1998; Rios 2011; Steen et al. 2005). Of relevance here is Eduardo Bonilla-Silva's (1997:476) concept of "racialized social systems," which helps explain how racial ideologies (e.g., seeing [younger] minority males as more likely to recidivate) may become "embedded in normal operations of institutions" (such as courts) in ways that foster racially charged actions, even if the motivations are race-neutral. Also, both Hispanic and black defendants are more likely than whites to lack the resources to thwart the imposition of sanctions.

There are competing views on whether Hispanics will be punished more harshly or leniently than blacks. On one hand, Hispanics may be punished less harshly because stereotypes of Hispanics may be more muted, and Hispanics may have more resources (e.g., family support) to diminish the imposition of punishment. On the other hand, Hispanics may be sentenced more harshly because they face added barriers in navigating the justice system (e.g., difficulty with English language) and because, drawing from racial threat perspectives and considering the current context of the Hispanic immigration in the United States, they may seem even more culturally dissimilar and threatening than their black counterparts (Harris and Feldmeyer 2013).

The effects of *age* on sentencing are less clear-cut, especially when combined with other locations, such as gender (Steffensmeier et al. 1995; Wu and Spohn 2009). Drawing from FCP, it can be assumed that older offenders are likely to benefit from judges seeing them as less dangerous and as less likely to recidivate. Also, doing time in prison may be perceived as harsher punishment for older offenders because time for them may be seen as a diminishing, exhaustible resource wherein the future becomes increasingly valuable. Practical constraints may be salient, too, as older offenders present the likelihood of greater health care costs that would be borne by correctional facilities. However, young adult offenders in their 20s and 30s are more likely to be linked to notions of dangerousness and recidivism, seen as more responsible for their actions (e.g., vs. teen adults), and viewed as less likely to be harmed by prison.

Teen-adult defendants (ages 18–20), however, may generate some sympathy and leniency by being seen as lacking in maturity needed to recognize consequences of their actions and as more likely to be harmed by incarceration (Kurlychek and Bernard 2010; Steffensmeier et al. 1995). Judges may be more forgiving toward youthful offenders than toward offenders in their 20s or 30s, seeing them as prone to peer pressure and going through a phase they will outgrow. These attributions of "immaturity" and "proneness to peer pressure" are consistent, of course, with nationwide underage drinking and underage driving under the influence (DUI) laws that apply to this age group and define them as more like "teens" than full-fledged adults. Moreover, it continues to be the case today that some states (e.g., Florida, Alabama, and Georgia; Pennsylvania until mid-1980s) have youthful offender statutes whereby younger offenders (i.e., usually under 21) can be given more lenient sentences, including alternatives to incarceration (Florida State Law, Title XLVII, Chapter 958, 2013).

Crucially, the focal concerns are shaped by the intersection of these statuses such that the influence of a particular status on sentencing outcomes, such as race, is likely to be conditioned by other statuses (age, gender). The stereotypes associated with one status category may heighten or soften the labels associated with another status category in ways that influence the application of the focal concerns. Likewise, certain status categories may *combine* (young adult × black × male) to prioritize or trigger focal concerns that are unique or less emphasized than when status categories are encountered independent of others (Ghavami and Peplau 2013). Research has

shown, for example, that black men are stereotyped as "aggressive" or "quick to anger," but this stereotype is not salient for blacks overall or for black women (Ghavami and Peplau 2013).

Regarding sentencing, it appears that labels of dangerousness and crime proneness attributed to blacks are shaped by gender—that is, amplified for males (considered more blameworthy, higher recidivism risk) but mitigated for females (lower recidivism risk, etc.). These stereotypes may be further shaped by age. Youth and its associated attributions tend to heighten stereotypes of black males, with those in their 20s and early 30s perceived as dangerous and as less likely to be harmed by prison. The public's fear of crime seems especially linked to young minority males who are portrayed in the media as hostile, aggressive, violent, and dysfunctional (Rios 2011). By contrast, it appears that these fears of crime are more muted among older black men, where advanced age seems to temper stereotypes of dangerousness and risk to the community.

Less is known about how intersections will influence certain race/ethnicity-gender-age subgroups. On one hand, gender and age may intersect with race/ethnicity in similar ways for Hispanics as for blacks, with stereotypes of dangerousness being pronounced for Hispanic males and young Hispanic males in particular. For example, research suggests that stereotypes of Hispanics as "violent" are primarily reserved for males, who are also viewed as "aggressive" and "macho" (Ghavami and Peplau 2013). On the other hand, gender and age may contextualize Hispanic sentencing differently than for blacks. Age may have less of an effect on Hispanics and particularly Hispanic males who instead may experience harsh punishment across all age groups. As noted previously, because of the current context of fears about Hispanic immigration (including stereotypes linking immigration to drugs and violence), Hispanics may seem particularly threatening (as projected by racial threat thesis). Also, when a group is regarded as especially threatening, stereotypes may be broader, with gradations in stereotypes (e.g., by age or gender) being less nuanced (Feldmeyer et al. 2015).

Likewise, FCP helps to theorize about the "teen adult effect" and how in particular it may interact with gender and race/ethnicity to influence sentencing. Teen-adult female defendants may generate leniency by being seen as more easily swayed by male companions and as likely to be harmed by incarceration (Steffensmeier 1980). Historically, young female offenders have been treated as "status" offenders and sentenced less strictly (Kurlychek and Bernard 2010), owing apparently to notions of chivalry and paternalism defining them as needing protection and as likely to benefit from alternative punishment. An exception to the leniency granted to teen adults may be young minority male defendants (ages 18–20) because they, like their young adult counterparts (21–34), might be perceived as dangerous, recidivism-prone, and easily adaptable to incarceration.

Expectations

Drawing from the discussion above, we hypothesize independent effects of race, ethnicity, gender, and age on sentencing outcomes, as well as important joint effects based on multiple defendant characteristics.

Hypotheses 1 (H1): Sentence severity overall will be greater for males than females and for black and Hispanic than white offenders.

Hypotheses 2 (H2): Age will influence sentencing in a curvilinear fashion with young adults (21–34) receiving harsher sentences than both teen-adult (18–20) offenders and older offenders (50–64).

Hypotheses 3 (H3): Race effects will be strong among male defendants but muted or weak among female defendants.

Hypotheses 4 (H4): Age will have curvilinear effects on sentencing although these effects will vary somewhat by gender and race/ethnicity. Teen adults (18–20), for example, may

receive added leniency for some groups (females, white males) but not others (black males, Hispanic males).

Hypotheses 5 (H5): Joint effects of these statuses will result in large contrasts in sentence severity between some combinations or intersections of defendant statuses, for example, when comparing the sentences of young or older females with young minority male defendants.

Method

Data

To assess our hypotheses, we analyzed sentencing outcomes in Pennsylvania for 2003–2010 using Pennsylvania Commission on Sentencing (PCS) data. Covering felony and misdemeanor convictions, these data offer some of the richest information on state sentencing patterns. Although Pennsylvania has sentencing guidelines, they allow more discretion than some systems (e.g., Federal, Minnesota), which enhances the risk of sentencing disparity. As Pennsylvania is a very diverse state in terms of racial composition and political and social contexts, study findings should have broad generalizability to other localities.

We limited cases to the most serious offense per judicial proceeding and to non-DUI and non-traffic offenses. The data provide an unusually large number of cases compared with other studies of sentencing, roughly 470,000 defendants. Sentencing researchers, in many respects, have been precluded from rigorous exploration of the main and interactive effects of multiple social statuses on sentencing outcomes because of the regional nature of Hispanic populations, the considerably smaller numbers of female than male defendants, and the comparatively smaller sample sizes of many data sets. That we have abundant data to perform rigorous intersectional analyses makes our study a significant advance over prior research.

Dependent Variable

Many argue that sentencing involves a two stage decision process: first, a decision whether to incarcerate the offender, and second, if incarcerated, a decision regarding length of sentence. We therefore investigate the role of race, ethnicity, age, and gender both singly and in combination with logit models for the in-out decision and ordinary least squares (OLS) models of minimum incarceration length.[3] We define in-out as a dichotomous variable in which non-incarceration sentences (e.g., probation, restitution, county intermediate punishment, restrictive intermediate punishment) equal "0," and sentences involving any length of incarceration (e.g., county jail, state prison, state intermediate punishment) equal "1." Our length models include only incarceration cases. Sentence length is measured as the minimum length of incarceration associated with the most serious offense within a judicial proceeding and ranges from a few days to 300 months. We use the natural logarithm of the incarceration sentence to adjust for skewness in sentence length.[4] Taking the antilog of the coefficient in a logged model allows us to interpret the results as a proportional increase in sentence length.

Independent Variables

Extra-legal variables. *Gender* is measured using a single dummy variable. *Race and ethnicity* are measured using three dummy variables: White (reference), Black, and Hispanic. We include as Hispanic those defendants who are identified as "Hispanic" in the PCS database as well as those whose last names qualify as Spanish surnames that the U.S. Census Bureau classifies as "Heavily Hispanic." For *age*, our analysis includes defendants between the ages of 18 and 64. Throughout the analysis, we focus on four distinct age groupings: 18 to 20, 21 to 34 (reference), 35 to 49, and

50 to 64. We selected these age categories based upon initial analyses in which we broke the data into finer age groupings (e.g., 18–20, 21–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64). For parsimony and to reduce small *N*'s in some categories, we combined these finer age groupings based upon similarities in sentencing patterns (e.g., there were only minor differences in sentencing for the finer age groups within the 21–34 age category).[5]

Legal and case processing variables. Our primary control variable is the presumptive sentence, which is a measure of what the guidelines propose as the appropriate sentence based on offense severity and the offender's criminal history. To correct for skewness, and to maintain comparability to the actual sentence length variable, we take the natural log of the presumptive sentence. As an added control for legal factors, and because it is less correlated with presumptive sentence compared with the guidelines' measure of offense severity, we also include the guidelines' prior record score to account for offender's criminal history. To control further for offense conduct, we include dummy variables for number of current convictions (multiple vs. "a single conviction" as reference), type of offense (violent, property, drug, and "other" as reference category), and whether an offender received a mandatory sentence (no mandatory is reference).[6] Last, we include controls for case processing variables as follows: mode of conviction (trial, guilty plea, and "missing" as reference), county fixed effects to control for unmeasured county characteristics, and year fixed effects to control for trending.

These data features when combined with the large size of our defendant population are arguably the best *available* database for studying intersectionality as it pertains to race, ethnicity, gender, age, and court sentencing. Nonetheless, as characterizes sentencing research in general, data constraints preclude examination of some potentially important variables (e.g., offender's citizenship or socioeconomic status) and earlier case processing decisions.[7] Our lack of preconviction data means we may be understating overall, process-wide disparity, if such disparity is evident in prosecutors' charging decisions and plea agreement behavior.

Results

Because our data set is not a sample, but contains data on all convicted defendants in Pennsylvania for the 2003 to 2010 period, statistical tests of significance do not apply in the conventional sense of assessing error in making inference to the universe from which the sample was drawn (Berk 2010). Also, because the number of cases included in the analysis is very large, many small sentencing differences between groups can emerge as statistically significant. As such, we place more emphasis on the direction and magnitude of the coefficients than on statistical significance levels and gauge the relative importance of the effects of the independent variables according to odds of incarceration and differences in months for sentence length (Steffensmeier and Demuth 2000; also see Bushway, Sweeten, and Wilson 2006).

An important feature of our analysis is the application of a more effective and parsimonious method for assessing complex interaction effects, and thus studying intersectionality, compared with prior sentencing research. We begin our analysis by examining the main effects of status characteristics on sentencing outcomes. We then use two- and three-way product terms to statistically assess whether race/ethnicity, gender, and age interact to influence sentencing. After conducting two- and three-way interactions, we use a suite of post-estimation commands from Stata to gain better insights into the interactions between status characteristics (Long and Freese 2014). We use the *testparm* command to assess whether the overall interaction between our categorical variables is statistically significant (Tran et al. 2015). The *testparm* command is a Wald test that allows us to examine the null hypothesis that our interaction terms are simultaneously equal to 0 (Long and Freese 2014). Drawing from these regression estimates, we use the *margins* command to decompose our interaction terms into the predicted probability of

Table 1. Main Effects for Race, Ethnicity, Gender, Age Groups, and Controls—Logit Model of In-Out Decision and OLS Model of Incarceration Length (Logged).

	In-out		Length	
Variable	OR	*SE*	b	*SE*
Race (reference: White)				
Black	1.433	(.009)	.032	(.003)
Hispanic	1.497	(.014)	.064	(.005)
Gender (reference: Males)				
Female	0.606	(.009)	−.144	(.004)
Age (reference: 21−34)				
18−20	0.936	(.011)	−.053	(.004)
35−49	0.877	(.009)	−.020	(.003)
50−64	0.686	(.016)	−.036	(.006)
Presumptive Sentence	2.602	(.005)	.576	(.001)
Prior record	1.170	(.002)	−.036	(.001)
Mandatory Eligible	2.171	(.021)	.528	(.005)
Multiple Convictions	1.476	(.008)	.151	(.003)
Trials	2.229	(.026)	.340	(.007)
Constant	0.138	(.021)	1.150	(.008)
N	470,602		212,248	
χ^2	174,701 ($p < .0001$)			
R^2			.66	

Note. Reference categories for control variables are: not mandatory eligible, single conviction, and pleas. Controls for year, offense type, county, and missing disposition are included in the model, but are not shown. Standard errors in parentheses. OLS = ordinary least squares; OR = odds ratio. All coefficients are significant at .001 or less due (partly) to large number of cases (two-tailed tests).

incarceration and predicted sentence length for different subgroups defined by race/ethnicity, gender, and/or age. Our predicted values are calculated as average marginal effects (i.e., marginal standardization) where the predicted values of the dependent variable are calculated for every value of the independent variables and then combined as a weighted average (Muller and MacLehose 2014).[8] We use Wald tests to examine the equality of coefficients for particular subgroups. This approach statistically tests for interactions while allowing a parsimonious presentation of findings and for the direct statistical comparison of sentencing outcomes among different race-gender-age groups.

Main Effects

Table 1 shows additive models of the in-out and length-of-term decisions, with the main effects for the control variables as well as race, ethnicity, gender, and age. As is found generally, the main legal variables—presumptive sentence and mandatory eligibility—are associated most strongly with sentence outcomes and thus are important statistical controls; also, defendants with multiple versus a single conviction charge receive modestly more severe sentences.

Net of controls, race, ethnicity, gender, and age have substantial main effects on sentence outcomes. The results are consistent with H1 that males and racial/ethnic minorities will receive harsher sentences. The gender effects are the largest, with female defendants being much less likely to be incarcerated and more likely to receive shorter sentences than males. Regarding race-ethnicity, black and Hispanic defendants are both more likely to be incarcerated than whites and to receive longer sentences.

Table 2. Interaction Between Race/Ethnicity and Gender on Sentencing Outcomes, Net of Controls (Standard Errors in Parentheses).

	In-out		Sentence length (logged)	
Variable	OR	*SE*	*b*	*SE*
Race (reference: White)				
Black	1.476	(.01)	.036	(.004)
Hispanic	1.580	(.015)	.069	(.005)
Gender (reference: Male)				
Female	0.647	(.011)	−.133	(.005)
Race by Gender Interaction (reference: White × Female)				
Black Females	0.861	(.020)	−.025	(.009)
Hispanic Females	0.728	(.036)	−.039	(.015)
Test for Interaction of Race by Gender	$\chi^2 = 113.14$, $p < .0001$		$F = 6.15$, $p < .001$	

Note. OR = odds ratio.

Table 3. Predicted Probabilities of Incarceration and Predicted Sentence Lengths by Gender.

	Males		Females	
Subgroup	Predicted value	Difference	Predicted value	Difference
Incarceration				
Whites (reference)	0.442		0.370	
Black	0.510	*.07*	0.409	*.04*
Hispanic	0.522	*.08*	0.393	*.02*
Sentence Length[a]				
Whites (reference)	7.827		6.853	
Black	8.110	*.28*	6.924	*.07*[b]
Hispanic	8.387	*.56*	7.061	*.21*

Note. Differences in prediction from reference group in italics.
[a]Predicted values of sentence length exponentiated to transform values from logged to original metric.
[b]NS = difference in predicted values not significant at .05 level (Wald Test of Equality of Coefficients).

The effects of age on sentencing are more complex. Consistent with H2, age influences sentence severity in a curvilinear fashion. Specifically, we find that the age-sentencing relationship is depicted by an inverted U-shape pattern: Offenders over 50 and under age 21 receive the least severe sentences, while those aged 21 to 34 receive the harshest sentences. Although important, the main effects of race/ethnicity, gender, and age mask considerable variation in the ways these statuses are conditioned by one another. Below, we begin to examine the interactive effects of these statuses.

The Interaction of Race and Gender

Table 2 presents the results of the logistic regression analysis of the in-out decision and the OLS models of sentence length. The models include two-way product terms of the interaction between race/ethnicity and gender. The test for interaction (*testparm* command in Stata) indicates that net of controls, race and gender significantly interact to influence both the in-out decision ($\chi^2 = 113.14$; $p < .0001$) and sentence length ($F = 6.15$ $p < .001$). As displayed in Table 3, we used Stata's margins command to decompose the interaction terms into predicted probabilities of incarceration and predicted sentence lengths separately for males and females. Using whites as a

reference category, we calculated probability differences and used Wald tests to assess whether these differences were statistically significant.[9] Consistent with H3, race effects are strong among male defendants, but weak or muted among female defendants. Racial minority status has a substantially stronger effect on differences in the probability of incarceration (from whites) for males (blacks = .07; Hispanics = .08) compared with females (blacks = .04; Hispanics = .02). Likewise, race effects on differences in predicted sentence length (from whites) are more pronounced among men (blacks = .28, Hispanics = .56) than women (blacks = .07, Hispanics = .21).

The Interactive Effects of Age: Age by Race and Age by Gender

Table 4 presents results of separate interactions between age and gender and age and race on sentencing outcomes. Tests for interaction (*testparm* command in Stata) displayed in Table 4 indicate that net of controls, age significantly interacts with both gender and race. The margins command is used to decompose these effects into the predicted probabilities of incarceration and predicted sentence length. The decomposition of the interactions between age and gender is displayed in the left panel and age and race in the right panel.

Regarding the interaction between age and gender, we note two key findings. First, for both the in-out and the sentence length decision, age curvilinearity is manifest for both males and females (with those 21–34 receiving the harshest sentences), but with the effect being more robust for males. Second, for both males and females, teen adults receive leniency at sentencing, with the effects larger for females.

Moving to the interaction of age and race, we see that age curvilinearity is evident in both the in-out and the sentence length decision for all three racial/ethnic groups. That is, in general, young adults (21–34) receive the harshest sentences while teen adults and older adults receive comparative leniency. A few exceptions include the in-out decision where blacks 18 to 20 receive sentences that are statistically indistinguishable from those 21 to 34 and for sentence length where older (35–49, 50–64) Hispanic and white adults receive sentences that are statistically comparable with those 21 to 34.

Intersectionality of Race, Ethnicity, Gender, and Age on Sentencing Outcomes

We turn now to what is the main concern of our analysis—clarifying the intersection of race, ethnicity, gender, and age in sentencing. Table 5 presents results of a logistic regression analysis of the in-out decision and OLS models of sentence length. The models include three-way product terms of the interaction between race/ethnicity, gender, and age. The test for interaction (*testparm* command in Stata) indicates that net of controls, race, gender, and age significantly interact to influence both the in-out decision ($\chi^2 = 37.53$; $p < .0001$) and sentence length ($F = 6.79$; $p < .0001$). These results are consistent with H5 predicting that race/ethnicity, gender, and age will interact to shape sentencing outcomes.

Drawing from these regression estimates, we use the *margins* command to decompose our interaction terms into predicted probabilities of incarceration and sentence length for each race/ethnicity-gender-age subgroup. We use Wald tests to test the equality of coefficients for particular race-gender-age subgroups. We use these estimates to make the following strategic comparisons between groups: (1) how age influences sentencing for particular race-gender subgroups, (2) whether the effect of race varies across the age range for male and female defendants, and (3) to better understand how status characteristics combine to shape overall disparities in sentencing outcomes.

Age Effects within Race-Gender Groups

In Table 6, we arrange the subgroups by gender and race to examine whether the effects of age vary for different race-gender subgroups. We use Wald tests to assess whether there are significant age

Table 4. The Interactive Effects of Age, Separately with Gender and Race on Sentencing Outcomes, Net of Controls; Predicted Probablities of Incarceration and Predicted Sentence Lengths.

	Age by gender interaction					Age by race interaction			
	Incarceration		Sentence length[a]			Incarceration		Sentence length[a]	
Subgroup	Predicted value	Difference	Predicted value	Difference	Subgroup	Predicted value	Difference	Predicted value	Difference
Males 18–20	.473	*−.01*	7.728	*−.40*	Whites 18–20	.421	*−.02*	7.21	*−.54*
Males 21–34 (ref.)	.482		8.127		Whites 21–34 (ref.)	.439		7.75	
Males 35–49	.453	*−.03*	7.907	*−.22*	Whites 35–49	.417	*−.02*	7.75	*−.01*[b]
Males 50–64	.417	*−.06*	7.777	*−.35*	Whites 50–64	.384	*−.06*	7.84	*.09*[b]
Females 18–20	.362	*−.03*	6.311	*−.61*	Blacks 18–20	.503	*.00*[b]	7.93	*−.25*
Females 21–24 (ref.)	.393		6.924		Blacks 21–34 (ref.)	.499		8.17	
Females 35–49	.389	*−.00*[b]	7.065	*.14*	Blacks 35–49	.473	*−.03*	7.70	*−.47*
Females 50–64	.339	*−.05*	7.034	*.11*[b]	Blacks 50–64	.419	*−.08*	7.27	*−.91*
					Hispanics 18–20	.487	*−.02*	7.87	*−.36*
					Hispanics 21–34 (ref.)	.505		8.23	
					Hispanics 35–49	.493	*−.01*	8.39	*.16*[b]
					Hispanics 50–64	.466	*−.04*	8.36	*.13*[b]
Test of Interaction of Age by Gender	$\chi^2 = 96.38$, $p < .00001$		$F = 18.35$, $p < .00001$		Test of Interaction of Age by Race	$\chi^2 = 71.72$, $p < .00001$		$F = 39.88$ $p < .00001$	

Note. Differences in predictions from reference group in italics.

[a]Predicted values of sentence length exponentiated to transform values from logged to original metric.

[b]NS = difference in predicted values not significant at .05 level (Wald Test of Equality of Coefficients).

Table 5. Race/Ethnicity by Age by Gender Interaction Effects on Sentencing Outcomes, Net of Controls (Standard Errors in Parentheses).

	In-out		Length (logged)	
Variable	OR	*SE*	*b*	*SE*
Race (reference: White)				
Black	1.484	(.013)	.058	(.005)
Hispanic	1.561	(.019)	.063	(.007)
Gender (reference: Male)				
Female	0.636	(.016)	−.141	(.007)
Age (reference: 21–34)				
18–20	0.914	(.015)	−.072	(.006)
35–49	0.855	(.013)	−.006[a]	(.005)
50–64	0.726	(.022)	.013[a]	(.009)
Race × Gender (reference: White × Male)				
Black × Female	0.813	(.029)	−.049	(.013)
Hispanic × Female	0.706	(.048)	−.039[a]	(.021)
Race × Age (reference: White × 21–34)				
Black × 18–20	1.133	(.025)	.044	(.009)
Black × 35–49	0.954	(.021)	−.064	(.007)
Black × 50–64	0.814	(.037)	−.149	(.013)
Hispanic × 18–20	0.984	(.039)	.030	(.015)
Hispanic × 35–49	1.063	(.035)	.024	(.012)
Hispanic × 50–64	1.115	(.078)	−.005[a]	(.025)
Gender × Age (reference: Male × 21–34)				
Female × 18–20	0.903	(.038)	−.009[a]	(.019)
Female × 35–49	1.103	(.025)	.026	(.011)
Female × 50–64	0.898	(.051)	−.013[a]	(.023)
Race × Gender × Age Interaction (reference: White × Male × 21–34)				
Black × Female × 18–20	0.888[a]	(.072)	−.081	(.034)
Black × Female × 35–49	1.162	(.046)	.062	(.019)
Black × Female × 50–64	1.530	(.090)	.181	(.038)
Hispanic × Female × 18–20	0.999[a]	(.118)	−.05[a]	(.055)
Hispanic × Female × 35–49	1.087[a]	(.083)	−.001[a]	(.034)
Hispanic × Female × 50–64	1.097[a]	(.184)	.094[a]	(.077)
Test for Interaction of Race by Gender by Age	$\chi^2 = 37.53$, $p < .0001$		$F = 6.79$, $p < .00001$	
N	470,602		212,248	

Note. OR = odds ratio.
[a]NS = coefficient not significant at .05 level (two-tailed tests).

differences in sentencing, with young adults (age 21–34) serving as the reference category for each comparison.

Consistent with H4, age has curvilinear effects on sentencing, although these results vary somewhat by gender and race/ethnicity. Looking first at the in-out decision, the overall age-curvilinearity pattern is robust for each race-gender group (e.g., white females, Hispanic males). Teen-adult offenders (18–20) are less likely to be incarcerated than young adult defendants (ages 21–34) within the same race-gender group for all groups except black males, while overall, the oldest defendants are the least likely to be incarcerated. This greater leniency in sentencing for teen adults (relative to 21–34 age group) and elder defendants represents statistically significant differences across most race-gender categories. The major exception involves black male

Table 6. Age Differences in Predicted Probabilities of Incarceration and Predicted Sentence Length for Race-Gender Age Subgroups, Net of Controls.

	Males						Females					
Subgroup	White		Black		Hispanic		White		Black		Hispanic	
Predicted Probability of Incarceration, Differences in Predictions from Reference Group in Italics												
Age 18–20	.439	*−.02*	.530	*.01*[a]	.514	*−.02*	.350	*−.03*	.378	*−.03*	.362	*−.03*
Age 21–34 (reference)	.454		.524		.533		.380		.410		.395	
Age 35–49	.428	*−.03*	.488	*−.04*	.516	*−.02*	.370	*−.01*	.417	*.01*[a]	.409	*.01*[a]
Age 50–64	.401	*−.05*	.432	*−.09*	.495	*−.04*	.315	*−.06*	.376	*−.03*	.36	*−.04*[a]
Predicted Sentence Length[b], Differences in Predictions from Reference Group in Italics												
Age 18–20	7.355	*−.55*	8.142	*−.23*	8.074	*−.34*	6.326	*−.53*	6.155	*−.77*	6.354	*−.67*
Age 21–34 (reference)	7.901		8.372		8.416		6.859		6.923		7.025	
Age 35–49	7.846	*−.06*[a]	7.804	*−.57*	8.568	*.15*[a]	6.994	*.14*[a]	7.043	*.12*[a]	7.33	*.31*[a]
Age 50–64	8.004	*.10*[a]	7.305	*−1.07*	8.482	*.07*[a]	6.862	*.00*[a]	7.142	*.22*[a]	7.675	*.65*[a]

[a]Predicted values of sentence length exponentiated to transform values from logged to original metric.
[b]NS = difference in predicted values not significant at .05 level (Wald Test of Equality of Coefficients).

defendants, where the probability of incarceration is virtually identical for the youngest males as compared with their young adult counterparts.

Important age differences also persist in the length models, but there is more variation in age effects. Most notable is the greater strength of the age effect favoring the youngest defendants and the null effects involving older defendants (35–49, 50–64). First, as also observed in the in-out models, young adults (21–34) typically receive some of the longest sentences. Second, unlike the in-out models, older adult offenders (35–49, 50–64) often receive sentences that are statistically indistinguishable from young adults (a notable exception is the much shorter sentences received by older black males).Third,, the youngest defendants (18–20) typically receive shorter sentences than other age groups.

Race/Ethnicity Effects by Gender for Age Disaggregated Data

In Table 7, we arrange the subgroups by age and gender to examine whether the effect of race varies across the age range for male and female defendants. We use Wald tests to examine whether there are significant race differences in sentencing, with whites serving as the reference category for each comparison. We find strong support for both H4 and H5; the effects of race/ethnicity on the sentencing of males and females vary across the age range. Starting with males, we observe two key findings. First, black male defendants are sentenced more harshly than white male defendants within younger age groups (18–20, 21–34) but with small and even reversed differences at older age comparisons. Second, Hispanic males are sentenced more harshly than white males across all age comparisons, and these effects are similar in size. Regarding females, race effects are muted compared with those for males and are only observed for the in-out decision.

Intersectionality of Race, Ethnicity, Gender, and Age on Sentencing Outcomes

In Table 8, we further establish the joint effects of race/ethnicity, gender, and age on sentencing outcomes. We rank-order the subgroups in terms of sentence severity and use Wald tests to assess whether there are significant subgroup differences in sentencing, with white males 21 to 24 serving as the reference category for each comparison.

Table 7. Race Differences in Predicted Probabilities of Incarceration and Predicted Sentence Length for Race-Gender Age Subgroups, Net of Controls.

	Predicted probability of incarceration								Predicted sentence length[a]							
Subgroup	18–20		21–34		35–49		50–64		18–20		21–34		35–49		50–64	
Males																
White (ref.)	.439		.454		.428		.400		7.35		7.90		7.853		8.004	
Black	.530	*.09*	.524	*.07*	.489	*.06*	.432	*.03*	8.14	*.79*	8.37	*.48*	7.8	*−.05*[b]	7.304	*−.70*
Hispanic	.514	*.08*	.533	*.08*	.516	*.09*	.495	*.09*	8.07	*.72*	8.42	*.52*	8.568	*.72*	8.485	*.48*
Females																
White (ref.)	.350		.380		.370		.315		6.326		6.859		6.995		6.859	
Black	.378	*.03*	.410	*.03*	.417	*.05*	.376	*.06*	6.155	*−.17*[b]	6.923	*.06*[b]	7.043	*.05*[b]	7.146	*.29*[b]
Hispanic	.362	*.01*[b]	.395	*.02*	.409	*.04*	.36	*.05*[b]	6.354	*.03*[b]	7.025	*.17*[b]	7.331	*.34*[b]	7.68	*.82*[b]

[a]Predicted values of sentence length exponentiated to transform values from logged to original metric.
[b]NS = difference in predicted values not significant at .05 level (Wald Test of Equality of Coefficients).

First, Hispanic and black male defendant groups are clustered at the top of the table indicating they receive the harshest sentences, while female defendant groups are clustered at the bottom regardless of race or ethnicity. This overall positioning holds for both the in-out and length decisions. With the exception of the oldest black males, black and Hispanic male defendants are found at the top of the rank ordering and receive the harshest sentences. Notably, sentencing penalties for Hispanic males are not limited to the young; rather, all age groups of Hispanic male defendants hover at or near the top of the rank ordering.

Second, age curvilinearity and the overall pattern of more lenient treatment of the youngest and the oldest defendants is fairly robust across gender and race-ethnicity categories. The older teen versus young adult advantage is particularly pronounced among females. Overall, the youngest female defendants receive more lenient sentences than any other race-gender-age combinations, including other female age groups. Youngest and oldest female defendants across racial groups cluster at the bottom for in-out decision (most leniency), but with youngest females also clustering at the bottom for sentence length decision. Also noteworthy, beyond this greater leniency for the youngest female defendants, the ordering of age effects is more scrambled among females than males. For example, while the young adult age group (21–34) consistently receives the harshest (or nearly the harshest) sentences among male defendants across all three race groups, its severity ranking is more variable or random among females.

Third, when fully taking into account the intersecting effects of these statuses, there is considerable variation in sentences that is concealed when main effects only are studied or when the intersectional analysis is limited to race-gender or age-race comparisons. Comparing some of the most disparately sentenced groups, for example, young black males (ages 18–20, 21–34) have more than a 20 percent greater probability of being incarcerated compared with the oldest white female defendants. Similarly, young adult (21–34) and middle-aged (35–49) Hispanic males receive sentences about 30 percent to 40 percent longer than the youngest black, white, and Hispanic female defendants. Also, the oldest black male defendants receive sentences that are about 15 percent shorter than young adult black males and 10 percent shorter than older white male defendants. Our discussion that follows elaborates important intersectional findings.

Supporting Qualitative Evidence

We turn last to describe briefly qualitative evidence from interviews with sentencing judges in Pennsylvania that helps to illustrate our central findings and increase our confidence in them (see note 1). The interview data clearly indicated how judges evaluate offenders in light of the focal

Table 8. Race-Gender-Age Group Differences in Sentencing Outcomes—Groups Rank-ordered in Terms of Sentence Severity, Net of Controls.

Incarceration				Sentence length[a]			
Subgroup		Predicted value	Difference			Predicted value	Difference
1	Hispanic Male 21–34	.533	*.08*	1	Hispanic Male 35–49	8.568	*.67*
2	Black Male 18–20	.530	*.08*	2	Hispanic Male 50–64	8.485	*.58*[b]
3	Black Male 21–34	.524	*.07*	3	Hispanic Male 21–34	8.416	*.52*
4	Hispanic Male 35–49	.516	*.06*	4	Black Male 21–34	8.372	*.47*
5	Hispanic Male 18–20	.514	*.06*	5	Black Male 18–20	8.142	*.24*
6	Hispanic Male 50–64	.495	*.04*[b]	6	Hispanic Male 18–20	8.074	*.17*[b]
7	Black Male 35–49	.488	*.03*	7	White Male 50–64	8.004	*.10*[b]
8	White Male 21–34 (ref.)	.454		8	White Male 21–34 (ref.)	7.901	
9	White Male 18–20	.440	*−.01*	9	White Male 35–49	7.852	*−.05*[b]
10	Black Male 50–64	.432	*−.02*	10	Black Male 35–49	7.804	*−.1*[b]
11	White Male 35–49	.428	*−.03*	11	Hispanic Female 50–64	7.681	*−.22*[b]
12	Black Female 35–49	.417	*−.04*	12	White Male 18–20	7.355	*−.55*
13	Black Female 21–34	.409	*−.05*	13	Hispanic Female 35–49	7.330	*−.57*[b]
14	Hispanic Female 35–49	.409	*−.05*	14	Black Male 50–64	7.305	*−.60*
15	White Male 50–64	.401	*−.05*	15	Black Female 50–64	7.146	*−.76*
16	Hispanic Female 21–34	.395	*−.06*	16	Black Female 35–49	7.043	*−.86*
17	White Female 21–34	.380	*−.07*	17	Hispanic Female 21–34	7.025	*−.88*
18	Black Female 18–20	.378	*−.08*	18	White Female 35–49	6.995	*−.91*
19	Black Female 50–64	.376	*−.08*	19	Black Female 21–34	6.923	*−.98*
20	White Female 35–49	.370	*−.08*	20	White Female 21–34	6.859	*−1.04*
21	Hispanic Female 18–20	.362	*−.09*	21	White Female 50–64	6.859	*−1.04*
22	Hispanic Female 50–64	.360	*−.09*	22	Hispanic Female 18–20	6.354	*−1.55*
23	White Female 18–20	.350	*−.10*	23	White Female 18–20	6.326	*−1.58*
24	White Female 50–64	.315	*−.14*	24	Black Female 18–20	6.155	*−1.75*

Note. Probability differences from reference group in italics.
[a]Predicted values of sentence length exponentiated to transform values from logged to original metric.
[b]NS = difference in predicted values not significant at .05 level (Wald Test of Equality of Coefficients).

concerns and how combinations of status characteristics shape focal concerns in ways that are unique and not present when separate status categories are considered in isolation. These comments from several veteran trial court judges confirm the importance of studying the intersection of multiple defendant statuses, especially the variable effects of age on gender and race outcomes.

> An 18 or 19 year old in one sense is less mature, more inclined to peer influence. But in another sense is more apt to get into trouble again and so is more of a threat to the community, to prey on their neighborhoods. So you have to balance this. I'm talking mostly about male defendants now. The females I see in court, the threat and the danger aspect really isn't there—no matter their age. Unless she is a main pusher or dealer [in drugs].

> Most women just "get it." You don't have to hit them over the head, unlike a lot of men. Men are too stubborn, or aggressive, or whatever. I know young women in a bad situation, who's done something stupid, is a good risk and can benefit from alternatives [to incarceration].

> If children are involved and she is the mother taking care of them, you will take that into account. So this is something that can bring a reduced sentence and less in way of incarceration (for younger women) because they are often the ones who will be the mothers and with younger children.

> If it is a young female, I am probably more careful, [will] spend more time thinking through my sentence. You can have a situation here where she has been pressured into involvement by some guy who is a loser; in my mind young women are more susceptible to that. She is in the wrong place at the wrong time, maybe has a kid or is pregnant and does something desperate. The risk from her killing or mugging someone isn't there. Maybe she has her kid to take care of. What purpose would incarceration serve? Actually may cause more harm.

The judge's assessments indicated that the law violations of females, and younger females in particular, are more likely to be viewed as arising out of situational contingencies (e.g., male influence, family-related pressures) and thus unlikely to occur again; whereas the law violations of males, minority males in particular, may confirm pre-existing stereotypes of anti-social tendencies and thus a sign of future risk and the need to protect the community by imposing a harsher sentence.

However, qualitative evidence also indicates that age may sometimes temper stereotypes and focal concerns associated with minority males:

> If [as you say] older African American men seem to do okay with their sentences, it likely would have to do with the judge's thinking that he isn't a threat to his neighborhood, isn't part of the drug problem, or maybe he has really serious health problems; whereas the judge's worry would lean otherwise with the [black] defendant who is younger.

And how the recent growth of Hispanics might contribute to greater scrutiny and harsher sentencing of Hispanic (male) defendants or idiosyncratic sentencing of some female defendants,

> I do believe some judges will have some concerns about Hispanic cases and how these might connect with drugs and with issues having to do with needing more police, more public assistance, and that. Some areas of the state have changed a lot on account of their [Hispanic] influx. Mostly, the concern is about [Hispanic] males but are some [Hispanic] women involved in drug groups bringing the stuff in and doing the selling. I hit an older Colombian woman with extra time, [as she] was a main entity in a local drug organization.

Discussion

The intersectionality of defendant status characteristics—gender, race, ethnicity, and age—in their effects on sentence outcomes has still been understudied in law and the social sciences. Particularly scarce are studies that incorporate Hispanics and females into the analysis, while also covering the full range of ages to take into account likely age-curvilinear effects.

Consistent with hypotheses drawn from focal concerns theory, our results show that sentence severity is greater for males than females and harsher among blacks and Hispanics than whites (H1); age curvilinearity is pronounced overall, with young adults receiving harsher sentences than younger-teen adults (18–20) and older defendants (H2); race/ethnicity effects are substantial among men, but weak among women (H3); age-curvilinearity effects vary somewhat by gender and race/ethnicity, for example, teen adults receive added leniency for some groups (females, white males) but not others (black and Hispanic males; H4); and joint effects of status characteristics on sentencing (e.g., much harsher sentences for young adult Hispanic or black males as compared with teen-adult white females) are considerably larger than the main effects of individual status characteristics (e.g., female effect or race effect; H5).

Several findings, displayed in Figure 2, stand out for further elaboration. First, the gender effect of greater leniency for female defendants is pronounced and consistent for both the in-out and length decisions. It also persists across both race and age comparisons, with female defendants sentenced more leniently than their same-race male counterparts and similarly aged minority males. Second, a substantial race/ethnicity effect on sentencing exists, but this applies mainly to *male*

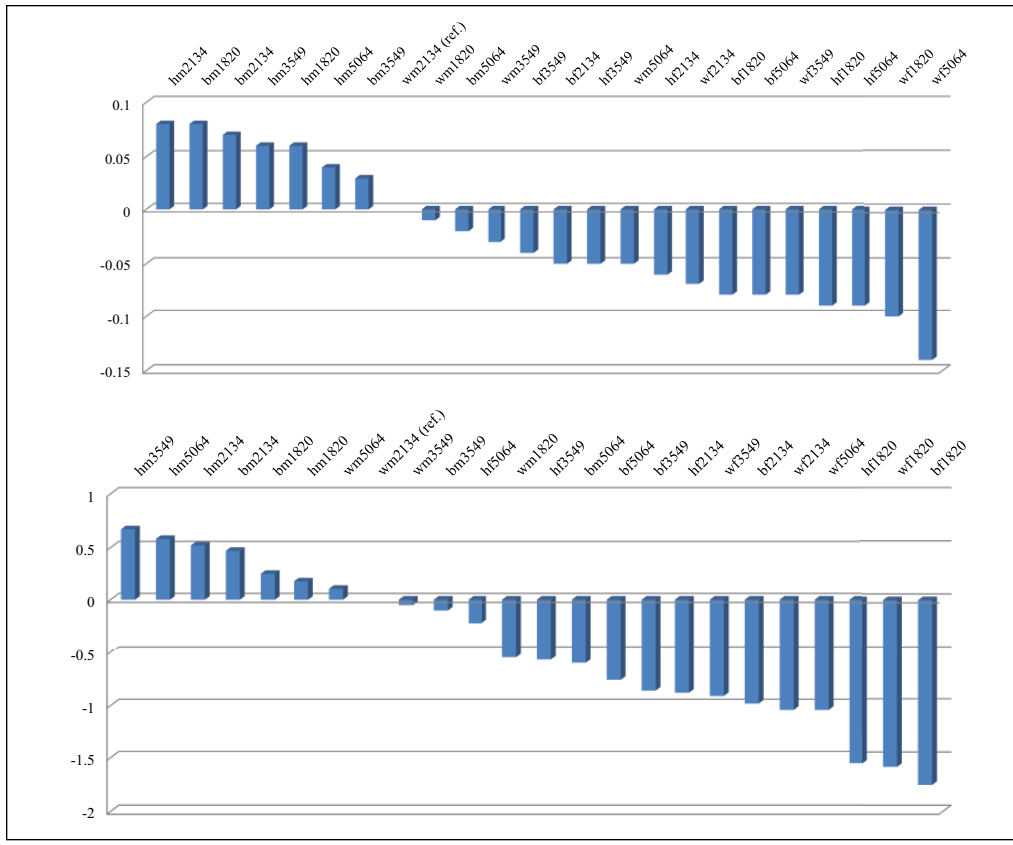

Figure 2. Differences in predicted probabilities of incarceration (top panel) and sentence length (bottom panel) among Race/Ethnicity × Gender × Age subgroups.
Note. White males ages 21–34 are the reference group.

defendants. Younger black male defendants (ages 18–20, 21–34) and Hispanic male defendants overall receive the harshest sentences. Notably, the penalty for Hispanic males persists at older ages while the penalty declines for older black males, creating sentencing disparities between these groups at the older age ranges. Our finding of a strong Hispanic male effect coincides with evidence that is emerging in other sentencing studies in which Hispanic ethnicity has become a comparatively salient factor in decisions to punish, with Hispanics being sentenced comparably with or more severely than blacks (e.g., Feldmeyer et al. 2015). Darrell Steffensmeier and Stephen Demuth (2000:278) suggest in the context of heated debate about immigration and perceptions linking it to social problems, such as diminished employment opportunities and drug-trade networks, Hispanics may be viewed as more "culturally dissimilar and threatening than either Blacks or Whites."

Third, age curvilinearity is strongly in evidence, and age conditions the effects of membership in specific race-gender subgroups in different ways. A core feature of the curvilinearity is that young adults (21–34) are consistently sentenced more harshly than teen adults (18–20). The partial exception is for black males where for the in-out decision, teen adults are sentenced on par with young adults. Age also conditions the effects of defendant's social statuses in ways that contribute to lighter sentencing of some subgroups compared with others. For example, teen-adult females receive more lenient sentences overall and for length of term in particular.

Fourth, as the in-out and length differences in Figure 2 illustrate, substantial disparities in sentence severity exist when comparisons are made between the most dissimilar groups. For

example, young adult minority males (black, Hispanic) have a roughly 25 percent greater probability of incarceration than the oldest white female defendants, and a 30 percent greater probability than the youngest white, black, and Hispanic females.

The focal concerns perspective is based on a relatively complex decision-making process in which judges take into account multiple factors and consequences of sentencing decisions. These considerations may or may not conflict with one another, and how judges and other court actors interpret or prioritize the focal concerns may vary as well. This complexity seems to be most strongly in play in the case of age effects and their intersection with gender and race. Drawing from our statistical findings and qualitative interviews, we can expect, on one hand, that some judges will view youth as a protective factor for offenders, downplaying culpability because of a lack of social experiences or serious harm caused. On the other hand, other judges may not view or prioritize youth as a protective factor, but rather may focus on the practical issue of whether older offenders are able to do time in prison without health concerns and family disruption. Adding gender to the mix, judges may view younger female defendants with greater sympathy because they see them as more "salvageable" or amenable to treatment. Or judges may see young women's law violation(s) as due to victimization or association with male offenders, and see them as having a lesser "ability to do time." On the other hand, when identifying risk to the community, many judges may link age with other status characteristics whereby young black or Hispanic males will arouse more fear and be singled out as the most dangerous or crime prone, and viewed as the group that warrants sentence severity.

Conclusion

Our results both confirm the importance of intersectionality and are consistent with the focal concerns perspective. While the primary determinants of sentencing decisions are the past and present criminal behaviors of defendants, our findings are consistent with the notion that legal attributions of culpability, criminal risk, and practical considerations are influenced by commonly held perceptions of membership in various racial/ethnic, gender, and age categories, both singly and in combination with one another. The joint constellations of certain offender characteristics, therefore, result in compounded sentence severity for some defendants but greater leniency for others. These social statuses and their intersectionality are not just individual attributes but cultural categories that shape the distribution of sanctions and criminal punishment.

Race, ethnicity, gender, and age are primary social statuses that are a prominent core of sociological as well as criminological analyses and a persistent theme of interest covering essentially all substantive areas within these and other social science disciplines. Our findings demonstrate that these statuses cannot be studied alone but rather interact to produce disparate outcomes by race/ethnicity and gender and age simultaneously, and they show that intersectionality effects are apt to be responsive to cultural contexts of social differentiation. Our findings also emphasize the underutilized potential of the concept of intersectionality for scholars and researchers in criminology, legal studies, sociology, and the social sciences more generally. We hope that our research and the focal concerns perspective might serve as a template for future intersectional studies that seek to integrate and understand the complex ways in which membership in these social categories, both singly and in combination, shapes variability in the application of criminal punishment and in other types of behavioral and inequality outcomes.

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Notes

1. Qualitative data from Pennsylvania judges and court officials have been collected intermittently over the past two decades by the co-authors. The interviews focused on case characteristics and circumstances, and reasons and criteria for (theirs and their judicial colleagues) sentencing decisions.
2. Space constraints do not permit us to address more fully prior research related to our study or propose future research that would further advance the intersectionality issue.
3. Supplemental models were run to assess the robustness of results, including the application of (1) the tobit model, which assumes sentencing is a one-step process and that independent variables influence each dependent variable (in-out, sentence length) in the same way; (2) multinomial logistic regression with the "in" decision separated into jail and prison; and (3) Heckman correction to account for potential selection bias. Substantive findings were similar to our main results.
4. A value of 1 was added to all values before taking the natural log. We do this to avoid negative values that result from logging sentence lengths in days.
5. We do not include offenders 65 and older because the number of defendants sentenced to prison declines precipitously after the age of 64 (less than 0.5 percent of all cases are 65 and above) and is near 0 for some status combinations.
6. We examined the influence of both mandatory eligibility and whether a mandatory was imposed on sentencing outcomes (Bergstrom et al. 2009). Substantive results were the same.
7. Some research shows that citizenship status accounts for a substantial amount of the Hispanic effect in federal sentencing (Light, Massoglia, and King 2014). That our study lacks information on defendant citizenship, however, is unlikely to affect the findings because the majority of adult Hispanics in Pennsylvania are citizens (about 90 percent), and because non-citizens arrested in the state are routinely routed to and sentenced in federal courts, for example, non-citizens make up less than 1 percent of those incarcerated in Pennsylvania prisons (information provided by Pennsylvania Department of Corrections).
8. Compared with other methods of calculating predicted values (prediction at the modes *or* means), average marginal effects is the preferred method when calculating estimates for specified target populations, especially when the model includes dichotomous variables (Muller and MacLehose 2014).
9. Table 2 lists interaction effects between race/ethnicity and gender. For example, the results show that being a female reduces the odds of incarceration and length of sentence to a greater extent for black (in-out, odds: .861, length, $b = -.025$) and Hispanic females (in-out, odds: .728, length, $b = -.039$) than for whites.

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