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Michael P. Harrington
Northern Michigan University, micharri@nmu.edu

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What is This?

Revisiting the Total Incarceration Variable

Should Researchers Separate Jail From Prison Sentences in Sentencing Research?

Michael P. Harrington
University of Nebraska at Omaha

Recent research has examined the use of the total incarceration variable. The results of these studies have shown that the factors affecting a decision to sentence an offender to jail are different than those influencing a prison sentence. These studies have suggested that disentangling jail and prison sentences will enhance our understanding of how race influences sentence outcomes. Neither of these studies examined the sentence-length portion using the expanded definition of the total incarceration variable. The research presented here examines the validity of using the total incarceration variable and whether the same factors affect the length of a jail sentence as those affecting the length of a prison sentence. The implication for future research is discussed.

Keywords: sentencing; prison; jail

Recent figures released by the US Department of Justice (Bureau of Justice Statistics, 2007) revealed that in 2004 slightly more than 1 million offenders were sentenced subsequent to a felony conviction in state courts. Seventy percent of these offenders were given a custodial sentence involving incarceration. The remaining 30% were given a community sentence of probation. Of the approximately 755,300 offenders sentenced to a term of incarceration, 57% (431,600) were sentenced to prison and 43% (323,700) were sentenced to serve time in jail. Despite this distribution of felony sentence type, researchers have traditionally grouped jail and prison as one type of sentence of incarceration and examined judicial sentencing decisions as being an in (custody) or out (probation) decision. More recent research has expanded the definition of judicial sentencing to examine jail sentences separate from prison (Harrington & Spohn, 2007; Holleran & Spohn, 2004). The reported results by these researchers have suggested that the factors influencing a jail sentence were different than those that influence decisions to sentence offenders to

prison. Although these studies have offered significant insight into the complexity of sentence outcomes, they only examined the in/out decision and did not extend their examinations to the sentence-length portion of sentencing. The research presented here examines the sentence-length portion of sentencing using the expanded definition of the total incarceration variable. Of particular interest is whether the factors that influence the length of a prison sentence are the same as those that influence the length of a jail sentence.

In addition to the aforementioned quantitative evidence suggesting the need to examine jail and prison separately, there exist important qualitative differences between prison and jail. Prisons are generally state-run facilities that house sentenced offenders, typically for felony offenses and for more than 1 year. Jails, on the other hand, house a variety of offenders, including pretrial detainees, sentenced misdemeanants, those under civil commitment, and those serving felony sentences usually less than 1 year. Jails tend to be locally managed and funded most often by county governments. Often, jails are centrally located in the county seat and offer a certain amount of accessibility to criminal justice officials, service providers, and visitors. Offenders who are sentenced to jail are often granted privileges to continue with existing employment, search for employment in their community, or participate in educational and counseling services that are located near their home. Many of these release opportunities allow offenders to continue with these services after they have completed their sentence and therefore may allow an easier transition or reentry into life after incarceration. In short, the local nature of the jail's location and operation can offer an opportunity for inmates to maintain important community ties and social networks.

Prisons, on the other hand, are often removed from large metropolitan areas and tend to be more closed (Goffman, 1961). More specifically, the rural location and the separation from family and other social networks effectively separate inmates from their home communities (Huling, 2002). Sampson and Laub (1993) referred to this phenomenon as a "knifing off" (p. 142) of conventional social bonds. This separation can further complicate the process of reintegration after release. Petersilia (2003) has noted that offenders who are released from prison are "largely uneducated, unskilled and usually without solid family support" (p. 3). Although a sentence in jail may also disrupt or damage the ties that an offender may have with his or her community, such disruption may be tempered by the jail's proximity to the offender's community and the ability for offenders to continue to participate in some conventional social networks.

The research presented here is intended to further explore the efficacy of using the total incarceration variable. Two prior inquiries (Harrington & Spohn, 2007; Holleran & Spohn, 2004) examined the expanded definition of the total incarceration variable. However, both were limited to only the in/out portion of sentence outcome. The logical sequel to these inquiries requires an examination, as presented here, of the sentence-length decision using an expanded definition of the in-jail versus in-prison total incarceration variable.

Prior Research

The empirical examination of how legal and extralegal factors affect sentence outcomes is numerous. As Zatz (1987) noted, the question of race and ethnicity with respect to sentencing may have been the major research question examined during the 1970s and 1980s. The numerous studies conducted in the past two decades have employed more sophisticated methods and have been framed using a variety of theoretical frameworks. The most recent studies have attempted to untangle the contextual and interactive effects of sex, race, and age. Regardless, the question of how extralegal factors influence sentencing decisions remains unclear.

For the purpose of this article, the review will be limited to studies that have examined sentencing decisions in state courts. Although there are a substantial number of studies examining sentencing decisions, there are no federal jails, and federal judges therefore do not decide between prison and jail. Of particular importance are two prior reviews that have presented a comprehensive summary of the sentencing literature with respect to race and other legally irrelevant factors (Chiricos & Crawford, 1995; Spohn, 2000).

Legally Relevant Influences

Both of the reviews of prior literature have acknowledged the influence of prior criminal record and the seriousness of the present offense as legitimate factors that result in harsher sentence outcomes. The summary by Chiricos and Crawford (1995) has suggested that those offenders with more extensive prior criminal histories and those convicted of more serious crimes were more likely to be incarcerated and more often receive lengthier terms of incarceration. The summary by Spohn (2000) does not include the results for these factors; she nonetheless alluded to the importance of criminal history and crime seriousness as important factors that should be controlled for when examining sentence outcome.

The Effects of Race

Chiricos and Crawford (1995) reviewed 38 studies published between 1979 and 1991 that included an examination of the direct effect of race for felony sentencing decisions in noncapital cases. The authors found a direct effect of race for the in/out decision but not for the sentence-length decision. Through further analysis, the authors found that the effect of race was more prominent in their contextual analysis. That is, in the South—areas with higher percentage of Blacks—and in places of high unemployment, the race–imprisonment relationship was more pronounced. In these contexts, Blacks had greater odds of being sentenced to prison than similarly situated White offenders.

Spohn (2000) conducted a similar analysis where she examined the sentencing literature during the 1980s and 1990s. Her analysis also examined the contextual influences of race on sentencing. Spohn's findings were consistent with those of Chiricos and Crawford (1995). More specifically, she found that many of these results found a direct race effect with sentence outcomes at both the state and federal level revealing that Blacks and Hispanics were more likely than Whites to be sentenced to prison. Furthermore, the author found additional evidence that Blacks received longer sentences than similarly situated White offenders.

Noting that "[e]vidence concerning direct racial effects . . . provides few clues to the circumstances under which race matters," Spohn (2000, p. 458) also evaluated the 40 studies included in her review for evidence of indirect or contextual discrimination. She found that the combination of race/ethnicity and other legally irrelevant offender characteristics produced greater sentence disparity than race/ethnicity alone and that the race of the victim interacted with the race of the offender to produce harsher sentences for Blacks convicted of crimes against Whites. She also found that some studies revealed that process-related factors conditioned the effect of race/ethnicity on sentence severity; pleading guilty, hiring a private attorney, or providing evidence or testimony in other cases, for example, resulted in greater sentence discounts for White offenders than for Black or Hispanic offenders.

Interactions Among Legally Irrelevant Offender Characteristics

In her article exploring the convergence of race, ethnicity, gender, and class on court decision making, Zatz (2000) urged researchers to consider the ways in which offender (and victim) characteristics jointly affect case outcomes. As she noted (Zatz, 2000), "Race, gender, and class are the central axes undergirding our social structure. They intersect in dynamic, fluid, and multifaceted ways" (p. 540).

The findings of a series of studies conducted by Darrell Steffensmeier and his colleagues at Penn State University have illustrated these intersections. Research published by this team of researchers during the early 1990s concluded that race (Kramer & Steffensmeier, 1993), sex (Steffensmeier, Kramer, & Streifel, 1993) and age (Steffensmeier, Kramer, & Ulmer, 1995) each played a role in the sentencing process in Pennsylvania. However, it is interesting to note, especially in light of their later research findings (Steffensmeier, Ulmer, & Kramer, 1998) that the team's initial study of the effect of race on sentencing concluded that race contributed "very little" to our understanding of judges' sentencing decisions (Kramer & Steffensmeier, 1993, p. 370). Although the incarceration (jail or prison) rate for Blacks was 8% points higher than the rate for Whites, there was only a 2% point difference in the rates at which Blacks and Whites were sentenced to prison. These findings led Kramer and Steffensmeier (1993) to conclude that "if defendants' race affects judges' decisions in sentencing . . . it does so very weakly or intermittently, if at all" (p. 373).

This conclusion was called into question by Steffensmeier et al.'s (1998) more recent research, which explored the ways in which race, sex, and age interact to influence sentence severity. They found that each of the three legally irrelevant offender characteristics had a significant direct effect on the likelihood of incarceration. To elaborate, Blacks were sentenced more harshly than Whites, younger offenders were sentenced more harshly than older offenders, and males were sentenced more harshly than females. More importantly, they found that the three factors interacted to produce substantially harsher sentences for one particular category of offenders, young Black males, than for any other age–race–sex combination. According to the authors, their results "illustrate the high cost of being Black, young, and male" (Steffensmeier et al., 1998, p. 789).

The validity of this assertion is confirmed by the results of a replication and extension of the Pennsylvania study. Spohn and Holleran (2000) examined the sentences imposed on offenders convicted of felonies in Chicago, Miami, and Kansas City. Their study included Hispanics as well as Blacks and tested for interactions between race, ethnicity, sex, age, and employment status. They found that each of the four offender characteristics had a significant direct effect on the decision to incarcerate or not in at least one of the jurisdictions. In Chicago, both Black and Hispanic offenders were more likely than White offenders to be sentenced to prison; in Miami, Hispanics (but not Blacks) faced higher odds of incarceration than Whites. Male offenders were substantially more likely than female offenders to be sentenced to prison in Chicago and Kansas City, and unemployed offenders faced significantly higher odds of incarceration than employed offenders in Kansas City. In all three jurisdictions, offenders aged 21 to 29 were about 10% more likely than offenders aged 17 to 20 to be sentenced to prison (Spohn & Holleran, 2000, pp. 291-292). Race, ethnicity, sex, age, and employment status, then, each had a direct effect on the decision to incarcerate or not.

Like Steffensmeier and his colleagues (1998), Spohn and Holleran (2000) found that various combinations of race/ethnicity, sex, age, and employment status were better predictors of incarceration than any variable alone. They found, for example, that young Black and Hispanic males were consistently more likely than middle-aged White males to be sentenced to prison. These offenders, however, were not the only ones singled out for harsher treatment. In Chicago, young Black and Hispanic males and middle-aged Black males faced higher odds of incarceration than middle-aged White males. In Miami, young Black and Hispanic males and older Hispanic males were incarcerated more often than middle-aged White males. Moreover, in Kansas City, both young Black males and young White males faced higher odds of incarceration than middle-aged Whites. These results led Spohn and Holleran (2000) to conclude that "in Chicago and Miami the combination of race/ethnicity and age is a more powerful predictor of sentence severity than either variable individually, while in Kansas City age matters more than race" (p. 301). Moreover, when they added unemployment to the age–race–sex status, they found that in Kansas City and

Chicago unemployment increased the odds that Black and Hispanic males would receive a sentence of incarceration. In addition, in Chicago, the disparate results were particularly harsh for young, unemployed minorities.

The results of these recent studies highlight the importance of testing for intersections among sex, race/ethnicity, age, and other legal and extralegal variables. Spohn (2002) noted that the effects of race in criminal justice processing have become more subtle over time. The trend in research results appears to reflect this statement and the methodological advancement in sentencing research. That is, the direct effects of race are less observable in the more recent empirical research. The examinations reported here have noted the importance of how race interacts with other offender characteristics. Although each variable may have a direct effect on the severity of the sentence imposed, the combinations of these characteristics may be more powerful predictors than any single characteristic alone.

Despite these important findings of extralegal factors, the strongest predictors of sentence severity have been the offender's criminal history and the seriousness of the offense for which the offender has been sentenced. Moreover, these two factors have been the most salient variables in sentencing research over time.

Use of the Total Incarceration Variable

Prior research using the total incarceration dependent variable has made important contributions to our understanding of the factors that affect sentence outcomes. However, the results of the study conducted by Holleran and Spohn (2004) raise serious questions about the validity of this approach. As they noted (2004),

> The multinomial logistic regression specification, in which the odds of receiving prison and the odds of receiving jail are each compared to the odds of receiving probation, provides a more meaningful picture of the disposition decision than the binominal logistic regression with the total incarceration response variable. (p. 235)

Their study demonstrated not only that the effects of offender and case characteristics vary depending on the way in which the in/out decision is defined but also that combining jail and prison sentences into a single category masks differences in the types of sentences imposed on male and female offenders and on White, Black, and Hispanic offenders.

The research by Holleran and Spohn (2004) is the first to examine the use of the total incarceration variable. Their study included misdemeanor and felony convictions for Philadelphia County, Pennsylvania, in 1998. The authors first examined the predictors of sentence outcomes using the total incarceration variable typically used in the studies reviewed above. Their results mirrored the results of the prior research; that is, the legally relevant variables of offense seriousness and prior record were the primary predictors of the decision to incarcerate (in jail or prison) or not. They also

found that males were more likely than females to be incarcerated and that Hispanic offenders faced higher odds of incarceration than White offenders did. Age, on the other hand, was not a significant predictor of the decision to incarcerate or not.

When they examined the decision to sentence the offender to prison rather than jail (with probation cases excluded), Holleran and Spohn (2004) found that the offender and case characteristics included in the model did predict whether the offender would be sentenced to prison rather than jail. Both the offense gravity score and the prior record score affected the odds of a prison sentence; the likelihood of prison sentence rather than a jail sentence also was affected by the type of disposition in the case, with defendants who pled guilty having a lower likelihood of prison than defendants who went to trial. Regarding the extralegal variables, sex and age were not significant factors in the jail or prison decision, either in the overall model or in the models partitioned by race/ethnicity. However, Hispanic offenders faced higher odds of imprisonment than either White or Black offenders. Based on these results, Holleran and Spohn (2004) concluded that prison and jail sentences are not indistinguishable; rather, "offender and case characteristics . . . predict whether an offender will be sentenced to prison rather than jail" (p. 230).

Further confirmation of this was provided by the results of their multinomial logistic regression analysis. For example, the authors found that the offense gravity score had a significantly greater effect on the decision to sentence the offender to prison (rather than probation) than on the decision to sentence the offender to jail (rather than probation; Holleran & Spohn, 2004). Similarly, the type of disposition in the case had no effect on the odds of a jail sentence, but offenders who pled guilty were less likely than those who went to trial to be sentenced to prison rather than probation.

Harrington and Spohn (2007) applied similar methodology in their examination of the total incarceration variable. Their results further question the usefulness of the total incarceration variable. With respect to the in/out decision, Blacks were more likely than Whites to be incarcerated, and women were much less likely than males to be incarcerated. However, when a multinomial methodology was used to model the probation–jail–prison decision, their results are somewhat contrary to prior research on sentence outcomes. That is, sex had a significant influence on the decision to sentence an offender to probation rather than jail but did not have an effect on the decision to sentence to jail rather than prison. The authors also found, with respect to race, that Black offenders were more likely than White offenders to be sentenced to jail rather than probation. However, for the decision to sentence an offender to prison rather than jail, Whites faced higher odds of receiving the harsher sentence decision. Finally, with respect to the effect of age, in the binomial models younger offenders were more likely to be incarcerated than be sentenced to probation. When the authors modeled the jail versus prison decision, younger offenders were more likely to be sentenced to jail rather than prison. For the multinomial analysis, age was not a significant predictor of the type of sentence.

Harrington and Spohn (2007) also ran multinomial models using the age–race–sex interaction terms. Their results showed that, in the case of Midwestern County, White males, Black females, and White females were more likely than Black males to receive a term of probation rather than a jail sentence. Furthermore, for the jail versus prison decision, White males were more likely to be sentenced to prison than were similarly situated Black offenders. Using Black males aged 30-39 as the comparison group, the authors found that White males of all age categories (17-29, 30-39, and 40 or older) were treated more leniently for the probation versus jail decision but were more likely to be sentenced to prison rather than jail.

Method

The present research investigates the effects of extralegal characteristics on the lengths of the sentences imposed on offenders convicted of felonies in Midwestern County. Midwestern County is an urban court that utilizes an indeterminate sentencing system. Harrington and Spohn (2007) presented findings from Midwestern County in their examination of the efficacy of the total incarceration variable. This research utilizes the same data to further examine the total incarceration variable with respect to sentence length.

The data for our study were collected by Spohn and Piper (2004) for their examination of felony case processing in Midwestern County. The original data file included information on all felony cases processed in Midwestern County District Court for the year 2001 ($N = 2,663$). For this study, cases in which defendants were referred to adult drug court ($n = 255$) or transferred to juvenile court ($n = 31$) were excluded. Because there were very few offenders who were not White or African American, cases involving offenders who were Hispanic ($n = 61$), Native American ($n = 24$), Asian ($n = 2$), or another race ($n = 8$) were removed. Also eliminated were cases where the most serious offense was murder or manslaughter ($n = 10$), forcible rape ($n = 29$), or armed robbery ($n = 26$). These offenders were excluded because all but three of them were sentenced to prison. Based on the nature of our inquiry, cases that were dismissed ($n = 641$), were still pending at the time of data collection ($n = 78$), or resulted in a probation sentence ($n = 506$) were removed. Finally, because of the small number of female offenders in some of the offense categories, it was necessary to remove them from the analysis ($n = 134$). The final dataset includes 848 male felony offenders who were sentenced to jail ($n = 364$) or prison ($n = 484$).

In examining sentence length, it was necessary to utilize several different dependent variables. As previously stated, Midwestern County uses an indeterminate sentencing scheme for offenders sentenced to prison. Felony prison sentences represent a minimum term at which time the offender is eligible for discretionary release (parole) and a maximum limit at which time the offender is required to be released. For the purpose of this research, the length of a prison sentence is defined as the

maximum sentence length in months. Offenders who were sentenced to a term of jail incarceration were given a determinate sentence. These sentences therefore are not expressed in a range of time with a minimum and maximum term. As with length of prison term, the length of the jail sentence is expressed in months. The definition of the total incarceration variable includes the maximum prison sentence or the jail sentence, in months, for each offender.

The results presented by Harrington and Spohn (2007) offered additional evidence persuasive of the need to examine prison and jail sentences as separate sentencing outcomes. Therefore, this analysis begins by using binomial regression to analyze the decision to sentence the offender to jail or prison. Following that, ordinary least squares regression will be used to analyze the length of sentence imposed on offenders in the total incarceration sample and then to analyze sentence length separately for offenders sentenced to jail and prison.

For the independent variables, this research replicates some of those used in the initial examination by Harrington and Spohn (2007). Race and age were combined to create categories of offenders for Whites and Blacks (18-29, 30-39, and 40+). Black males 30-39 were the reference group for all models. The measurements of criminal history include the number of prior felony convictions and whether the offender had a prior conviction for a violent felony offense (*no* = 0, *yes* = 1).

The measures of case characteristics consisted of the number of charges filed and the number of conviction charges for the present case. Offenses were categorized as property, drug, and violent (reference category) offenses. The disposition of the case was measured as whether the offender plead guilty or went to trial (*trial* = 0, *plea* = 1). Lastly, the research uses two separate measures of pretrial detention. The first measure is a dichotomous variable measuring whether the offender was held in custody prior to release (0 = *released*, 1 = *held in custody*). The second measure is a continuous measurement of pretrial detention for those who were in custody at sentencing and was measured as the amount of months from arrest to sentencing.

Findings

The offender and case characteristics for those sentenced to jail and prison are displayed in Table 1. These data indicate some variation in sentence type (jail or prison) based on race. However, the variation of age appears small. The data suggest that Blacks are more often sentenced to jail than Whites. Furthermore, with exception of Black males aged 30-39, the proportion of White offenders of all age categories were higher for prison sentences than were Black age groups. Some of the case characteristics display a distribution that we would expect. That is, offenders with more prior felony convictions, those with more charges filed, more conviction charges, and those convicted of a violent offense were more likely to be sentenced to prison.

The binomial model (Table 2) for the factors that influenced whether incarcerated offenders were sent to prison or jail is consistent with many of the prior findings by

Table 1
Frequency Distribution

	Jail		Prison		Total	
	n	%	*n*	%	N	%
	364	43	484	57	848	100
Offender characteristics						
Age (mean)	35.4		34.4		34.8	
Race						
White	169	38	271	62	440	100
Black	195	48	213	52	408	100
WM 17-29**	50	34	99	66	149	100
WM 30-39	57	38	93	62	150	100
WM 40+	62	44	79	56	141	100
BM 17-29	69	43	91	57	160	100
BM 30-39 (ref.)**	53	55	44	45	97	100
BM 40+	73	48	78	52	151	100
Case characteristics						
Number of prior felony convictions**						
0	155	47	176	53	331	100
1	93	47	107	54	200	100
2	43	36	75	64	118	100
3 or more	73	37	126	63	199	100
Prior violent felony conviction**						
Yes	46	34	90	66	136	100
No	318	45	394	55	712	100
Number of charges filed**						
1	117	52	107	48	224	100
2	89	44	113	56	202	100
3	65	44	83	56	148	100
4	42	41	60	59	102	100
5	19	38	31	62	50	100
6 or more	32	26	90	74	122	100
Number of conviction charges**						
1	289	50	294	50	583	100
2	61	33	125	67	186	100
3 or more	13	17	65	83	78	100
Type of conviction charge						
Violent offense (ref)**	20	17	101	83	121	100
Drug offense	98	48	105	52	203	100
Property offense**	246	47	278	53	524	100
Defendant plead guilty**						
Yes	321	42	449	59	770	100
No	43	55	35	45	78	100
Defendant in custody before trial						
Yes	194	41	281	59	475	100
No	170	46	203	54	373	100
Days of pretrial detention*	76		118		100	
Sentence length (months)*	7.4		50.1		32.5	

Note: WM = White male; BM = Black male; ref. = reference category.
*$p \leq .05$. **Chi sq $p \leq .05$.

Table 2
Binomial Results: Jail Versus Prison

	B	SE	Exp(B)*
Offender characteristics			
WM 17-29	0.933*	.294	2.543
WM 30-39	0.811*	.286	2.251
WM 40+	0.587*	.289	1.798
BM 17-29	0.361	.282	
BM 30-39 (ref.)	Ref.		
BM 40+	0.257	.283	
Case characteristics			
Number of prior felony convictions	0.253*	.073	1.288
Prior violent felony conviction	0.195	.234	
Number of charges filed	0.058	.054	
Number of conviction charges	0.573*	.152	1.774
Type of conviction charge			
Violent offense	Ref.		
Drug offense	−1.250*	.303	0.287
Property offense	−1.281*	.282	0.278
Defendant plead guilty	0.578*	.263	1.783
Defendant in custody before trial	−0.587*	.215	0.556
Days of pretrial detention	0.003	.001	1.003
Nagelkerke R²	.19		

Note: Exp(B) reported only for those variables where $p < .05$. WM = White male; BM = Black male; ref. = reference category.

Harrington and Spohn (2007). Each category of White male offenders was more likely to be sent to prison rather than jail when compared to the Black male 30-39 category. The presence of a prior felony conviction and the number of conviction charges both influenced the decision to sentence offenders to prison rather than jail. Offenders who were convicted of a property offense or a drug offense were less likely to be sentenced to prison than were offenders convicted of a violent crime. These results therefore are consistent with much of the prior research examining sentence severity. That is, a more extensive criminal history and the seriousness of the current case charge are significant predictors of sentence severity (jail or prison).

The measures of pretrial custody offered some interesting findings. When measured as a dichotomous variable, pretrial custody was not a significant influence on the decision to sentence an offender to jail versus prison. However, when pretrial custody was examined as a continuous variable, it became significant. Offenders who were incarcerated as pretrial detainees were approximately 1.08 times more likely to be sentenced to prison instead of jail for each month they were held in pretrial custody.

During the initial analysis using ordinary least squares, the total incarceration measure of sentence-length model and the prison-length model had high measures for Kurtosis. The distribution of sentence length showed distinct peaked patterns. This was due to smaller numbers of offenders receiving very long sentences. Furthermore, the initial analysis in these models suggested some slight autocorrelation. This was most likely due to a tendency for judges to sentence using months that reflect years and either a half of a year or quarter of a year. Therefore, in Table 3, for Models 1 and 2, the dependent variables have been logged. This adjustment removed the kurtosis and autocorrelation problems. This process to address outliers was first used in sentencing research by Wheeler, Weisburd, and Bode (1982, as noted in Bushway & Piehl, 2001). Demuth and Steffensmeier (2004) also used this technique in their analysis of pretrial release to address skewness in the distribution of bail amounts. After logging the dependent variable, the coefficients for the independent variables are interpreted differently. In this case, the coefficients are interpreted as the percentage change in Y for a unit change in X (Studenmund, 1997).[1]

Model 1 examines the length of sentence using the traditional total incarceration definition. The results show that White males in age groups 17-29 and 30-39 received a longer term of incarceration. All other race–age categories were not significant in the total incarceration model.[2] Offenders who had prior felony convictions and who were convicted of more than one charge in the present case were given longer terms of incarceration. As would be expected, those offenders convicted of property or drug offenses received sentences that were shorter than those convicted of a violent offense. Those offenders who plead guilty were given longer sentences than those who went to trial. Finally, pretrial incarceration, when measured dichotomously or as a continuous measure, positively influenced the length of sentence.

The results for the analysis of the length of the prison sentence are displayed in Model 2. Again, White males in age group 30-39 received longer sentences when compared to Black offenders in age group 30-39, and the remaining race–age categories lacked significance. The only case characteristic that was significant was the number of conviction charges. As expected, those with more conviction charges received longer prison sentences. Similarly, property and drug offenders received longer prison sentences than the sentences imposed on violent offenders. When pretrial custody was measured as a dichotomous variable, it did not significantly influence the length of the prison term. However, when measured as a continuous variable, the length of pretrial custody positively influenced the length of the prison sentence.

The final model, Model 3, examined the length of a jail sentence separate from a prison sentence. These results differ in some ways from the prison and total incarceration results. First, the intersection of race and age did not influence the length of a jail sentence. Offenders with a more serious criminal history, as indicated by the number of prior felony convictions, were given longer jail terms. Those offenders who plead guilty were penalized by receiving jail sentences that were 2 months longer than offenders who went to trial. With respect to pretrial credit, when

Table 3
Ordinary Least Squares Regression Results

Variable	Model 1 Total Incarceration (ln)	Model 2 Prison (ln)	Model 3 Jail	$z \geq 1.64$ (Yes/no) Jail vs. Prison
	B	B	B	
	(SE B)	(SE B)	(SE B)	
Constant	1.859*	3.535*	1.738	
	(.223)	(.163)	(.214)	
Age–race categories				
White 17-29	0.405*	0.121	1.403	No
	(.145)	(.110)	(.817)	
White 30-39	0.493*	0.319*	1.158	No
	(.143)	(.110)	(.776)	
White 40+	0.246	0.148	0.132	No
	(.145)	(.113)	(.766)	
Black 17-29	0.184	0.158	0.438	No
	(.142)	(.111)	(.743)	
Black 30-39	Ref.	Ref.	Ref.	
Black 40+	0.165	0.130	0.456	No
	(.143)	(.113)	(.748)	
Number of prior felony convictions	0.171*	0.029	0.854*	Yes
	(.036)	(.026)	(.214)	
Prior violent felony	−0.007	−0.013	−0.523	No
	(.114)	(.079)	(.708)	
Number of charges filed	0.053*	0.025	0.234	No
	(.027)	(.019)	(.152)	
Number of conviction charges	0.328*	0.097*	1.008*	No
	(.071)	(.048)	(.472)	
Plead guilty	0.500*	−0.026	2.358*	Yes
	(.131)	(.107)	(.665)	
In custody	−0.365*	−0.229*	−0.614	No
	(.105)	(.082)	(.550)	
Pretrial detention (days)	0.002*	0.001*	0.005*	No
	(.000)	(.000)	(.002)	
Property	−0.684*	−0.342*	−0.031	Yes
	(.118)	(.075)	(.975)	
Drug	−0.674*	−0.331*	0.051	Yes
	(.132)	(.088)	(1.015)	
Violent	Ref.	Ref.	Ref.	
R^2	.22	.16	.12	

Note: Ref. = reference category.
*$p \leq .05$.

measured as a dichotomous variable, pretrial detention was not significant. However, when measured as a continuous variable, the results show that offenders held in custody prior to sentencing were given slightly longer sentences. Our categories of offense types were not significant factors in determining the length of a jail sentence.

Discussion

The purpose of the study was to further extend the prior research of the total incarceration variable. The two prior examinations that have been cited here (Harrington & Spohn, 2007; Holleran & Spohn, 2004) examined only the in/out portion. The goal here was to determine if the factors that influence the length of a prison sentence differ from those that influence a jail sentence. The results illustrated here further support the need for researchers to differentiate between jail and prison when examining judicial sentencing decisions.

The variables representing the legal relevant measures traditionally used in research suggest a variety of effects. First, for the measure of criminal history, the presence of a prior violent felony conviction was not significant in any of the models. However, the number of prior felony convictions was positively related in the total incarceration model and the jail sentence length model. These results suggest that prior criminal history is considered when sentencing an offender to jail but not to prison. The other legally relevant measure, the seriousness of the present charge, was not consistent across models. That is, the number of charges filed was only a factor for the total incarceration model. The number of conviction charges, on the other hand, was significant (positive influence) in all models. Lastly, although drug offenders and property offenders received shorter sentences in the total incarceration and prison models, the type of offense did not influence the length of a jail sentence.

Results examining the process-related measures of guilty versus trial and pretrial detention did not always act in ways that are consistent with common presumptions. More specifically, offenders who plead guilty were given longer sentences in two models (total incarceration and jail). This may indicate that felony offenders who are facing incarceration may negotiate their plea to avoid prison and as a result accept a jail sentence. The other process measure, pretrial detention, presented somewhat conflicting results. When measured as a dichotomous variable, offenders who were confined prior to disposition received shorter sentences in the total incarceration model and shorter prison terms. However, when pretrial detention was examined as a continuous variable, the longer an offender was held prior to trial the longer prison and jail sentence they received. These results indicate that pretrial detention may influence sentence length depending on how it is measured.

The results for the age–race categories also acted contrary to much of the results observed in prior research. That is, when compared to Black offenders aged 30-39, some White offenders received harsher sentences for the decision to incarcerate (all

White age groups) as well as longer terms of incarceration (White males aged 17-29 and 30-39), and when differentiated from jail sentences White males aged 30-39 received longer prison terms.

Finally, as stated previously in the introduction, there are distinct qualitative differences between jail and prison. Furthermore, Holleran and Spohn (2004) stated that "offenders sentenced to prison are qualitatively different than those sentenced to jail" (p. 212). The results here support their assertion. Therefore, a comparison of the coefficients in the jail sentence length and prison sentence length was conducted to determine whether the difference of slope with the coefficients was statistically different. Utilizing the Paternoster, Brame, Mazerolle, and Piquero (1998) strategy, z scores were calculated.[3] The results show that the only variables that demonstrated a significant difference in slope were the number of prior felony convictions, whether the defendant pleads guilty, and the categories for property and drug offenders.

Summary

The results presented here offer continuing support for the need for researchers to consider using an expanded definition of the total incarceration variable when examining state-level felony sentences. Although these results are generalizable only to Midwestern County, they support the need to differentiate between jail and prison and that failing to do so may be misleading. Previous research for Midwestern County (Harrington & Spohn, 2007) suggested that Black offenders, and specifically Black males, were at a disadvantage for the decision to sentence to jail rather than probation. These observations led them to conclude that sentencing decisions "have race linked collateral costs" (p. 60). That being the case, these results suggest that the length of a jail sentence is influenced more by criminal history and the seriousness of the present case (as evidences by the number of conviction charges). It appears as though race matters less for the sentence length, and therefore the collateral costs of a jail sentence may be equally experienced by both Black and White offenders. These results are consistent with the summaries of Chiricos and Crawford (1995) and Spohn (2000) in that race matters more for the in/out decision and less for sentence length. The research results presented here also suggest two potential concerns for further sentencing research.

First, the results of the models show a decline in the number of statistically significant variables from the total incarceration model to the prison and jail sentence length model. In addition, there is an observable decrease in the Pearson's R^2 indicating less explanatory strength in the expanded models. These results indicate that the variables traditionally used to explain sentence severity may not be appropriate for research in expanded models and specifically research examining jail sentence length.

Second, this research suggests a need to more thoroughly examine how process-related variables are measured. More specifically, researchers need to use caution

with respect to how they measure pretrial detention. Just as sentence severity is measured as a bifurcated process (in/out and sentence length), pretrial detention may need similar consideration.

Although only speculative, the loss of explanatory power in the models and the lack of consistency across models with respect to the significance of the independent variables suggest the need to further examine prosecutorial discretion in sentencing. To elaborate, factors such as the number of charges filed, the number of conviction charges, and the negotiated plea may be more important in determining sentence severity based on prosecutor interests rather than judicial discretion. These factors may be more important for the jail sentence as opposed to a prison sentence.

One of the qualitative differences between prison and jail that has been referenced in this article is that those incarcerated in jail may have more opportunity to build or at least maintain connections with family, employment, and education. Future researchers should consider how these factors may influence a judge's decision to sentence an offender to jail or to prison and for how long. Although the present inquiry does not examine these factors, future research should consider how an offender's ties to conventional social bonds (employment, family structure, and education) may influence sentence outcomes.

Notes

1. Collinearity diagnostics showed some correlation between the dichotomous and continuous measures for pretrial detention. The Pearson's correlation was .686 (two-tailed significant at .01). Further diagnostics revealed that the variance inflation factors (VIFs) were 1.954 and 2.097 and Tolerance of .477 and .512, respectively. These diagnostics revealed that the existing collinearity is within acceptable limits.

2. The initial analysis revealed that race, when measured by itself, was only significant in the total incarceration binomial model. The observed influence was that Blacks were less likely to be incarcerated. When race was used in the ordinary least squares (OLS) models, it was not statistically significant. These results are not reported here but are available from the author. It is important to note that only two variables were significant in both the jail and prison models (number of conviction charges and pretrial detention). The z scores for these variables were not significant.

3. The Paternoster et. al. equation is $z = b_1 - b_2 / \sqrt{(SE_{b1})^2 + (SE_{b2})^2}$. To correctly calculate these scores, the jail sentence length model was logged so that the coefficients had like meanings.

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Michael P. Harrington is a doctoral student in Criminal Justice at the University of Nebraska at Omaha, School of Criminology and Criminal Justice. Prior to returning to school, he spent 10 years in correctional administration in Wisconsin, including work as a County Jail Administrator, and an Institutional Unit Supervisor with mentally ill prison inmates and civilly committed sexually violent offenders.