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## The role of juvenile adjudications in the disproportional incarceration of African-American and Hispanic defendants

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#### **ABSTRACT**

Prior research has demonstrated the mediating role of criminal history in incarceration decisions involving black and Hispanic men. Juvenility also plays a role in differential punishment. Our study examines juvenile adjudications as a component of criminal history, and the extent to which such adjudications are a potential source of disproportional incarceration of black and Hispanic men. Drawing from the focal concerns model of punishment decisions, we investigate juvenile adjudications in criminal history as they might mediate racial and ethnic differences in incarceration. We also examine whether judges give different weight to adjudications depending on how long ago they occurred, and whether juvenile adjudications heighten the incarceration chances of minority men more than others. We analyze Pennsylvania sentencing data from 2006 to 2010 that allow for the decomposition of criminal history into juvenile adjudications and adult convictions, and examine incarceration and guideline departure decisions.

#### **KEYWORDS**

Sentencing; courts; sentencing disparity; criminal history; incarceration

#### Introduction

The disproportionate representation of black and Hispanic youth in the juvenile justice system is well documented, including in the adjudication process (Kempf-Leonard 2007). Prior research has also demonstrated the mediating role of criminal history in incarceration decisions involving black and Hispanic men (e.g., Ulmer, Painter-Davis and Tinik 2016), and juvenility also plays a role in differential adult punishment (Kurlychek and Johnson 2004, 2010). These patterns raise questions about the role of juvenile adjudications in the punishment of adult offenders, and their discretionary consideration as part of criminal history in adult sentencing decisions. Examining the lasting impact of a juvenile record on adult sentencing outcomes is potentially important for understanding the overrepresentation of African-Americans and Hispanics in imprisonment. However, scant research exists on this topic.

Pennsylvania and its sentencing guidelines system provide a propitious research setting for examining the role of prior juvenile adjudications in adult sentencing. Under Pennsylvania sentencing guidelines, juvenile adjudications can count toward adult offenders' criminal history, and judges are allowed to consider juvenile adjudications in sentencing decisions. Our study examines juvenile adjudications as a component of criminal history, and the extent to which such adjudications are a potential source of disproportional incarceration of black and Hispanic men. That is, we examine the overall effect of juvenile adjudications, as well as whether juvenile adjudications affect the punishment outcomes of minority

men more than others. In supplemental analyses, we also examine whether judges give different weight to adjudications depending on how long ago those adjudications occurred.

We use Pennsylvania sentencing data from 2006 to 2010 that allow for the decomposition of criminal history into juvenile adjudications and adult convictions. We examine fixed effects multinomial models that differentiate between non-incarceration, jail, and prison sentences. We also examine differences in sentencing guideline departures, where the court sentences an offender to a greater or lesser sentence than called for by the guidelines. Below, we first discuss racial and ethnic disproportionality, particularly for males, in juvenile adjudication and adult incarceration, and the potential role of criminal history in such disproportionality. Then, we explain our theoretical expectations derived from the focal concerns model of court decision-making, before detailing our data and methods.

#### Disproportionality in incarceration: the role of criminal history

Researchers have documented both the scale of mass incarceration and the fact that it has fallen disproportionately on black and Hispanic men (e.g., Bonczar 2003; Tonry and Melewski 2008; Alexander 2010; Rios 2011). Part of this disproportional incarceration of black and, to a lesser extent, Hispanic men may be due to the fact that they are disproportionately arrested for serious violent crimes (Harris et al. 2009). But it may also be the case that discretionary decisions by local criminal justice officials – charging, conviction, and sentencing – systematically produce black and Hispanic imprisonment disparity relative to whites (Baumer 2013; Bushway and Forst 2013). Furthermore, sentencing policy structures, such as mandatory minimums or features of sentencing guidelines, might encode racial and ethnic disparity into sentencing by emphasizing punishment criteria that differentially impact blacks and Hispanics, especially males (Engen 2009; Ulmer 2012; Baumer 2013; Frase 2013). Frase (2013, 267) calls for "... more research on the current and prior biases embedded in controlled variables like offense and prior record."

Features of sentencing guidelines (Bushway and Piehl 2011; Bushway and Forst 2013) may help explain racial/ethnic disproportionality because they incorporate factors, such as prior record – including juvenile adjudications – that tend to be significantly correlated with race/ethnicity and gender (see Engen 2009; Bushway and Piehl 2011; Baumer 2013). If criminal history and the presence of juvenile adjudications within it, make incarceration more likely, this might be a differential sentencing impact on black and Hispanic males, and thus a relevant consideration in their overrepresentation among incarcerated populations. In addition, race and ethnicity disparity, especially that among male defendants, may be conditioned by criminal history, and specifically juvenile adjudications as a part of that history. Thus, research is needed that delineates the ways in which juvenile adjudications impact incarceration, and how they might interact with race/ethnicity and gender in doing so.

#### Disproportionality in juvenile adjudication

The disproportionate representation of minority youth in the juvenile justice system has been demonstrated – with minority youth being substantially overrepresented in the adjudication process (Kempf-Leonard 2007). Moreover, some sentencing guideline systems, including Pennsylvania's, count certain juvenile adjudications in calculating the criminal history score. Examining the lasting impact of a juvenile record on adult sentencing outcomes is therefore important for understanding the nuanced impact of criminal history on sentencing. It may be the case that the consideration of juvenile adjudications may disproportionately disadvantage black and Hispanic males.

Very little prior research exists on this specific question of how juvenile adjudications, as a component of criminal history, affect adult sentencing outcomes. Studies of juvenility and punishment might provide some indirect guidance. Some have examined the effects of waiving a juvenile to adult court (e.g., Kurlychek and Johnson 2004, 2010; Klein 1998; Clayton 1983). For example, Kurlychek and Johnson (2004) used Pennsylvania sentencing data to show that juveniles waived to adult court receive a "juvenile penalty," meaning that they are sentenced more severely than similarly situated, but slightly older, offenders who received no waiver. Furthermore, their research found that Hispanic male received the

longest sentences in a pooled sample of juveniles and adults. This challenges the idea that juveniles, and juvenile offenses, are treated with leniency in adult court.

Using matched cases in New York's criminal court and New Jersey's juvenile court, Kupchik (2006) finds that white youth were less likely than black youth to receive a prison sentence compared to a non-incarcerative sanction (e.g., probation, fine). His research further shows that both juvenile and criminal courts rely on similar criteria in the incarceration decision for adolescents – emphasizing offense and criminal history severity. However, youth are much more likely to be incarcerated when waived to adult criminal court than when sanctioned in juvenile court. Although prosecutors and judges in adult criminal court still viewed the youth as juveniles and wanted to sentence them according to rehabilitative goals, they were constrained by "... sentencing laws, courtroom norms, and limited sentencing options" (Kupchik 2006, 119).

We see from the above studies that juvenile adjudications and race inform court sentencing decisions for juveniles. But these studies do not tell us about the consideration of juvenile adjudications in the sentencing of adults, and how this may be intertwined with race, ethnicity, and gender. Specifically, juvenile adjudications may not carry the same punishment consequences for minority males as compared to other offenders.

In an early study similar to ours, Clayton's (1983) used Georgia state adult court sentencing data to show that race and juvenile record both had an effect on sentencing severity. That study further found that black offenders with a juvenile record received significantly longer prison sentences than white offenders with similar records (Clayton 1983). More recent research by Jordan and Freiburger (2010) supports this finding. In examining cases of youth tried in adult court in 19 of the largest counties in the United States, they found that being black interacted with having contact with the juvenile justice system to increase the likelihood of receiving a prison sentence. For white youth, this interaction decreased the chances of being incarcerated. Yet, few other studies have investigated the effects of juvenile adjudications on a broader range of adult sentencing outcomes (incarceration decision, guideline departure decisions), and whether juvenile adjudications have the same punishment consequences for minority males, for example, relative to other groupings.

#### Theoretical background

The focal concerns model argues that court actors' interpretations of offenders and offenses relative to three focal concerns of punishment – blameworthiness, protection of the community, and practical constraints – determine punishment decisions (see Steffensmeier, Ulmer, and Kramer 1998; Kramer and Ulmer 2009). This perspective argues that both legal and extralegal considerations can affect the interpretation and prioritization of these focal concerns through local substantive rationality, that is, individualized, ideologically driven decision goals and criteria (Savelsberg 1992; Ulmer and Kramer 1996).

#### Criminal history and juvenile adjudications

Formal indicators of criminal history and its seriousness, like the criminal history or prior record scores of sentencing guideline systems, provide a tool for assessing and assigning meaning to criminal history as related to focal concerns. Such criminal history scores and scales have been shown by virtually all sentencing studies using sentencing guidelines data to be strongly predictive of punishment severity (see reviews by Spohn 2000; Ulmer 2012). Research shows that judges use criminal history to evaluate both offender blameworthiness and dangerousness (Spohn 2009). Some guideline manuals, such as North Carolina's, explicitly state that criminal history should be viewed as a "measure of culpability or blameworthiness and also as a predictor of future criminal conduct" (North Carolina Sentencing and Policy Advisory Committee 1993, 17). In the course of Pennsylvania's guideline legislation and development, the inclusion of criminal history in the guidelines scheme was also justified in terms of both crime control and just deserts (Kramer and Scirica 1986; Kramer and Ulmer 2009).

When seen as a component of criminal history, juvenile adjudications might have a more ambiguous relationship to the focal concerns of punishment. They might be seen as marker of greater dangerousness

or criminal propensity, indicating that a now-adult offender is either a danger to the community or a continuing and perhaps escalating problem/nuisance. Offenders with juvenile adjudications might also be seen as more blameworthy. They might be seen as someone who had second chances and rehabilitative efforts earlier, but did not take advantage of them and moved on to adult crime.

By contrast, juvenile adjudications might be dismissed by court actors, and seen as ancient history, especially for offenders with juvenile adjudications that occurred more distant in time from the present criminal incident. Courts might see juvenile adjudications as "kid stuff," youthful "hell raising," or as the mistakes of youth that do not necessarily indicate much about adult dangerousness or criminal propensity. Some judges and prosecutors might even have a philosophical problem with holding youthful behavior against someone once they are an adult, from a blameworthiness standpoint (see Kupchik 2006). Finally, juvenile adjudications might also be disregarded because adult trial courts may not trust the quality integrity/rigor of juvenile courts and standards as a practical, organizational matter. Since different, more lax rules of evidence and due process apply in juvenile courts, trial court actors might take juvenile proceedings and their determinations with a grain of salt as legally indicative of an offenders' true behavior.

#### Race/ethnicity, gender, and juvenile adjudications

The subjective and interpretive nature of the focal concerns makes it likely that stereotypes and biases based on race/ethnicity or other extralegal defendant characteristics can influence the sentencing process, given a social context where such stereotypes and biases are prevalent (Kramer and Ulmer 2009). The focal concerns model also argues that the influence of extralegal factors such as race/ethnicity is often likely to be *contingent* and interwoven with other factors (Kramer and Ulmer 2009). The influence of race in sentencing is likely to be conditional on defendant gender, for example, (e.g., Steffensmeier, Ulmer, and Kramer 1998; Spohn and Holleran 2000; Spohn and Beichner 2000; Steffensmeier and Demuth 2006; Franklin and Fearn 2008; Curry and Corral-Camacho 2008; Kramer and Ulmer 2009; Doerner and Demuth 2010; Curry 2010). Several prior studies have found that black and Hispanic women do not tend to experience the same degree of sentencing disparities relative to white women that black and Hispanic men experience relative to white men (Spohn and Beichner, 2000; Steffensmeier and Demuth 2006; Kramer and Ulmer 2009). In fact, some argue that racial disparities in punishment distinctively focus on black and Hispanic men, rather than women of color (Steffensmeier and Demuth 2006).

Legally relevant factors such as criminal history might interact with race and ethnicity, perhaps in combination with gender, mobilizing differential punishment of minority men. For example, black or Hispanic male offenders with greater criminal histories might be seen as particularly dangerous or crime-prone, morally disreputable, or as presenting fewer practical difficulties connected to imprisoning them. Research also shows that criminal history interacts with the effect of race/ethnicity and gender status by mobilizing differential punishment of minority men and women (Ortiz and Spohn 2014; Steen, Engen, and Gainey 2005; Tillyer, Hartley, and Ward 2015; Ulmer, Painter-Davis, and Tinik 2016; Ulmer 1997). Black or Hispanic male offenders with greater criminal histories might be seen as particularly dangerous or crime-prone, morally disreputable, or as presenting fewer practical difficulties connected to imprisoning them compared to similarly situated white offenders (Steen, Engen, and Gainey 2005; Ulmer, Painter-Davis, and Tinik 2016). Similarly, women might be seen as more sympathetic or – for those with unusually high criminal histories – as particularly blameworthy (Tillyer, Hartley, and Ward 2015). For example, Ulmer, Painter-Davis, and Tinik (2016) found that black and Hispanic male status increased the odds of incarceration to a greater extent at lower criminal histories, where more sentencing discretion is present. Similarly, Tillyer, Hartley, and Ward (2015) found that, compared to men, women at both the lowest and highest ends of the criminal history scale received disproportionately more lenient and severe punishments, respectively. In addition, Ortiz and Spohn (2014) found that Hispanic men convicted of a drug crime in federal court were more likely to receive a substantia assistance departure if they were using hard drugs – possibly, because their drug problems undermined their dangerousness by making them appear less predatory. Thus, it is likely that criminal history, gender, and race/ethnicity interact to mobilize different perceptions of blameworthiness and dangerousness in court actors.

Research supports the interaction between race/ethnic status and criminal history (e.g., Steen et al. 2005; Ulmer, Painter-Davis, and Tinik 2016; Ulmer 1997). Thus, it may also be the case that each of the juvenile adjudications might be seen differently for minority male offenders relative to others. Perhaps the juvenile adjudications of white offenders are dismissed, and are not considered as serious or indicative of danger, criminality, or blameworthiness. However, the juvenile adjudications of black and Hispanic defendants, especially men, might be taken more seriously and might influence the interpretation of focal concern to a greater extent.

According to Ward's (2012) socio-historical analysis of race and juvenile justice, *The Black Child Savers*, the US juvenile justice system has been racially bifurcated since its inception. Black youth, especially boys and men, have traditionally been seen as more dangerous, more criminal, more morally blameworthy, and practically less worth "saving" than white youth (Ward 2012). Justice officials tend to view black families as less cooperative and less capable of dealing with and controlling delinquent youth (Bishop and Frazier 1996). Thus, perhaps when black or Hispanic men have juvenile adjudications, these are seen as more meaningful and indicative of dangerousness and blameworthiness, and are seen as presenting fewer practical qualms than juvenile adjudications would for among white defendants. Interestingly, several prior studies have found that black and Hispanic women do not tend to experience the same degree of sentencing disparities relative to white women that black and Hispanic men experience relative to white men (Spohn and Beichner, 2000; Steffensmeier and Demuth 2006; Kramer and Ulmer 2009). In fact, some argue that racial disparities in punishment distinctively focus on black and Hispanic men, rather than women of color (Steffensmeier and Demuth 2006).

#### **Expectations**

Based on the above discussion, we can formulate some possibilities for our findings. First, we posit two alternative possibilities for the overall effect of juvenile adjudications on incarceration and guideline departure decisions.

(1) Courts might see offenders with juvenile adjudications as more criminal, dangerous, or blameworthy, and be more likely to incarcerate them in jail or prison. Courts may also be more likely to depart above the guidelines for those with juvenile adjudications and less likely to depart below them.

Or:

(2) Courts might be dismissive of juvenile adjudications' value as indicators of focal concerns, and juvenile adjudications would thus not affect the likelihood of jail or prison incarceration. Juvenile adjudications may also not affect the likelihood of guideline departures.

Second, it may be that there are differential effects of juvenile adjudications by race/ethnicity and gender. Perhaps both of the possibilities above will be observed for different types of offenders. It may be that juvenile adjudications will have greater impact on the incarceration and guideline departure outcomes of black and Hispanic men, relative to other groupings. Courts might be dismissive of juvenile adjudications for other types of defendants, but such adjudications would mobilize racialized narratives of black and Hispanic men as crime-prone, dangerous, or morally disreputable and blameworthy. Thus:

(3) Juvenile adjudications might increase the likelihood of incarceration for black and Hispanic men, increase the likelihood of upward guideline departures, and decrease the likelihood of downward departures, relative to other race/ethnicity and gender categories.

Pennsylvania is a particularly appropriate setting to study these questions. Like other sentencing guidelines jurisdictions, Pennsylvania's guidelines employ a prior record score (PRS) to incorporate criminal history into the matrix of sentence recommendations. This PRS is an eight-point scale, weighted by the severity of prior convictions (three misdemeanors count for one point and can total no more than three points, while select serious felonies count four points each). In Pennsylvania, adjudications

are counted in the PRS if: (1) the offense took place after the offender's 14th birthday, (2) there was an express finding by the juvenile court that the adjudication was for a felony, or (3) there was an express finding that the adjudication was for a first-degree misdemeanor offense listed in PA Criminal Code \$303.7(a)(4) (i.e., serious misdemeanors involving children or weapons). Only the most serious crime per adjudication is counted. The courts also employ a lapsing procedure for offenders who have a 10-year crime-free period following their 18th birthday, 1 though felonies that count for four points in the PRS (e.g., third-degree murder, rape, robbery, aggravated assault with serious bodily injury) never lapse. Lapsed offenses are not counted in the PRS. However, Pennsylvania also allows juvenile adjudications to be considered by the court during sentencing even if they are not calculated into the PRS. Thus, juvenile adjudications have the potential to influence judicial decisions in a discretionary manner beyond their legally prescribed status in producing the PRS. There is also substantial variation in our data in terms of the presence, number, and age of juvenile adjudications.

#### **Data and methods**

We use data on sentences given by the Courts of Common Pleas in Pennsylvania, from the Pennsylvania Commission on Sentencing. Pennsylvania is a large, populous, and demographically, culturally, and politically diverse state that has operated under a sentencing guidelines system for over 30 years (see Kramer and Ulmer 2009). We use cases sentenced between 2006 and 2010. These data are among the most recent made available by the PCS. By law, each sentence given for a felony or misdemeanor conviction must be reported to the PCS (with the exception of first- and second-degree homicide, which entail mandatory life without parole or capital punishment). We limit the cases we examine to the most serious offense per judicial proceeding, and we exclude DUI offenses and other traffic offenses.

We begin with descriptive statistics for our data-set, which is shown in Table 1. We also show what percentage of each offense/offender category has an adjudication.

The data-set includes all offenders sentenced in the state of Pennsylvania between 2006 and 2010  $(n = 388,268)^2$ . The majority of offenders (57 percent) receive a non-incarcerative sentence (reference group), while 27 percent go to jail, and 16 percent go to prison. Overwhelmingly, judges do not depart (reference group) from the guideline recommendations (90 percent), while about 6 percent depart below and 4 percent depart above. About seven percent of all offenders have a juvenile adjudication in their criminal histories, with a mean of about one adjudication per offender. The majority (3.6 percent) of offenders with an adjudication have received it in the last 5 years, compared to 2 percent and 1 percent who received it 5 to 10 years ago and over 10 years ago, respectively.

The majority of the samples are white males (47 percent) and black males (25 percent). Hispanic males make up about four percent of the sample. Females make up a minority of the sample, with white females making up 15 percent, black females making up 5 percent, and Hispanic females less than 1 percent of the sample. The average age at sentencing is 32 years.

#### Dependent variables

We examine two sets of dependent variables: (1) the likelihood of jail or prison incarceration, and (2) the likelihood of departure decisions below and above the guidelines. Prior research on state sentencing reveals that beyond the overall incarceration decision, the decision to send an offender to county jail versus state prison not only has different implications and consequences, but may have different determinants (Holleran and Spohn 2004). A state prison term is not only a typically longer sentence, but a qualitatively more severe one, and can entail more severe post incarceration consequences (Holleran and Spohn 2004). Furthermore, in Pennsylvania, those sentenced to county jail may be released prior to the completion of their minimum sentences at the discretion of the court, whereas those in state prison cannot be released early, and have their release determined by the parole board. Thus, we analytically distinguish between these two quantitatively and qualitatively different forms of incarceration.

Table 1. Descriptive statistics N = 388,268.\*

	Percent	Mean	Min	Max	SD	Percent with adjudications %**
Dependent variables						
Prison	16.0	_	_	_	_	13.8
Jail	27.4	_	_	_	_	8.4
Out (reference)	56.6	_	-	-	_	4.9
Upward departure	3.7	_	-	-	_	7.6
Downward departure	6.0	_	-	-	_	15.2
No departure (reference)	90.3	-	-	-	-	6.8
Independent variables						
Adjudication dummy	7.3	_	_	_	_	_
Adjudication count	_	1.0	0	15	0.41	_
Adjudication < 5 years	3.6	_	_	_	_	_
Adjudication 5–10 years	2.36	_	-	-	_	_
Adjudication >10 years	1.28	-	-	-	-	_
Control variables						
Offender characteristics						
Black male	24.6	_	_	_	_	11.9
Black female	5.0	_	_	_	_	3.2
Hispanic male	3.8	_	_	_	_	9.9
Hispanic female	<1.0	_	_	_	_	2.5
White female	14.0	_	_	_	_	1.5
White male (reference)	46.9	_	_	_	_	7.1
Age at sentencing	_	32.03	18	89.6	10.78	_
Case processing						
Jury trial	1.4	_	_	_	_	12.2
Bench trial	1.4	_	_	_	_	11.2
Other disposition (reference)	97.2	_	_	_	_	7.0
Offense characteristics						
Property offense (reference)	34.6	_	_	_	_	6.5
Drug offenses	28.9	_	_	_	_	7.8
Violent offense	16.1	_	_	_	_	8.4
Sex offense	2.5	_	_	_	_	4.5
Weapons offenses	2.5	_	_	_	_	14.2
Miscellaneous offense	15.3	_	_	_	_	6.4
Multiple convictions	19.6	_	_		_	<1.0
Guidelines factors						
Criminal history score	_	1.6	0	7	1.9	_
Presumptive sentence (months)	_	5.3	0	240	13.0	_
Presumptive sentence (logged)	_	-0.64	-2.3	5.4	2.2	_
Mandatory eligible	6.4	-	_	_	_	11.6

<sup>\*</sup>Percentage of category who have any adjudications.

We also examine departures from the sentencing guidelines, because these represent discretionary judgments of special leniency or severity relative to the guideline standards. Not only are state guideline departures interesting sites of court discretion, but they have been shown to be sites of racial, ethnic, and gender disparity as well (Kramer and Ulmer 1996, 2002). This makes such departures germane to addressing our research questions.

#### Independent variables

Our key variables are the presence, number, and age of juvenile adjudications.<sup>3</sup> We start with a binary indicator of whether a juvenile adjudication is present in the offender's criminal history. Offenders who have a juvenile adjudication, whether it is lapsed or not, are coded as 1 and all others as 0. In order to get at the effect of juvenile adjudication on judicial sentencing decisions, we do not exclude the small

<sup>\*\*</sup>Offenders who have any adjudications = 28,341.

number of offender for whom the lapsing provision applies, because older juvenile adjudications still might affect the court's discretion even if they have lapsed for PRS purposes. Our second key variable indicates the total number of juvenile adjudications present in the offender's criminal history, which ranges from 0 to 15 adjudications. Finally, in supplemental analyses, we calculate time since adjudication by subtracting 18 from the age at sentencing. While Pennsylvania sentencing data separate adjudications from convictions, it does not provide the adjudication date. Thus, our best estimate for when juvenile adjudications occurred is to assume it could not have occurred after 18 years of age. This measure is then separated into three categories – offenders who had a recent adjudication (under 5 years ago), offenders who had an adjudication between 5 and 10 years ago, and offenders who have an older adjudication over 10 years ago. Because we control for the offender's age at sentencing, this variable attempts to measure whether judicial consideration of risk is dependent upon the age of an adjudication.

While criminal history also helps to shape the guideline minimum sentence, which we include as a control variable, we examine criminal history, as measured by the guidelines PRS, as a discretionarily considered but legally relevant variable (see Ulmer, Painter-Davis and Tinik 2016). Much research has shown that criminal history has important affects beyond the presumptive sentence (Ulmer, Painter-Davis and Tinik 2016). As noted earlier, the PRS is a weighted measure of the seriousness of the offender's criminal history, on a scale of 0 to 7. By controlling for PRS in our models, we can see the discretionary effect of a juvenile adjudication, net of its role in PRS.

We are also interested in the effects of race/ethnicity and gender statuses, particularly as they might interact with juvenile adjudications (our third research expectations). Race—gender groupings are measured with dummy variables: black (non-Hispanic) males, Hispanic (of any race) males, black (non-Hispanic) females, Hispanic females, white females, other race/ethnicity males, and other race/ethnicity females, with white non-Hispanic men serving as the reference category.

#### **Control variables**

The data allow us to control for a number of variables that have been shown to significantly affect sentencing outcomes in prior research. First, we control for the guideline recommended minimum sentence, given by the guidelines matrix of offense gravity and prior record scores, which has been shown to strongly determine sentencing decisions (Engen and Gainey 2000). This has become widespread practice in the sentencing literature.<sup>5</sup> For this measure, we include the minimum months of incarceration recommended by the sentencing guidelines applicable to a given case. To correct for skewness, we take the natural log of the presumptive sentence.<sup>6</sup> Second, we include a dummy variable indicating whether the offender was eligible for a mandatory minimum. We also control for the type of offense of conviction by including dummy variables for violent, drug, sex, weapons, and miscellaneous offenses, with property offenses as the reference category. We further control for whether the defendant was convicted of multiple current offenses. Our models also controls for mode of conviction, with dummy variables for bench trials, jury trials, negotiated guilty pleas and non-negotiated ("open") pleas (as the reference category).

#### Analytic strategy

State court jurisdictions, counties in the case of Pennsylvania, display substantial differences in socio-demographic contexts, crime problems, organizational characteristics, and other features (Myers and Talarico 1987; Eisenstein, Flemming, and Nardulli 1988; Ulmer 1997). These characteristics have been shown to foster considerable between-court differences in sentencing patterns (Ulmer and Johnson 2004; Johnson 2006). Thus, we use fixed effects models to control for unmeasured between-county differences. For our analyses of incarceration type, we estimate multinomial logistic regression models, using three categories: prison (2), jail (1), and non-incarceration (0). Non-incarceration serves as the reference category and includes probation, intermediate punishments, and restorative sanctions. We

also model the departure decisions with multinomial logistic regression, with non-departures coded as 0, downward departures coded as 1, and departures above guidelines as 2.

We first examine the effects of the presence and number of juvenile adjudications on incarceration type and guideline departures, addressing our first two expectations. Then, we investigate whether juvenile adjudications interact with black and Hispanic male status; that is, whether juvenile adjudications affect black and Hispanic males differently, addressing our third expectation. In supplemental analyses, we restrict the sample to offenders who have a juvenile adjudication and examine whether juvenile adjudications differ in their effect based on how long ago they occurred and whether this effect is the same for black and Hispanic men.

#### **Findings**

We start with multinomial logistic models of the incarceration decision to examine the effect of having a juvenile adjudication on the likelihood of receiving a prison, jail, or non-incarcerative (reference) sentence, controlling for legally and guideline-relevant offender variables and case processing variables. In order to account for between county variations we estimate fixed effects models for the 67 counties in the data.<sup>7</sup>

Model 1 estimates the effect of having a juvenile adjudication on receiving an incarcerative sentence. The results are not significant at even the .05 level with an N of over 388,268. Thus, the presence of a juvenile adjudication does not appear to affect the likelihood of receiving an incarcerative sentence when the other legally relevant and case processing variables are controlled for.

Model 2 examines the variation in the adjudication variable by estimating the effect of each additional adjudication on the decision to incarcerate. Similar to Model 1, this effect is also not significant. For the general offender population, juvenile adjudications have no meaningful effect on the incarceration decision when legally relevant offender and case processing variables are controlled.

Table 3 provides models for the effect of having a juvenile adjudication on the likelihood of departing below or above the guidelines, compared to sentences within the guidelines (reference).

Model 3 shows that, controlling for legally relevant variables, offenders with any juvenile adjudications increase their odds of receiving a downward departure by 18 percent compared to offenders who have no adjudications. This suggests a potential leniency effect for offenders with a juvenile record. Having a juvenile adjudication does not seem to affect the likelihood of receiving a departure above quidelines.

Model 4 shows that the chances of a downward departure increase by 7 percent for each additional adjudication in the offender's criminal history, which is in line with Model 3. Interestingly, we also see that for every additional adjudication, the odds of receiving an upward departure increase by 11 percent. Paradoxically, the cumulative effects of the number of juvenile adjudication increase the likelihood of both type departures. Overall, it appears that the number of juvenile adjudications "cuts both ways," making departures below the guidelines more likely for some offenders but departures above more likely for others.

We next examine whether the effect of juvenile adjudications is different for Black and Hispanic men compared to white men (and by implications, other groups as well). It should be noted that black and Hispanic offenders are more likely to have an adjudication on their adult record. About 12 percent of black males have juvenile adjudications in their records compared to 10 percent of Hispanic males and 7 percent of white males. Table 4 shows four multinomial logistic models of both the incarceration decision and the departure decision with interaction effects for minority men. All the previously identified legally relevant controls are included in these models, but not shown.

Model 5 shows that the effect of having a juvenile record is different for black men compared to white men, even after controlling for the legally relevant offense and offender variables and case processing factors. While black men are no more likely to receive a jail sentence as a result of having an adjudication, they are 16 percent more likely to receive a prison sentence compared to a non-incarcerative sentence. In other words, the presence of any juvenile adjudications distinctively increases black males, but not

Table 2. Multinomial logistic model of incarceration decision.

	(1) Adjudication Dummy		(2) Adjudication Count	
	Odds	SE	Odds	SE
lail				
Adjudication dummy	0.994	0.017	_	_
Adjudication count	_	_	0.987	0.012
Black male	1.414	0.016***	1.414	0.015***
Black female	0.864	0.017***	0.864	0.017***
Hispanic male	1.705	0.039***	1.705	0.039***
Hispanic female	0.849	0.049**	0.849	0.049**
White female	0.669	0.009***	0.669	0.008***
Age at sentencing	0.991	0.000***	0.991	0.000***
Bench Trial	1.616	0.063***	1.627	0.063***
Jury Trial	2.372	0.127***	2.372	0.127***
Drug offender	0.590	0.007***	0.590	0.007***
Violent offender	1.330	0.017***	1.330	0.017***
Sex offender	1.913	0.057***	1.913	0.057***
Weapons Offender	0.686	0.021***	0.686	0.022***
Misc. Offender	0.785	0.009***	0.785	0.010***
Multi convictions	1.187	0.010***	1.188	0.010***
Prior record score	1.150	0.003***	1.151	0.003***
(In) Presumptive sentence	1.430	0.003	1.430	0.004***
Mandatory eligible	1.014	0.024	1.015	0.025***
Constant	0.224	0.016	0.225	0.0156***
Prison	0.224	0.010	0.223	0.0150
	1.012	0.023		
Adjudication dummy	1.012	0.023	1.009	0.014***
Adjudication count Black male	1.526	0.025***	1.526	0.014****
Black female	0.258	0.026***	0.591	0.022***
Hispanic male	2.257	0.071***	2.257	0.071***
Hispanic female	0.774	0.070**	0.774	0.070**
White female	0.543	0.013***	0.543	0.013***
Age at sentencing	0.984	0.001***	0.984	0.001***
Bench trial	2.596	0.123***	2.595	0.123***
Jury trial	9.456	0.542***	9.543	0.542***
Drug offender	0.529	0.010***	0.528	0.010***
Violent offender	1.518	0.030***	1.517	0.030
Sex offender	2.901	0.112***	2.900	0.112***
Weapons offender	0.771	0.028***	0.771	0.028***
Misc. offender	0.761	0.017***	0.761	0.017***
Multi convictions	2.338	0.031***	2.328	0.031***
Prior record score	1.207	0.005***	1.207	0.005***
(In) Presumptive sentence	2.538	0.011***	2.528	0.011***
Mandatory eligible	3.987	0.010***	3.987	0.100***
Constant	0.221	0.017	0.220	0.017***
N	388,265		388,265	
Log likelihood	-269,798.09		-269,796.76	

p < 0.05; p < 0.01; p < 0.01; p < 0.001.

Reference groups: non-incarcerative sentence, white male, quilty plea, property offender. County dummies included, but not shown.

others' odds of being sent to state prison. Model 6 shows that the odds of receiving a prison sentence increase by 8 percent for each addition adjudication for black men, compared to white men. Given this cumulative effect, a black man with 5 adjudications would have 42 percent higher odds of receiving a prison sentence compared to a white male with the same number of adjudications. The results are not significant for Hispanic men in both models. Given the small number of Hispanic men who receive adjudications (n = 1,463) compared to white and black men, it is possible that there is not enough variation in the incarceration decision to pick up a significant difference in odds.

We see that in Model 7, black men who have a juvenile record have odds that are 16 percent lower for receiving a downward departure compared to white men, but they are no more likely to receive

Table 3. Multinomial logistic model of departure decision.

	(3) Adjudication dummy		(4) Adjudication count	
	Odds	SE	Odds	SE
Below				
Adjudication dummy	1.177	0.030***	_	_
Adjudication count	_	_	1.068	0.014***
Black male	0.988	0.018	0.990	0.018
Black female	1.321	0.050***	1.320	0.050***
Hispanic male	0.733	0.035***	0.734	0.035***
Hispanic female	1.325	0.202	1.322	0.202
White female	1.176	0.040***	1.173	0.027***
Age at sentencing	1.013	0.001***	1.012	0.001***
Bench trial	0.480	0.027***	0.481	0.027***
Jury trial	0.153	0.115***	0.153	0.011***
Drug offender	1.235	0.028***	1.236	0.028***
Violent offender	1.112	0.028***	1.114	0.017***
Sex offender	0.894	0.045*	0.896	0.045*
Weapons offender	1.139	0.044**	1.143	0.045**
Misc. offender	1.248	0.036***	1.249	0.036***
Multi convictions	0.895	0.015***	0.896	0.015***
Prior record score	1.331	0.007***	1.333	0.007***
(In) Presumptive sentence	2.157	0.016***	2.157	0.016***
Mandatory eligible	0.675	0.018***	0.675	0.018***
Constant	0.003	0.001	0.003	0.000
Above	0.003	0.001	0.003	0.000
	1.063	0.038		
Adjudication dummy	1.003	0.036	1.110	0.023***
Adjudication count Black male	1.288	0.028***		0.023***
			1.288	
Black female	0.667	0.034***	0.667	0.034***
Hispanic male	1.520	0.060***	1.521	0.060***
Hispanic female	0.862	0.109	0.863	0.109
White female	0.595	0.020***	0.595	
Age at sentencing	1.003	0.001***	1.004	0.001***
Bench trial	0.947	0.059	0.942	0.059
Jury trial	1.715	0.082***	1.709	0.082***
Drug offender	0.935	0.023***	0.936	0.023**
Violent offender	0.953	0.026	0.956	0.026
Sex offender	0.751	0.041**	0.751	0.041***
Weapons offender	0.302	0.023***	0.301	0.023***
Misc. offender	0.648	0.022***	0.648	0.022***
Multi convictions	1.765	0.034***	1.764	0.034***
Prior record score	0.880	0.005***	0.876	0.005***
(In) Presumptive sentence	1.179	0.006***	1.179	0.006***
Mandatory eligible	1.943	0.057***	1.941	0.057***
Constant	0.117	0.008	0.118	0.008
N	388,263		388,263	
Log likelihood	-107674.79		-107,674.07	

p < 0.05; p < 0.01; p < 0.001; p < 0.001.

Reference groups: no departure, white male, quilty plea, property offender. County dummies included, but not shown.

an upward departure. This effect is in particular contrast to Model 3 which showed that the odds of receiving a downward departure were 18 percent higher for offenders with adjudications - meaning that the overall effect obscures important differences in how adjudications affect black men compared to white men. Hispanic males are no more or less likely to receive a downward departure (although the coefficient is in the expected direction), but they are less likely (25 percent) to receive an upward departure compared to white males.

In Model 8, each additional adjudication decreases the odds of receiving a downward departure by about 7 percent for black men compared to white men. This is in contrast to the main effect for the juvenile adjudications count in Model 4, which showed that the odds of downward departure increased

**Table 4.** Multinomial logistic models of incarceration and departure decision with interaction effects controls included, but not shown.

	(5) Adjudication dummy		(6) Adjudication count	
Incarceration decision	Odds	SE	Odds	SE
Jail				
Adjudication dummy	1.005	0.023	_	_
Adjudication count	_	_	0.985	0.015
Black male	1.418	0.016***	1.414	0.016***
Hispanic male	1.714	0.041***	1.701	0.040***
Adjudication dummy/count × black male	0.980	0.034	1.008	0.023
Adjudication dummy/count × Hispanic male	0.924	0.076	0.979	0.056
Prison				
Adjudication dummy	0.954	0.029	_	_
Adjudication count	-	-	0.973	0.019
Black male	1.498	0.025***	1.504	0.025***
Hispanic male	2.266	0.074***	2.261	0.073***
Adjudication dummy/count × black male	1.156	0.051**	1.084	0.029**
Adjudication dummy/count × Hispanic male	0.943	0.093	0.983	0.063
N	388,265		388,265	
Log likelihood	-269,788.61		-269,790.53	
Departure decision	(7) Adjudicatio	on dummy	(8) Adjudicati	on count
Below				
Adjudication dummy	1.300	0.046***	_	_
Adjudication count	_	-	1.111	0.021***
Black male	1.014	0.020 NS	1.005	0.020 NS
Hispanic Male	0.757	0.039***	0.752	0.038***
Adjudication dummy/count × black male	0.837	0.039***	0.933	0.023**
Adjudication dummy/count × Hispanic male	0.809	0.098	0.900	0.063
Above				
Adjudication dummy	1.141	0.059*	_	_
Adjudication duning Adjudication count	-	-	1.160	0.035***
Black male	1.300	0.029***	1.300	0.033
Hispanic male	1.553	0.063***	1.537	0.062***
Adjudication dummy/count × black male	0.897	0.062	0.926	0.002
Adjudication dummy/count × Hispanic male	0.751	0.106*	0.906	0.074
N	388,263	0.100	388,263	0.07
Log likelihood	-107,664.78		-107,668.31	

p < 0.05; p < 0.01; p < 0.001; p < 0.001.

Reference groups: non-incarcerative sentence, no departure County dummies included, but not shown.

by 7 percent with each additional adjudication. This main effect, then, obscures the difference in the effect of the number of juvenile adjudications for black males in particular. That is, the number of juvenile adjudications cumulatively increases the likelihood of downward departures for other offenders, but not black men. Black men do not receive upward departures as a result of each additional adjudication at a rate higher than white men. The effects for Hispanic men are also not significant.

In supplementary analysis (not shown), we looked at whether all adjudications have the same effect on sentencing decisions or if this effect changes depending on the age of the adjudication (that is, how long prior to the instant offense and sentence the adjudication occurred). In order to isolate the effect of adjudication age, we excluded everyone who did not have a juvenile adjudication from analysis. We then partitioned the data into three groups: those with adjudications that were over 10 years old, those with adjudications that were between 5 and 10 years old, and those with adjudications that were within the last 5 years (reference). These models are shown in Table 5.

Table 5. Multinomial logistic models of incarceration and departure decision for time since adjudication controls included, but not shown.

	(9) Direct	effects	(10) Interaction effects (Black)		
Incarceration decisions	Odds	SE	Odds	SE	
Jail					
Adjudication was 5-10 years ago	0.957	0.043	0.988	0.052	
Adjudication was over 10 years ago	0.952	0.08	1.008	0.091	
Black male	1.45	0.056***	1.528	0.076***	
Hispanic male	1.668	0.142***	1.674	0.143***	
Adjudication 5–10*black male	_	_	0.919	0.067	
Adjudication over 10*black male	-	-	0.85	0.08	
Prison					
Adjudication was 5–10 years ago	0.999	0.055	1.086	0.073	
Adjudication was over 10 years ago	1.158	0.117	1.302	0.144*	
Black male	1.56	0.078	1.752	0.115***	
Hispanic male	2.058	0.207	2.075	0.209***	
Adjudication 5–10× black male	_	-	0.828	0.074*	
Adjudication over 10×black male	_	_	0.752	0.837*	
N	28,340		28,340	0.037	
Log likelihood	-22,450.9		-22,446.7		
Departure Decisions	(11) Direct	Effects	(12) Interaction Effects (Black)		
Below					
Adjudication was 5–10 years ago	1.019	0.058	1.07	0.081	
Adjudication was over 10 years ago	0.86	0.089	0.912	0.108	
Black male	0.892	0.046*	0.946	0.068	
Hispanic male	0.675	0.081**	0.677	0.081**	
Adjudication 5–10×black male	-	-	0.91	0.084	
Adjudication over 10 × black male	-	-	0.888	0.102	
Above					
Adjudication was 5–10 years ago	1.184	0.106	1.348	0.161*	
Adjudication was over 10 years ago	1.523	0.223**	1.972	0.323***	
Black male	1.11	0.223	1.399	0.154**	
Hispanic male	1.264	0.194	1.281	0.196	
Adjudication 5–10× black male	-	0.134	0.777	0.130	
Adjudication over 10*black male		_	0.566	0.094**	
N	28,340		28,340	0.074	
Log likelihood	-11,405.177		-11,400.2		

p < 0.05; p < 0.01; p < 0.01; p < 0.001.

Reference groups: non-incarcerative sentence, no departure.

In multinomial regression models with the standard controls (including age at sentencing), we saw no effects for the incarceration decision. However, having an older adjudication (over 10 years ago) increased the odds of an upward departure by 52 percent compared to a more recent adjudication (under 5 years). Thus, we see no leniency effect for the whole group simply due to the age of the adjudication.

The models in Table 5 also include interactions for race/ethnicity and gender status with the age of adjudications variables. Results indicate that black men with older adjudications (5–10 years and over 10 years distant) had odds that were 17 percent and 25 percent *lower* for receiving a prison sentence compared to white men with the same adjudications. Taken together, our findings imply that the presence of relatively recent juvenile adjudications in the criminal histories of black men *increases* those black men's odds of going to state prison. Similarly, the presence of older adjudications (over 10 years distant) *decreases* the odds of an upward departure by 43 percent for black men compared to white

men. The effects were not significant for Hispanic men, but this is likely due to the smaller sample size of Hispanic men with adjudications.

#### **Conclusions**

Prior research has demonstrated that juvenile status affects punishment severity in adult court (Kurlycheck and Johnson 2004; 2010), and that black and Hispanic youth are overrepresented in the juvenile justice system (Kempf-Leonard 2007). The lasting impact of a juvenile record on adult sentencing outcomes is a potentially important piece of the puzzle for understanding the overrepresentation of African-Americans and Hispanics in imprisonment. However, scant research exists on this topic. In Pennsylvania, the site of our study, juvenile adjudications can count in offenders' criminal history (PRS), and courts may also use their discretion to consider juvenile adjudications in sentencing. Using Pennsylvania sentencing data from 2006–2010, we investigated the overall effect of juvenile adjudications, as well as whether juvenile adjudications affect the punishment outcomes of minority men more than others. In supplemental analyses, we also examine whether judges give different weight to adjudications depending on how long ago those adjudications occurred.

First, we find that juvenile adjudications have mixed effects on sentencing outcomes, straddling both the possibilities proposed at the beginning of the study. We find little in the way of overall main effects of juvenile adjudications on the likelihood of jail or prison incarceration. The presence or number of juvenile adjudications seems to have no effect on the odds of jail or prison for offenders overall. However, a juvenile record both increases the likelihood of a judicial departure both above and below the guidelines for all offenders. The explanation for this may be that the juvenile adjudications counted in the prior record score may inflate the prior record score, and thus increase the guideline recommended sentence. Judges may then view the guideline recommendation as too high, and "correct" the guidelines by departing below them (Kramer and Ulmer 2002). Similarly, courts may sometimes see a particular juvenile adjudication (such as ones involving violence or weapons) and feel its counting in the prior record score understates its "true" severity and importance, and depart above the guidelines.

For example, assume that an offender has been convicted of possession with intent to deliver more than 10 grams of cocaine, which has a guidelines offense gravity score (OGS) of 7. They have a prior record score of 2, due to a prior adult conviction for a first-degree misdemeanor that counts for one point, and a prior juvenile adjudication that also counts for one point. This yields a guideline range of 12 to 18 months, or correctional boot camp. But the court may feel that the juvenile adjudication unfairly inflates the prior record score and thus the guidelines, and that the offender actually deserves probation. This would be a downward departure. Likewise, the court might think that the adjudication signals that the offender has a more serious criminal career in the making, and want to sentence the offender to a state prison sentence greater than 18 months. This would be a departure above.

Courts can discretionarily consider and interpret the presence of juvenile adjudications beyond their role in composing the prior record score in a way that increases punishment. In the same way, they can interpret these adjudications in a way that minimizes their importance and decreases punishment. It appears that the consideration of a juvenile record galvanizes both responses for different kinds of offenders. Interestingly, both of these patterns have been found before regarding the interpretation of prior adult convictions in the prior record score (Kramer and Ulmer 2002).

We also find that judges were more likely to depart above the guidelines for offenders who had an older adjudication (10 or more years distant) compared to offenders who had more recent adjudications (in the last 5 years). Thus, it's likely that judges *do not* discount serious juvenile adjudications simply because of how long ago they occurred. Perhaps, having an older adjudication along with a current conviction evokes a "career criminal" label, thus making the guideline recommendation seem insufficient. However, this finding does not appear to be true for black men, for reasons we discuss below.

Second, we find that juvenile record affects the likelihood of receiving a prison sentence mainly through its interaction with minority and gender status – above and beyond its role in contributing to the prior record score. Compared to white men, black men were significantly more likely to receive a

prison sentence as a result of having a juvenile adjudication, and this likelihood increased with each additional adjudication. Third, black men with juvenile adjudications were also less likely to receive a downward departure than white men, and the odds of receiving one decreased with each additional adjudication. While each additional adjudication increases the likelihood of a downward departure for all offenders – this is not so for black men. These findings were in line with our third expectation about the differential effects of juvenile adjudications by race/ethnicity and gender.

In addition, the supplemental analysis showed that the differential effect of juvenile adjudications for black men was largely specific to the relatively recent adjudications of younger black men. We found that black men with older versus more recent adjudications had lower odds of receiving a prison sentence compared to white men. We interpret these effects to indicate that adjudications of any number and age do not affect the incarceration decisions of any offender grouping except black men. Among black men, in turn, older adjudications – those that occurred 5–10 years and more than 10 years previously – have less of a deleterious effect on the likelihood of a state prison sentence than more recent adjudications. Thus, the effects of juvenile adjudications we observe for black men seem to be specific to relatively recent adjudications, those that are less than five years distant in time. Of course, this means that comparatively young black males (from 18 to 24) are the ones who would have recent adjudications. If so, young black males are the specific group for whom juvenile adjudications are more likely to lead to state imprisonment. Similarly, we find that older adjudications are treated with more leniency for black men than more recent adjudications because they decrease the odds of receiving an upward departure. This coincides with a great deal of research over the past two decades showing that young black males are a group specifically singled out for more severe punishment (Steffensmeier, Ulmer, and Kramer 1998; Spohn and Holleran 2000; see reviews by Spohn 2000; Mitchell 2005; Ulmer 2012).

The differential impact of criminal history, and, specifically, juvenile adjudications, on black and Hispanic men has several implications for racial/gender disparity at sentencing. Black males on average have significantly greater criminal history scores than white or Hispanic males (the black male – prior record score correlation is .21, whereas for Hispanic males it is .01). As stated earlier, black males are also significantly more likely than other groups to have juvenile adjudications in their adult record. It could be argued that the discretionary consideration of juvenile adjudications (beyond their role in producing the prior record score), captures "real" legally relevant differences in criminality between offenders. If the discretionary consideration of juvenile adjudications affected all offenders, one might argue that such consideration has the unfortunate side effect of contributing to the differential imprisonment of black males simply because of the differential distribution of juvenile adjudications by race and gender. In other words, even if there were no racial discrimination in sentencing, the influence of criminal history, and the consideration of juvenile adjudications within it, would produce a meaningful disproportionate imprisonment of black men. But under this argument, the resulting disproportionality would not constitute disparity – juvenile adjudications would be a neutral indicator of focal concerns-based assessments of blameworthiness or community danger, or criminal risk for all offenders.

However, this logic is not consistent with what we observe in the data. The discretionary consideration of juvenile adjudications (specifically more recent adjudications) *uniquely affects* black male defendants, and has little effect on the imprisonment odds of any other category. Our results are therefore inconsistent with the above view that the consideration of juvenile adjudications as indicators of focal concerns considerations is a race/gender neutral process. Instead, the consequences of the discretionary weighting of juvenile adjudications in incarceration decisions fall specifically on black males, and juvenile adjudications appear to count against young, black males in a way that they do for no one else. Furthermore, it is likely that the juvenile records of black males might themselves be the product of juvenile court adjudication processes that are sites of racial/ethnic and gender disparity.

The juvenile records of black males, particularly younger black males with more recent adjudications, may be viewed subjectively as more serious than those of other offenders, perhaps through a focal concerns-based attribution process. Juvenile adjudications appear to be disregarded for other types of offenders, but such adjudications might stand out and mobilize more negative assessments and attributions for younger black males (Albonetti 1991). Relatively, recent juvenile adjudications might

be interpreted as signals of criminality, risk, and danger to the community for young black men in a way that they are not for others. Young black men with juvenile adjudications might also be seen as more blameworthy, in that they have already had contact with the juvenile justice system and have not "gone straight" and desisted from crime. They might be seen as fitting stereotypes of "hardened," street-wise, incorrigible young black men, and as being more deserving of a term in state prison. Court actors might also have fewer qualms about sending these young black men to prison, and view them as more suited to prison and less suited to less restrictive punishment.

Like all studies, ours has several limitations. First, we do not have access to juvenile court decision data in connection with our sentencing-stage data. Juvenile court data are notoriously hard to obtain because many juvenile court records are generally sealed. We therefore cannot directly assess the likely complex selection processes by which offenders come to have or not have juvenile adjudications. Relatedly, we do not know the exact age at which the juvenile adjudications occurred, and prior research suggests that age is consequential in the waiver, adjudication, and punishment decisions of juvenile courts (Kupchik 2006). Third, we cannot say a great deal about prosecutorial behavior regarding the consideration of juvenile adjudications at sentencing hearings and in the guilty plea process. Do prosecutors routinely push for the discretionary consideration of juvenile adjudications at sentencing or not, or does this vary between counties? Does the counting of juvenile adjudications in the prior record score become a subject of plea bargaining (guideline rules for calculating the prior record score do not allowed this, but it might occur nonetheless)? Finally, like most studies using state-level sentencing guidelines data, we lack key socioeconomic and other potentially important variables connected to offenders, such as education, employment, family background and current family status, and mental health status.<sup>9</sup>

This line of research presents the potential to answer a number of important research questions about the lasting impact of a juvenile record. First, a more detailed analysis can be done to unpack the effect of adjudication age, and disentangle it from offender age. We found that the estimated time since adjudication had an effect on sentencing outcomes – in that older adjudications appeared to create a leniency effect for black men. Replicating this finding using the precise age of an adjudication and parsing out smaller groupings of time would elucidate how judges consider the breadth of an offender's criminal history. We currently see that juvenile adjudications increase the likelihood of prison sentences and decrease the odds of downward guideline departures for young black men in particular. However, this effect becomes less straightforward with slightly older black men who may have juvenile adjudications that are more distant in time. Figuring out how these effects change based on age would add to our understanding of how juvenile adjudications affect adult sentencing outcomes over an offender's lifetime. Second, instead of controlling for differences between counties – it would be interesting to examine between court variations in the role that adjudications play in adult sentencing outcomes. Finally, this study should be replicated in other states, particularly non-guideline states, in order to better understand exactly how adjudications affect judicial perceptions of risk.

#### **Policy implications**

We find that black men are somewhat more likely to have, and be impacted by, a juvenile record. We also find that judges are more likely use this factor to increase the severity of their sentence compared to whites. Several policy implications can be gleaned from these findings. One implication is that sentencing commissions may want to rethink the counting of juvenile adjudications in criminal history scores, and states may want to rethink allowing such adjudications to be considered in adult sentencing. If states insist that such adjudications be considered and counted, policy makers should be aware of and address their possible disparate impact on young black men. One possible solution would be to allow certain juvenile adjudications to count in criminal history scores (as in Pennsylvania), but *not* allow them to be considered beyond that as a discretionary sentencing factor. However, if black men are more likely to have juvenile adjudications, allowing juvenile adjudications to count in criminal history

scores would still leave in place the differential impact of such adjudications in criminal histories, and thus the punishment exposure, of black men.

Furthermore, similar disproportionality is already present in juvenile justice system where a disproportionate number of black males have long received more severe treatment (Kempf-Leonard 2007; Ward 2012). In Pennsylvania, black youth are arrested at almost four times the rate of white youth and are significantly less likely to be diverted away from the justice system (Griffith, Jirard, and Ricketts 2012). Thus, black men may be the unfortunate recipients of the cumulative effects of disproportionality. Our findings underscore the importance of continuing to address disproportionate minority contact (DMC) in Pennsylvania, as well as nationally. Federal legislation in place since 2002 has required that states monitor and address DMC at all points of the juvenile justice system. Pennsylvania has been fairly involved in implementing the DMC-reduction mandate and research indicates that its efforts have diminished the size of processed minority youth populations. However, disproportionality still remains, particularly in counties that have not implemented interventions (Donnelly 2015). These findings show that successful efforts to reduce DMC have the potential to have a lasting impact on adult incarceration.

Finally, many states, including Pennsylvania, are moving toward formalized risk assessment as a tool for punishment decision-making. For example, Pennsylvania has been mandated by the state legislature to build risk assessment into the sentencing guidelines. It is interesting to note that being adjudicated as a juvenile is a fairly standard actuarial risk assessment item, as it is consistently predictive of risk of recidivism for adult offenders. We show that actuarial assessment of risk mirrors the non-actuarial process with one major caveat: actuarial risk assessment increases the risk score of offenders with adjudications evenly across racial groups. As more states integrate actuarial risk assessments into sentencing, black and Hispanic men will likely continue to be disadvantaged because they are more likely to have a juvenile record. However, formal risk assessment may reduce the differential impact of adjudications on minority offenders vs. white offenders with a juvenile record. One thing is clear: if states are serious about addressing disproportionate imprisonment of black men and perhaps other minorities, they must pay attention to the potential complex roles of juvenile records in adult punishment decisions.

#### **Notes**

- Crime-free is defined as not being convicted of anything more than a summary offense or one third-degree misdemeanor between age 18 and 28.
- 2. With the exception of DUI/traffic offenses and those sentenced for first or second degree murder.
- 3. We examined the effect of adjudication seriousness and type, but the results were not viable, and suspect due to low numbers of cases of offenders with specific types of adjudications.
- 4. The inclusion of criminal history did not result in problematic collinearity with the presumptive sentence measure.
- 5. We do not control for the offense gravity score due to its high collinearity with the guideline minimum. Collinearity is less of a problem for prior record and guideline minimum. The bivariate correlation between offense gravity score and the guideline minimum is .77, whereas it is .52 for prior record score and guideline minimum. VIF statistics and tolerance ratios also indicate that multicollinearity is problematic for offense gravity and guideline minimum but not for prior record and guideline minimum.
- A constant of 0.1 is added to all zero values for the presumptive sentence variable, because we want to retain those cases where an offender's presumptive sentence was 0 months.
- 7. Individual county variables not shown in models (Table 2).
- 8. As a reminder, only adjudications for felonies, or serious misdemeanors involving weapons or danger to children, are carried over from juvenile to adult record. Thus, these percentages are not representative of everyone who may have had an adjudication, as less serious adjudications are not included in the criminal record or seen by the sentencing judge in adult court.
- The PCS does attempt to collect some of these variables, such as income and employment at time of sentencing from presentence reports, but these variables are missing for over half of the cases in the data and their validity is questionable.

#### Disclosure statement

No potential conflict of interest was reported by the authors.

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#### References

Albonetti, Celesta. 1991. "An Integration of Theories to Explain Judicial Discretion." Social Problems 38: 247–266.

Alexander, Michelle. 2010. The New Jim Crow: Mass Incarceration in the Age of Colorblindness. New York: The New Press.

Baumer, Eric P. 2013. "Reassessing and Redirecting Research on Race and Sentencing." Justice Quarterly 30 (2): 231–261.

Bishop, Donna M., and Charles E. Frazier. 1996. "Race Effects in Juvenile Justice Decision-Making: Findings of a Statewide Analysis." The Journal of Criminal Law and Criminology (1973-) 392–414.

Bonczar, Thomas P. 2003. Prevalence of Imprisonment in the U.S. Population, 1974-2001. Washington, DC: Bureau of Justice Statistics

Bushway, Shawn, and Brian Forst. 2013. "Studying Discretion in the Processes that Generate Criminal Justice Sanctions." Justice Quarterly 30 (2): 199–222.

Bushway, Shawn, and Anne M. Piehl. 2011. "Location, Location, Location: The Impact of Guideline Grid Location on the Value of Sentencing Enhancements." *Journal of Empirical Legal Studies* 8 (1): 222–238.

Clayton, O. 1983. "A Reconsideration of the Effects of Race in Criminal Sentencing." Criminal Justice Review 8: 15–20.

Curry, Theodore. 2010. "The Conditional Effects of Victim and Offender Ethnicity and Victim Gender on Sentences for Non-Capital Cases." Punishment and Society 12 (4): 438–462.

Curry, Ted R., and Guadalupe Corral-Camacho. 2008. "Sentencing Young Minority Males for Drug Offenses: Testing for Conditional Effects between Race/Ethnicity, Gender and Age during the US War on Drugs." *Punishment & Society* 10 (3): 253–276.

Doerner, Jill K., and Stephen Demuth. 2010. "The Independent and Joint Effects of Race/Ethnicity, Gender, and Age on Sentencing Outcomes in U.S. Federal Courts." Justice Quarterly 27 (1): 1–27.

Donnelly, Ellen. 2015. "The Disproportionate Minority Contact (DMC) Mandate: Its Impacts on Juvenile Processing Outcomes (1997-2011)." Criminal Justice Policy Review. [Advance online publication].

Eisenstein, James, Roy Flemming, and Peter Nardulli. 1988. The Contours of Justice: Communities and Their Courts. Boston, MA: Little, Brown.

Engen, Rodney. 2009. "Assessing Determinate and Presumptive Sentencing: Making Research Relevant." Criminology and Public Policy 8: 323–336.

Engen, Rodney, and Randy Gainey. 2000. "Modeling the Effects of Legally-Relevant and Extra-Legal Factors Under Sentencing Guidelines: The Rules Have Changed." *Criminology* 38: 1207–1230.

Franklin, Cortney, and Noelle Fearn. 2008. "Gender, Race, and Formal Court Decision-Making Outcomes: Chivalry/ Paternalism, Conflict Theory or Gender Conflict?" *Journal of Criminal Justice* 36: 279–290.

Frase, Richard. 2013. "Research on Race and Sentencing: Goals, Methods, and Topics." Justice Quarterly 30 (2): 262–269.

Harris, Casey, Darrell Steffensmeier, Jeffery T. Ulmer, and Noah Painter-Davis. 2009. "Are Blacks and Hispanics Disproportionately Incarcerated Relative to their Arrests? Racial and Ethnic Disproportionality between Arrest and Incarceration." Race and Social Problems 1 (4): 187–199.

Holleran, David, and Cassia Spohn. 2004. "On the Use of the Total Incarceration Variable in Sentencing Research." *Criminology* 42: 211–240.

Jordan, K. L., and T. L. Freiburger. 2010. "Examining the Impact of Race and Ethnicity on the Sentencing of Juveniles in the Adult Court." Criminal Justice Policy Review 21 (2): 185–201.

Johnson, Brian D. 2006. "The Multilevel Context of Criminal Sentencing: Integrating Judge and County-Level Influences." Criminology 44: 259–298.

Kempf-Leonard, Kimberly. 2007. "Minority Youths and Juvenile Justice: Disproportionate Minority Contact after Nearly Twenty Years of Reform Efforts." Youth Violence & Juvenile Justice 5 (2): 71–87.

Klein, Eric. 1998. "Dennis the Menace or Billy the Kid: An analysis of the role of transfer to criminal court in juvenile justice." American Criminal Law Review 35: 371–408.

Kramer, John H. and Anthony Scirica. 1986. Complex Policy Choices: The Pennsylvania Commission on Sentencing. *Federal Probation* L(3):15–23.

Kramer, John H., and Jeffery T. Ulmer. 1996. "Sentencing Disparity and Guidelines Departures." Justice Quarterly 13 (1): 401–426.

Kramer, John H., and Jeffery T. Ulmer. 2002. "Downward Departures for Serious Violent Offenders: Local Court 'Corrections' to Pennsylvania's Sentencing Guidelines." Criminology 40: 601–636.

Kramer, John H., and Jeffery T. Ulmer. 2009. Sentencing Guidelines: Lessons from Pennsylvania. Boulder: Lynne Rienner Publishers.

Kupchik, Aaron. 2006. Judging Juveniles: Prosecuting Adolescents in Adult and Juvenile Court. New York: New York University Press.

Kurlychek, Megan, and Brian D. Johnson. 2004. "The Juvenile Penalty: A Comparison of Juvenile and Young Adult Sentencing Outcomes in Criminal Court." Criminology 42 (2): 485–515.

Kurlychek, Megan, and Brian D. Johnson. 2010. "Juvenility and Punishment: Sentencing Juveniles in Adult Criminal Court." Criminology 48 (3): 725–758.

Mitchell, Ojmarrh. 2005. "A Meta-Analysis of Race and Sentencing Research: Explaining the Inconsistencies." *Journal of Quantitative Criminology* 21 (4): 439–466.

Myers, Martha, and Susette Talarico. 1987. The Social Contexts of Criminal Sentencing. New York: Springer-Verlag.

North Carolina Sentencing and Policy Advisory Commission. 1993. Report to the 1993 Session of the General Assembly of North Carolina. Raleigh, NC: Sentencing and Policy Advisory Commission.

Ortiz, Natalie R., and Cassia Spohn. 2014. "Mitigating the Effect of a Criminal Record at Sentencing Local Life Circumstances and Substantial Assistance Departures Among Recidivists in Federal Court." Criminal Justice Policy Review 25 (1): 3–28. Rios, Victor M. 2011. Punished: Policing the Lives of Black and Latino Boys. New York: New York University Press.

Savelsberg, Joachim J. 1992. "Law that Does Not Fit Society: Sentencing Guidelines as a Neoclassical Reaction to the Dilemmas of Substantivized Law." *American Journal of Sociology* 97: 1346–1381.

Spohn Cassia. 2009. How Do Judges Decide? The Search for Fairness and Justice in Punishment. SAGE.

Spohn, Cassia. 2000. "Thirty Years of Sentencing Reform: The Quest for a Racially Neutral Sentencing Process." In Policies, Processes and Decisions of the Criminal Justice System. Vol. 3, Criminal Justice. 2000. Washington, DC: National Institute of Justice.

Spohn, Cassia and Beichner, Denise. 2000. Is Preferential Treatment of Female Offenders a Thing of the past? A Multi-Site Study of Gender, Race, and Imprisonment. *Criminal Justice Policy Review* 11:149–184.

Spohn, Cassia, and David Holleran. 2000. "The Imprisonment Penalty Paid by Young Unemployed Black and Hispanic Male Offenders." Criminology 38: 281–306.

Steen, Sara, Rodney L. Engen, and Randy R. Gainey. 2005. "Images of Danger and Culpability: Racial Stereotyping, Case Processing, and Criminal Sentencing." *Criminology* 43: 435–468.

Steffensmeier, Darrell, Jeffery Ulmer, and John Kramer. 1998. "The Interaction of Race, Gender, and Age in Criminal Sentencing: The Punishment Cost of Being Young, Black, and Male." Criminology 36: 763–798.

Steffensmeier, Darrell, and Stephen Demuth. 2006. "Does Gender Modify the Effects of Race–Ethnicity on Criminal Sanctioning? Sentences for Male and Female White, Black, and Hispanic Defendants." Journal of Quantitative Criminology 22 (3): 241–261.

Tonry, Michael, and Matthew Melewski. 2008. "The Malign Effects of Drug and Crime Control Policies on Black Americans." Crime and Justice 37 (1): 1–44.

Tillyer, Rob, Richard D. Hartley, and Jeffrey T. Ward. 2015. "Differential Treatment of Female Defendants Does Criminal History Moderate the Effect of Gender on Sentence Length in Federal Narcotics Cases?". Criminal Justice and Behavior. doi: http://dx.doi.org/10.1177/0093854814560624.

Ulmer, Jeffery T., and John H. Kramer. 1996. "Court Communities Under Sentencing Guidelines: Dilemmas of Formal Rationality and Sentencing Disparity." *Criminology* 34 (3): 383–408.

Ulmer, Jeffery T. 1997. Social Worlds of Sentencing: Court Communities under Sentencing Guidelines. Albany: State University of New York Press.

Ulmer, Jeffery T., and Brian Johnson. 2004. "Sentencing in Context: A Multilevel Analysis." Criminology 42: 137–178.

Ulmer, Jeffery T. 2012. "Recent Developments and New Directions in Sentencing Research." Justice Quarterly 29 (1): 1–40.

Ulmer, Jeffery T., Painter-Davis Noah, and Tinik Leigh. 2016. Disproportional Imprisonment of Black and Hispanic Males: Sentencing Discretion, Processing Outcomes, and Policy Structures. *Justice Quarterly*.

Ward, Geoff K. 2012. The Black Child-Savers. Chicago, IL: University of Chicago Press.