

# Racial Disproportionality in Juvenile Justice: The Interaction of Race and Geography in Pretrial Detention for Violent and Serious Offenses

Jeffrey J. Shook · Sara A. Goodkind

Published online: 11 December 2009  
© Springer Science+Business Media, LLC 2009

**Abstract** Youth of color, particularly black youth, are overrepresented at every stage of processing in the juvenile justice system. This paper presents an analysis of racial differentials at an early stage—pretrial detention among youth charged with violent and serious offenses. It contributes to work in this area by exploring police decision making, which has been understudied in comparison with decision making by court actors. Contrary to prior studies suggesting that race differences in police treatment are found primarily in the handling of youth suspected of minor offenses, we find that black youth are three times as likely as white youth to be detained, controlling for other demographic and legal factors, including offense type and severity. This paper also contributes to efforts to understand *how* racial disproportionality occurs, by including an analysis of how geography affects detention decisions differentially by race. Using data from an urban county in Michigan, we find that geography and race interact, such that white youth from the suburbs are much less likely to be detained than white youth from the city and black youth from the city or suburbs.

**Keywords** Juvenile justice · Race · Disproportionality · Detention · Police decision making · Geography

## Introduction

Youth of color, particularly black youth, are overrepresented at every stage of processing in the U.S. juvenile justice system, beginning with arrest and including detention, petition, adjudication, secure confinement, and transfer to the adult system (Bishop 2005). For example, the violent crime index arrest rate for black youth in 2007 was 5 times (and their property crime index arrest rate more than double) more than that of white youth (Puzzanchera 2009). In 2005, black youth were more than twice as likely as white youth to have a delinquency case before the juvenile court (Sickmund 2009). Once referred to the juvenile court, black youth are also more likely than white youth to have their cases petitioned for formal processing, to be sent to residential placement, and to be waived to the criminal court (Sickmund 2009).

Despite a lack of agreement on the cause of this disproportionality—some attribute it to differential rates of offending by black and white youth, while others focus on differential treatment within the justice system—its existence has been well documented. Clearly, these two explanations are related, as “the same structural factors responsible for race differences in offending also contribute to race disparities in justice system responses” (Bishop 2005, p. 64). While efforts to change the conditions of racial inequality that contribute to differential rates of offending occur largely outside the justice system, attempts to make justice system processing more equitable are also needed. This paper focuses on the latter through an examination of racial differentials in pretrial detention among youth charged with violent and serious offenses in an urban county in Michigan.

In a review of the literature examining the role of race in juvenile justice processing, Bishop (2005) argues that “the

---

J. J. Shook (✉) · S. A. Goodkind  
University of Pittsburgh, 2117 Cathedral of Learning, Pittsburgh,  
PA 15260, USA  
e-mail: jes98@pitt.edu

S. A. Goodkind  
e-mail: sag51@pitt.edu

issue is no longer simply *whether* whites and youth of color are treated differently. Instead, the preeminent challenge for scholars is to explain *how* these differences come about” (p. 24, emphases in original). This paper contributes to this effort by including an analysis of geography as a means by which racial differences manifest. Prior research suggests that youth are more likely to be detained in urban areas than in suburban and rural ones (e.g., Feld 1991). At the same time, research has suggested that the more formalized justice system practices found in urban areas may lead to less discretion, and therefore less racial discrimination (Smith et al. 1984). Using data from a Michigan county with both urban and suburban areas, we assess the influence of race, geography, and their interaction on detention decisions, while controlling for relevant legal factors (e.g., prior history of justice system involvement, offense information). Consequently, the article adds to understandings of how racial disproportionality is produced by showing how race and geography interact to influence the detention of serious and violent juvenile offenders.

## Literature Review

Scholars have argued that the effects of racial disproportionality are cumulative, as racial disproportionality at earlier stages of justice system involvement compounds to result in more extensive disproportionality at later stages (Pope and Feyerherm 1993; Sampson and Lauritsen 1997). Thus, it is important to investigate all decision-making points. The decision whether to utilize pretrial detention has significant repercussions for later stages of juvenile justice processing. Youth who are detained are more likely to be formally charged (Bishop and Frazier 1988) and to be adjudicated and committed to out-of-home placement (Bishop and Frazier 1992; Bortner and Reed 1985; Frazier and Bishop 1985; McCarthy and Smith 1986; McGuire 2002). In the county examined in the analyses presented here, only youth who are detained are considered for prosecutorial waiver, demonstrating the importance of detention in enabling certain possibilities and precluding others.

Although a number of studies have found that youth of color, particularly black youth, are more likely to be detained than similarly situated white youth (Armstrong and Rodriguez 2005; Bishop and Frazier 1996; Bortner and Reed 1985; Harms 2002; McGuire 2002; Secret and Johnson 1997; Wordes et al. 1994; Wu 1997; Wu et al. 1997; but see Rodriguez 2007), there is very little understanding of the means by which disproportionality occurs. Three possible avenues have begun to be examined—the first is related to youths’ attitude and character as assessed by justice system personnel, the second is related to

judgments about adequate parental supervision and/or school and work involvement, and the third is related to what some have called “justice by geography.”

While not specifically focused on the detention decision, the work of Bridges and Steen (1998) demonstrates the tendency of court officials to attribute black youths’ criminal behavior to negative attitudinal and personality traits and that of white youths to external factors such as poverty and family problems. They further illustrate how individual attributions lead to assessments of greater risk of reoffending and harsher sentencing recommendations, thus revealing how these attributions mediate the relationship between race and justice system outcomes. It is possible that similar processes are at work in detention decisions, although there is, as of yet, no empirical research demonstrating this (but see Bell and Lang 1985 for preliminary work in this area). There is work, however, linking assessments of parental and school supervision to detention decisions (e.g., Wu et al. 1997). In particular, the absence of a father in the home, a family characteristic more common among black families than white (The Annie E. Casey Foundation 2009), is often interpreted to indicate a lack of adequate parental supervision. Similarly, because black youth are more likely than white youth to be out of school (The Annie E. Casey Foundation 2009), they may be adversely affected by the influence of school involvement on detention decisions.

In terms of geography as a means by which race affects detention decisions, the research is somewhat contradictory. Feld (1991) found that pretrial detention is used more than twice as often in urban counties as in suburban and rural ones. He contends that this is because urban counties have greater levels of bureaucratization and engage in more formal social control. As a result, they have a greater availability of detention bed space, which corroborates the work of Krisberg et al. (1984), who found best predictor of pretrial detention to be bed space. Because black youth are more likely to live in urban areas, this could help to explain their greater likelihood of pretrial detention. At the same time, others researchers have suggested that a higher degree of bureaucratization may lead to less racial bias in urban areas because there are more formal policies in place which allow for less discretion by decision makers (see, for example, Smith et al. 1984; Wilson 1968).

Most work looking at the impact of geography has compared counties, categorizing them as urban, suburban, or rural (e.g., Feld 1991) or utilizing other county-level data. Examples of the latter include the work of Sampson and Laub (1993), in which they used measures of racial inequality and concentration of “underclass poverty” within a county as contextual level predictors of juvenile justice decisions, finding that context has a greater effect on the pretrial detention and subsequent placement of

blacks than whites within juvenile justice. They interpret this as related to the symbolic threat that middle-class whites perceive blacks, particularly those living in conditions of poverty and inequality, to represent. Similarly, Armstrong and Rodriguez (2005) found that counties with higher proportions of people of color were more likely to utilize pretrial detention for youth.

However, an intra-county racial comparison is needed to tease out the potentially contradictory influences of geography mentioned previously (see Rodriguez 2007 for an intra-city analysis of the effects of race and geographical contextual influences on detention decisions). As we discuss in more detail subsequently, the county in this study would be classified in these prior studies as urban, as it contains a large city. Yet, it also contains a significant suburban portion that is geographically and racially very separate from the city (in that the vast majority of the city's residents are black, while the suburban part of the county is majority white). Thus, intra-county research provides an opportunity to examine geographical differences in treatment within a county that is itself highly segregated.

Most work examining racial disproportionality in pretrial detention has focused on detention as a court decision; however, as the work of Wordes et al. (1994) makes clear, the decision about whether or not to detain a youth can also be made by police. Because of the severity of the offenses of the youth in our data set, all are offenses for which a youth, if brought by police to the detention facility in this county, should be automatically detained pending preliminary hearing. Thus, in our analyses, the pretrial detention decision is primarily an indicator of police behavior. While much research has examined racial disproportionality in court processing, there has been relatively little research focused on police decisions, including the decision to detain or release youth once they have been arrested (Bishop 2005). Yet, as Conley (1994) argues, “what happens between youths of color and police...is perhaps the most important factor contributing to racial and ethnic disproportionality” (p. 136).

In reviewing the extant research on the police–juvenile encounter, Bishop (2005) concluded that police tend to treat white youth and youth of color similarly when they are suspected of serious crimes, but that differential treatment is largely manifest when “the threat is less serious” (p. 45). Our study is important because it provides an opportunity to reexamine the potential effects of youths' race on police decisions with regard to youth suspected of serious crimes. In this and other ways, the analyses presented here address a number of limitations of the research on racial disproportionality in the juvenile justice system. Specifically, these analyses have three main goals: 1) to document racial differentials (if any) in pretrial detention among youth charged with violent and serious offenses; 2)

to enhance the sparse literature on the relationship between police decisions and racial disproportionality in the juvenile justice system, and 3) to contribute to understandings of how racial disproportionality occurs by including an analysis of geography and its interaction with race.

## Methods

### Sample

The population for this study ( $N = 1,302$ ) includes all youth in an urban county in Michigan who were charged with an offense included in the prosecutorial direct file provision for waiver to the criminal court between 1997 and 2000.<sup>1</sup> This county presents an interesting context for examining the role of race in detention decisions because it is highly segregated, with a large percentage of people of color, particularly blacks, living in the central city, and there is tension between the central city and suburban area that revolves, at least in large part, around race. As noted previously, the offenses for which youth in the sample are charged are all automatic admission to detention offenses under state law, thereby presenting an opportunity to examine police referrals to detention. Further, they provide an opportunity to examine racial differences in detention admissions among a sample of youth tried with violent and serious offenses.

### Data

The data set includes information pertaining to detention status, prior history in the juvenile justice system, prior offense history, present offense, age at the time of the offense, race/ethnicity, gender, and residence of the youth, and the police department making the arrest that was obtained from the court's information management system. Youth charged with murder, kidnapping, and arson are excluded from the analyses presented here because all of these youth were detained. Further, only youth identified as white or black are included in these analyses because of the small number of youth of other racial and ethnic groups. This results in a sample of 1,195 youth used in these analyses. Table 1 presents the descriptive statistics for this sample.

<sup>1</sup> Offenses in this provision include first degree murder; second degree murder; assault with intent to commit murder; assault with intent to maim; first degree criminal sexual conduct; armed robbery; carjacking; kidnapping; arson (burning of a dwelling house); assault with intent to commit great bodily harm; assault with intent to rob; first degree home invasion; bank, safe, or vault robbery; escape or attempted escape from a medium or high-security juvenile facility; manufacture, sale, delivery, or possession of 650 grams or more of a schedule 1 or 2 narcotic or cocaine; or any attempt, solicitation, or conspiracy to commit any of the crimes previously listed.

**Table 1** Descriptive statistics

	Percentage	Mean (SD)	<i>N</i>
<b>Demographic information</b>			
Male	93		1,195
Female	7		1,195
Black	81		1,195
White	19		1,195
Age		14.76 (1.85)	1,195
<b>Prior history information</b>			
Prior probation	20		1,195
Prior commitment	9		1,195
Prior petitions		1.58 (2.31)	1,195
Prior offense	10		1,194
<b>Current offense information</b>			
Robbery	37		1,195
Criminal sexual conduct (CSC)	41		1,195
Assault	11		1,195
Mixed	3		1,195
Other offenses	8		1,195
Counts		1.58 (1.37)	1,193
Weapon charge	18		1,195
<b>Geographical information</b>			
City police department	73		1,129
Suburban police department	27		1,129
City youth residence	79		1,170
Suburban youth residence	21		1,170
<b>Dependent variable</b>			
Detained	77		1,195

## Measures

Detention is measured dichotomously, where 1 = detained and 0 = not detained. Race is also represented with a dichotomous variable (black) with 1 = black and 0 = white. Youth's residence is represented by a dichotomous variable (city) that indicates whether a youth resides in the city or suburbs, with 1 = city and 0 = suburbs. As discussed previously, most examinations of geographical variation in juvenile court processing have used county as the unit of analysis (e.g., Armstrong and Rodriguez 2005; Feld 1991; Sampson and Laub 1993). There are, however, reasons to believe that geographical differences exist within counties with regard to the processing of youth (Rodriguez 2007). Table 2 shows that there are differences in the detention of youth based on whether they reside in the suburbs or city.<sup>2</sup> Further, there are differences based on

<sup>2</sup> In addition to substantive reasons for coding geography as residence in urban or suburban portions of the county, we code this way because we are unable to use a finer unit of analysis (e.g., neighborhood or city of residence) due to the small number of cases in each unit. An examination of cases by city of residence indicates that

**Table 2** Percentage of youth detained by race, residence, and police (*N* = 1,104)

	City police	Suburban police	Total
Black city youth	82	86	82
Black suburban youth	81	75	77
White city youth	85	89	86
White suburban youth	71	44	46
Total	81	64	77

whether the police department making the arrest is within the city or suburbs (this variable is coded dichotomously, where 1 = city police department and 0 = suburban police department). Given the racial and spatial differences in detention and the tensions between the city and suburbs, this coding provides an important means to examine of the role of race, geography, and police on decisions to detain violent and serious juvenile offenders.

In addition to race, residence, and police department, a number of additional variables are included in the analysis to account for differences in demographic, prior history, and offense characteristics of youth. Age is a continuous variable that measures the age of each youth at the time of the offense, and gender is coded dichotomously with 1 = male and 0 = female. Prior history consists of four variables that measure the extent and severity of a youth's prior programming and offending behavior. These include dichotomous measures of whether a youth was previously committed to out-of-home placement and whether a youth was previously placed on probation, which provide two measures of prior juvenile court intervention. Total number of prior petitions is entered as a continuous variable and measures the extent of a youth's previous contacts with the court. Whether a youth was previously referred to the court for one of the serious waivable offenses studied here provides a dichotomous measure of the severity of prior offending behavior.

Characteristics of the present offense are included to account for the type and severity of offending. Offense types are grouped into five categories—robbery/carjacking, first degree criminal sexual conduct, serious assaults (assault with intent to murder, assault with intent to maim, attempted murder), mixed offenses (instances, for example, where a youth is charged with robbery and assault with intent to murder or criminal sexual conduct and assault with intent to murder<sup>3</sup>) and other offenses (assault with

Footnote 2 continued

detention practices within the suburban jurisdictions are similar (in that all have similar rates of detention overall).

<sup>3</sup> Although all youth charged with murder and some other offense were included in the murder category and thus excluded from these analyses..

intent to rob, assault with intent to commit great bodily harm, first degree home invasion, etc.). These offenses are entered into the model as dummy variables with robbery as the comparison (omitted) offense. Number of counts is a measure of offense seriousness that captures the number of charges of the enumerated offense(s) in each petition. Weapon charge is entered as a dichotomous variable and indicates whether a youth was charged with a weapon offense in addition to the enumerated offense(s).

## Results

We begin by presenting bivariate correlations for the variables of interest, and then present the results of a binary logistic regression analysis used to predict detention. Table 3 presents the bivariate correlations for the dependent and independent variables. Detention is correlated with race, place of residence, and police department. These three variables are themselves correlated, which suggests that multivariate analysis is needed to better understand the net effects of race, residence of youth (city vs. suburbs), and location of police department (city vs. suburbs). It is possible that that race interacts with residence and police department to influence detention decisions and further examination of these interactions is necessary to identify means by which race influences detention decisions. As expected, detention is also related to a number of legal factors, including all four measures of prior justice system involvement (prior probation, prior commitment to out-of-home placement, number of prior petitions, and prior referral for a waivable offense) and current offense characteristics (such as total number of counts, robbery/car-jacking charge, and weapon offense charge), suggesting that a range of other factors also influence whether or not a youth is detained.

Table 4 presents the results of binary logistic regression analyses of demographic, legal, and geographical factors on detention. Many analyses of racial disproportionality in detention decisions have not included geographical measures, such as youths' residence and police location. Thus, in order to replicate other research in this area, we ran an initial model with just demographic, prior history, and offense characteristics as predictors. Column 1 reports the main effects of these variables. Age is significantly related to detention as youth faced a 29% increase in their odds of being detained for each year in age. With regard to prior history characteristics, each additional prior petition increased the odds of detention by 47%. A number of offense characteristics were related to detention, as youth charged with robbery were significantly more likely to be detained than youth in all of the other offense groups. Further, each

additional count of an enumerated offense increased the likelihood of detention by 41% and youth charged with a weapon offense were 3.6 times more likely to be detained. These results indicate the important of specific offense characteristics—type and severity—on detention decisions. Race was also strongly related to detention in this model as black youth were more than 3 times as likely to be detained as white youth, while controlling for the relevant legal factors.

Given the literature indicating that youth are more likely to be detained in urban than suburban areas (e.g., Feld 1991), we thought that perhaps some of the racial difference in likelihood of detention could be explained by which police were making the arrest. Thus, we entered a variable indicating the location of the arresting police department (city vs. suburbs) in the second model (Column 2), which suggests that city police are more likely than suburban police to detain youth. Black youth are still more likely, in this model, to be detained than white youth, although the racial differential is smaller.

At the same time, because most of the research examining the effects of geography on detention has been inter-county—in which counties are designated as urban, suburban, or rural, the role of geography is not clear. Is it the location of the arresting police or is it where the youth resides that makes a difference? These two factors are highly correlated in our data set, but not perfectly. When youth's residence is added to the model (Column 3), however, neither race nor police department is a significant predictor of detention. Instead, residence is significant, with youth from the central city more than twice as likely to be detained as youth from the suburban areas. With the exception of mixed offenses being no longer significant in these models, the demographic, prior history, and offense characteristic variables are not affected by the addition of police department or youth's residence.

Because of the complicated ways in which race, residence, and location of police department overlap in our data (see Table 2), and because of the extensive literature on the importance of race in detention decisions, we decided to test for interactions among these variables. We tested all possible interactions of these three variables, including race and residence, race and police department, residence and police department, and a three-way interaction of race, residence, and police department. We found the interaction of race and residence to be a significant predictor of detention ( $p < .05$ ), but not any of the other possible interactions. To interpret the significance of this interaction term, we plotted the slopes of the likelihood of detention by residence separately for white and black youth. We used the predicted probabilities of detention for 15-year-old men with no prior probation or commitment,

**Table 3** Bivariate correlations of detention, predictors, and control variables ( $N = 1,104-1,195$ )

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Detained																
2. Male	.02															
3. Age	.40***	.00														
4. Prior prob.	.23***	.09**	.22***													
5. Prior commit.	.15***	.05	.16***	.26***												
6. Prior petitions	.30***	.09**	.33***	.54***	.44***											
7. Prior offense	.17***	.07*	.15***	.18***	.19***	.33***										
8. Robbery	.32***	.00	.30***	.18***	.08***	.24***	.04									
9. CSC	-.42***	.09**	-.42	-.23***	-.14***	-.33***	-.14***	-.64***								
10. Assault	.08**	-.17***	.10**	.05	.05	.05	.06*	-.27***	-.29***							
11. Mixed	.05	.03	.08*	.01	.03	.06	.02	-.14***	-.15***	-.06*						
12. Other off.	.06*	.03	.07*	.04	.00	.06*	.09**	.23	-.24	-.10***	-.05					
13. Counts	.11***	.05	.07*	-.0	.14***	.05	.05	-.08**	-.07**	.11***	.28***	-.04				
14. Weapon	.23***	.02	.22***	.12***	.12***	.18***	.11***	.14***	.14***	.22***	.10***	.11***	.12***			
15. Black	.22***	-.03	.01	.03	.04	.05	.05	.18***	.18***	.04	.01	-.05	-.01	.10**		
16. City police	.18***	-.01	.01	.02	-.01	.03	.06*	.13***	.13***	.01	-.01	-.08**	-.03	.04	.54***	
17. City resid.	.25***	-.01	.02	.04	.02	.08**	.06*	.16***	.16***	.04	.00	-.05	.01	.09**	.61***	.65***

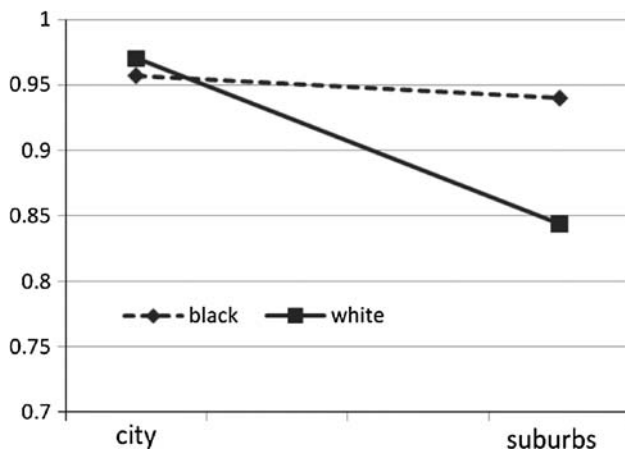
\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$



**Table 4** Logistic regression analyses on detention ( $N = 1,101$ )

	Column 1		Column 2		Column 3	
	B (SE)	Odds ratio	B (SE)	Odds ratio	B (SE)	Odds ratio
Male	.23 (.34)	1.26	0.20 (.35)	1.22	.21 (.35)	1.23
Age	.26 (.05)	1.29***	.26 (.05)	1.30***	.27 (.05)	1.31***
Prior probation	.53 (.41)	1.69	.52 (.41)	1.67	.57 (.42)	1.77
Prior commitment	1.03 (.80)	1.62	1.15 (.81)	3.15	.95 (.81)	2.57
Prior petitions	.38 (.11)	1.47***	.38 (.11)	1.46**	.37 (.11)	1.45**
Prior offense	1.26 (.77)	3.52	1.16 (.77)	3.19	1.21 (.78)	3.35
CSC	-1.60 (.26)	.20***	-1.60 (.26)	.20***	-1.54 (.26)	.22***
Assault	-.93 (.39)	.40*	-.94 (.39)	.39*	-.91 (.39)	.40*
Mixed	-1.33 (.68)	.27*	-1.24 (.68)	.29	-1.12 (.69)	.33
Other offenses	-1.03 (.42)	.36*	-.95 (.42)	.39**	-.92 (.42)	.40*
Counts	.34 (.113)	1.41**	.34 (.11)	1.41**	.33 (.11)	1.39**
Weapon charge	1.28 (.46)	3.60**	1.29 (.46)	3.62**	1.23 (.47)	3.42**
Black	1.18 (.21)	3.25***	.76 (.27)	2.14**	.50 (.29)	1.65
City police			.62 (.25)	1.86*	.21 (.31)	1.23
City					.79 (.32)	2.21*
Chi square	389.162***		395.268***		401.435***	
-2 log likelihood	800.181		794.076		787.909	
Cox and Snell $R^2$	0.298		0.302		0.306	
Nagelkerke $R^2$	0.450		0.457		0.463	

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$



**Fig. 1** Predicted probabilities of detention for a 15-year-old men with 2 prior petitions and 2 life offense counts charged with robbery

two prior petitions, no weapon offense, no prior life offense, and two life offense counts.<sup>4</sup> As shown in Fig. 1, black youth from the city and suburbs are detained at approximately the same rate, while white youth from the suburbs are significantly less likely to be detained than white youth from the city (and than black youth from anywhere in the county). Interestingly, white youth from

<sup>4</sup> These characteristics were chosen because they represent the average or most common for each variable.

**Table 5** Predicted probabilities of detention for a 15-year-old men with 2 prior petitions and 2 life offense counts

	Robbery (%)	CSC (%)	Assault (%)
<i>City police</i>			
African American (city)	96	83	90
White (city)	97	88	93
African American (suburbs)	94	77	86
White (suburbs)	84	54	68
<i>Suburban police</i>			
African American (city)	95	80	88
White (city)	96	85	91
African American (suburbs)	93	74	83
White (suburbs)	82	49	63

the central city are the group most likely to be detained, although their rate of detention is similar to those of black youth regardless of where they reside.

To further elucidate the effects of the race by residence interaction, Table 5 presents the predicted probabilities of detention for 15-year-old men with no prior probation or commitment, two prior petitions, no weapon offense, no prior life offense, and two life offense counts, separately for those charged with robbery, criminal sexual conduct, and assault. The table is further split based on whether the youth are arrested by the police from the central city or the suburbs.

Whereas black youth from the city, white youth from the city, and black youth from the suburbs all face a similar probability of detention, white youth from the suburbs have a significantly lower probability of detention, regardless of offense. This relationship holds whether the youth is arrested by police from the central city or from the suburbs. Consequently, it is apparent that race and residence interact in favor of white youth from the suburban portion of the county.

## Discussion

Racial disproportionality in the justice systems is a tremendously perplexing and troubling social problem that has substantial effects on individuals, families, and communities. Although the existence of racial disproportionality in the justice systems has been well established, debate remains about its cause. A substantial body of research suggests that at least some of this disproportionality results from differential treatment; however, relatively little is known about how it is produced. Detention is a particularly important point in the juvenile justice process because decision making is a cumulative process where subsequent decisions build upon those that have come before. A number of studies have found a relationship between detention and severity of subsequent processing decisions (Bishop and Frazier 1988, 1992; Bortner and Reed 1985; Frazier and Bishop 1985; McCarthy and Smith 1986; McGuire 2002), suggesting that detention might act as a gateway to more intensive intervention.

One goal of this paper was to extend understandings of the extent to which racial disproportionality exists in the police treatment of violent and serious juvenile offenders. Although numerous studies have found race differences in their treatment of less serious juvenile offenders, some have concluded that there is little racial disparity in police treatment of violent and serious juvenile offenders, because of the heightened level of threat they present (Bishop 2005). Our findings challenge this conclusion, demonstrating racial disparities in the treatment of youth charged with offenses for which they are eligible for transfer to the criminal court. Specifically, controlling for relevant legal factors, black youth were still more than three times as likely as white youth to be detained. Thus, we have extended the relatively sparse literature on racial disproportionality and police decisions, and replicated previous work documenting racial discrepancies in the likelihood of pretrial detention within the juvenile justice system.

The primary goal of this article, however, was not simply to identify whether racial disproportionality in detention exists among violent and serious juvenile offenders but to further examine how it is produced. In particular, we were interested in the interaction between

race and geography and its influence on detention outcomes, as prior research has found racial variation across counties on a number of juvenile court outcomes (Armstrong and Rodriguez 2005; Sampson and Laub 1993). Because these outcomes are also likely to differ within as well as across counties, we examined intra-county differences in pretrial detention through a focus on youth's residence in the central city compared to the suburbs.

As noted, we found significant racial disproportionality in detention decisions for violent and serious juvenile offenders. Whereas 82% of black youth were detained, only 58% of white youth were detained. Further, we found geographical differences, as 83% of youth within the city were detained compared to 57% from the suburbs. Bivariate examination also showed a difference by police department, as youth arrested by city police departments were more likely to be detained than those arrested by suburban police (81 vs. 64%). However, the multivariate analysis further specified the relationships among race, geography, and police department, demonstrating that youth's place of residence is more relevant to the detention decision than location of arresting police. We found a significant interaction between race and youth's residence and the plot of the slope of the interaction term showed the white youth from the suburbs were the least likely group to be detained. The predicted probabilities of detention showed that the likelihood of detention was, in fact, substantially less for white suburban youth than for black youth in the city or suburbs, for a variety of offenses. Interestingly, white youth from the city were the group most likely to be detained, although the differences in the predicted probabilities were small between white and black youth from the city.

These findings reveal that even when accounting for demographic, prior history, and offense characteristics, race matters in detention outcomes for violent and serious offenders, but that the effects of race are moderated by geography. Feld (1991) found that detention is more common in urban areas, which he attributed in part to the increased availability of detention beds in urban areas. However, in our case, when county bed availability is held constant, we still find that white youth from the suburban portions of the county are treated differently. Prior research has suggested that police in the city, because they operate within a greater level of formalized bureaucracy, might be more even handed. Yet, these analyses reveal little difference in detention decision making by the location of police department; instead, they demonstrate that what makes a difference is where the youth resides.

In many ways, these results support Sampson and Laub's (1993) symbolic threat hypothesis, in that black youth are perceived as a threat regardless of where they live—city or suburbs (see also Armstrong and Rodriguez 2005). Geography has a different effect on white youth,



though, as white youth from within the city are perceived similarly to black youth (and detained at similar, or higher, rates). However, white youth who live in the suburbs are not perceived as a comparable threat. Thus, geography is a means by which race helps to shape the perceptions of justice system actors. In contrast to the work of Sampson and Laub (1993), who found that context matters more for the treatment of black youth, our research indicates that, in some cases, context may exert a greater influence on the treatment of white youth. These findings suggest that future research on racial disproportionality in detention and other court processing decisions should account for how race and geography interact in influencing outcomes and continue to explore both inter-county and intra-county variation.

Although our analyses cannot identify the specific reasons for these results, there are a number of potential explanations for this differential treatment. Black youth might be perceived as exhibiting more negative attitudinal and personality traits (e.g., more aggressive, less cooperative) than white youth from the suburbs, leading to greater attributions of dangerousness or risk (Bridges and Steen 1998). They might also be viewed as coming from situations in which they lack adequate parental supervision or school involvement, leading to similar perceptions of risk. White youth from the city appear to be perceived similarly to black youth in terms of the level of threat they present, behaviorally and/or in terms of the assumptions about their family or school situations. This may be because they live in a city that is predominantly black or because they live in a city with high rates of poverty, unemployment, and social disorganization. White youth from the city may also be likely to associate with black youth (or be perceived as having such associations), thereby exhibiting similar characteristics or suggesting a similar level of risk. Another possible explanation for the differential treatment of white youth from the suburbs is that police are acting protectively toward them, based on concern that they might be at risk if held in the county detention facility. Future research needs to explore these and other possible explanations in order to further specify *how* racial disproportionality is produced in detention decisions.

One of the limitations of our analyses is that we do not have more specific demographic information about youth, such as family structure, income level, and school performance, which might help further delineate this process. However, we were able to obtain data on family structure and percentage of families living in poverty for the Census tract within which each youth resides. Overall, black youth from the city live in Census tracts with the largest percentage of female-headed households (53%) and white youth from the suburbs in tracts with the lowest percentage (20%). White youth from the city and black youth from the suburbs live in tracts with about the same percentage of single family households (36 and 32%, respectively, which

is less than black youth from the city but more than white youth from the suburbs). If perceptions of adequate parental supervision were the key factor in police decision making, this would suggest that black youth from the city would be more likely to be detained than black youth from the suburbs or white youth from the city, which is not what we found. In terms of income, black and white youth in the city live in Census tracts with very similar percentages of households living below the poverty line (31 and 30%, respectively). In the same vein, black and white youth in the suburbs also live in Census tracts with similar percentages of households living below the poverty (16 and 11%, respectively). The difference here appears to be more a function of residence (city vs. suburbs) than of race. Once again, this pattern does not explain the interaction we found between race and residence.

To further explore whether the fact that white youth from the suburbs were less likely to be detained was related to perceptions about family structure or income level, we ran our regression analyses with the average percentage of female-headed households, the average percentage of families living below the poverty line, and the average percentage of black residents in each youth's Census tract as additional control variables. The inclusion of these variables did not change the results, with the interaction between race and geography remaining significant. We do not include these variables in the analyses presented mainly because we were not able to match the address with its Census tract for about 17% of the youth in our sample, resulting in more missing data than we would like in our analyses.

In addition, the absence of information on each youth's family structure and school performance is mitigated by the fact that we do employ a variety of prior history variables and that it is likely that police officers do not have extensive background information on each youth prior to determining whether to take him or her to the detention facility. Instead, they are likely to make attributions based on the limited information they have when making the arrest. Further, because we are talking about detention for serious and violent offenses, there is a case to be made that family stability is (or should be) less relevant. Clearly, most of these youth are considered "risky" as 83% of youth from the city and 57% of the youth from the suburbs are detained and these offenses are all included in the prosecutorial discretion waiver provisions.

This raises one of the strengths of the analysis—its focus on police behavior. Because these are all automatic admission offenses, intake workers do not have discretion in deciding whether or not to admit. Instead, differences in detention outcomes are likely the result of police referrals to detention, allowing us to illustrate the role that police decision making plays in producing racial discrepancies. Another key strength of the analysis is that we employ a

variety of controls for the type and severity of the offense. Many studies of racial disparities in detention use broad offense categories, but we are able to use specific offense groupings and to control for other offense severity measures (number of counts and weapon charge). Consequently, we are able to control for more aspects of offense seriousness that may be related to detention decisions.

Scholars of racial disproportionality in the justice systems have emphasized the need to study multiple decision-making points. Given the cumulative effect of justice system decision making, racial disproportionality in detention is particularly problematic. The analyses presented here indicate that some of the variation in the use of pretrial detention for violent and serious juvenile offenses can be explained by the interaction of race and residence. This suggests that perceptions of threat, danger, or need for control are based not only on race but also on assumptions and beliefs associated with place. In our analyses, black youth are treated relatively uniformly, regardless of where they live. However, geography matters for how police differentiate among white youth, who seem more likely to be perceived as risky or in need of control when they live in the city. Future research on racial disproportionality in the justice systems should continue to examine the role that place plays in attributions of offenders and how it contributes to decisions such as detention.

## References

- Armstrong, G. S., & Rodriguez, N. (2005). Effects of individual and contextual characteristics on preadjudication detention of juvenile delinquents. *Justice Quarterly*, 22, 521–539.
- Bell, D., Jr., & Lang, K. (1985). The intake dispositions of juvenile offenders. *Journal of Research in Crime and Delinquency*, 22, 309–328.
- Bishop, D. M. (2005). The role of race and ethnicity in juvenile justice processing. In D. F. Hawkins & K. Kempf-Leonard (Eds.), *Our children, their children* (pp. 23–82). Chicago: University of Chicago Press.
- Bishop, D. M., & Frazier, C. E. (1988). The influence of race in juvenile justice processing. *Journal of Research in Crime and Delinquency*, 25, 242–263.
- Bishop, D. M., & Frazier, C. E. (1992). Gender bias in juvenile justice processing: Implications of the JJDP Act. *Journal of Criminal Law & Criminology*, 82, 1162–1186.
- Bishop, D. M., & Frazier, C. E. (1996). Race effects in juvenile justice decision-making: Findings of a statewide analysis. *Journal of Criminal Law & Criminology*, 86, 392–414.
- Bortner, M. A., & Reed, W. L. (1985). The preeminence of process: An example of refocused justice research. *Social Science Quarterly*, 66, 413–425.
- Bridges, G. S., & Steen, S. (1998). Racial disparities in official assessments of juvenile offenders: Attributional stereotypes as mediating mechanisms. *American Sociological Review*, 63, 554–570.
- Conley, D. J. (1994). Adding color to a black and white picture: Using qualitative data to explain racial disproportionality in the juvenile justice system. *Journal of Research in Crime and Delinquency*, 31, 135–148.
- Feld, B. C. (1991). Justice by geography: Urban, suburban, and rural variations in juvenile justice administration. *Journal of Criminal Law & Criminology*, 82, 156–210.
- Frazier, C. E., & Bishop, D. M. (1985). The pretrial detention of juveniles and its impact on case disposition. *Journal of Criminal Law & Criminology*, 76, 1132–1152.
- Harms, P. (2002). *Detention in delinquency cases, 1989–1998*. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
- Krisberg, B., Litsky, P., & Schwartz, I. (1984). Youth in confinement: Justice by geography. *Journal of Research in Crime and Delinquency*, 21, 153–181.
- McCarthy, B. R., & Smith, B. I. (1986). The conceptualization of discrimination in the juvenile justice process: The impact of administrative factors and screening decisions on juvenile court dispositions. *Criminology*, 24, 41–64.
- McGuire, M. D. (2002). Cumulative disadvantage as an explanation for observed disproportionality within the juvenile justice system: An empirical test. *Juvenile and Family Court Journal*, 53, 1–17.
- Pope, C. E., & Feyerherm, W. H. (1993). *Minorities and the juvenile justice system*. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
- Puzzanchera, C. (2009). *Juvenile arrests 2007*. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
- Rodriguez, N. (2007). Juvenile court context and detention decisions: Reconsidering the role of race, ethnicity, and community characteristics in juvenile court processes. *Justice Quarterly*, 24, 629–656.
- Sampson, R. J., & Laub, J. H. (1993). Structural variations in juvenile court processing: Inequality, the underclass, and social control. *Law & Society Review*, 27, 285–311.
- Sampson, R. J., & Lauritsen, J. L. (1997). Racial and ethnic disparities in crime and criminal justice in the United States. *Crime and Justice*, 21, 311–374.
- Secret, P. E., & Johnson, J. B. (1997). The effect of race on juvenile justice decision making in Nebraska: Detention, adjudication, and disposition, 1988–1993. *Justice Quarterly*, 14, 445–478.
- Sickmund, M. (2009). *Delinquency cases in juvenile court, 2005*. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
- Smith, D. A., Visher, C. A., & Davidson, L. A. (1984). Equity and discretionary justice: The influence of race on police arrest decisions. *The Journal of Criminal Law and Criminology*, 75, 234–249.
- The Annie E. Casey Foundation. (2009). KIDS COUNT Data Center. Retrieved June 29, 2009 from <http://www.kidscount.org>.
- Wilson, J. Q. (1968). *Varieties of police behavior: The management of law and order in eight communities*. Cambridge, MA: Harvard University Press.
- Wordes, M., Bynum, T. S., & Corley, C. J. (1994). Locking up youth: The impact of race on detention decision. *Journal of Research in Crime and Delinquency*, 31, 149–165.
- Wu, B. (1997). The effect of race and juvenile justice processing. *Juvenile & Family Court Journal*, 48, 43–52.
- Wu, B., Cernkovich, S., & Dunn, C. S. (1997). Assessing the effects of race and class on juvenile justice processing in Ohio. *Journal of Criminal Justice*, 25, 265–277.