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Racial and Ethnic Disparities in the Police Handling of Juvenile Arrests

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Executive Summary

Past research on disproportionate minority contact (DMC) in juvenile justice routinely demonstrates that members of racial and ethnic minority groups are over-represented at multiple stages of the juvenile justice system (Cruchfield, Fernandes, & Martinez 2010; Engen, Steen and Bridges 2002; Leiber 2002; Pope, Lovell, & Hsia 2002; Sampson & Lauritsen 1997). For example, Hispanic/Latino youth are placed in residential facilities at a rate that is 1.3 times greater than their representation in the population. Black representation in juvenile residential placement facilities is nearly three times that of their representation in the population (Puzzachera, Slatdky, & Kang 2013; Sickmund, Sladky, Kang, & Puzzachera 2013). Similar disparities are also seen in earlier stages of the juvenile justice system—Black and Hispanic/Latino adolescents are more likely than Whites to have had contact with the police and to be arrested (Cruchfield, Skinner, Haggarty, McGlynn, & Catalano, 2009). This is troubling given that early contact with the police was found to increase the odds of further contact with the police in later adolescence.

Although well-supported empirically, limitations on research design and sampling methodology often restrict the implications of these studies. The present study integrates and extends research findings on DMC in the juvenile justice system by using the National Incident-Based Reporting System (NIBRS) to examine the effects of race and ethnicity and contextual factors on post-arrest handling decisions by the police. The structure of NIBRS allows for the exploration of jurisdictional variation in the treatment of juvenile arrestees, as well as an assessment of whether legal characteristics, extralegal factors and social context help to explain ethnic disparities in the police handling of youth.

Our findings suggest that:

- **DMC was related to the type and severity of the charges faced by juveniles.**
  - Individuals with less severe charges faced increased DMC, such that Hispanic/Latino juveniles were 10% more likely to be referred to authorities and White juveniles were 16% less likely to be referred.
  - DMC was not observed for juveniles with more severe charges, including violent, weapons, property, public order, and drug crimes.
For all charges, the effects of ethnicity and race on juvenile disposition were independent, and no differences between White and non-White Hispanic/Latinos were observed.

**Referral of racial and ethnic minority girls to the juvenile justice system varied by severity of the charges.**

- Hispanic/Latina girls were less likely to be referred to the juvenile justice system compared to girls who were not Hispanic/ Latina, but only for less severe offenses.
- Compared to White girls, racial minority girls were less likely to be referred to the juvenile justice system for more serious charges.

**DMC varied across counties, but structural disadvantage was not significantly related to disposition.**

- Juveniles in less advantaged areas were not more likely to be referred to authorities than juveniles in more advantaged areas.

These findings contribute to the literature on racial and ethnic disparities in the juvenile justice system by focusing on an early stage in the decision-making process and by broadening the geographic scope of past studies (Duran & Posadas 2013; Freiburger & Burke 2011; Guevara, Boyd, Taylor, & Brown 2011; Moore & Padavic 2010). The findings highlight the way race and ethnicity influence post-arrest decision-making for less serious charges and point to the ongoing need to strive for equitable treatment of youth. Because even small disparities at this point may accumulate over subsequent levels, these results underscore the need to better understand arresting officer behaviors and attitudes and agency-level intervening processes that result in differential treatment by race and ethnicity.
Introduction

Nearly 30 years after federally supported efforts to address disproportionate minority contact (DMC), the overrepresentation of racial and ethnic minority youth in various stages of juvenile justice processing remains a longstanding issue (Davis & Sorensen, 2013b; Leiber, Bishop, & Chamlin, 2011; Piquero, 2008). For example, although Black youth represent 14% of the youth population in the U.S. in 2013 (Puzzanchera, Sladky, & Kang, 2015), they constitute 36% of delinquency cases processed in juvenile courts (Sickmund, Sladky, & Kang, 2015). The relationship between race and ethnicity and contact with the juvenile justice system, however, is complex. Studies show that the effects of race and ethnicity on juvenile justice system contact may vary by extralegal, incident-related, and contextual factors, including age and gender of youth, and social and neighborhood contexts (Bishop, Leiber, & Johnson, 2010; D’Allesio, Stolzenberg, & Eitle, 2002). However, despite the exponential growth in systematically investigating DMC, theoretical and methodological limitations remain, including lack of a credible measure of ethnicity and geographically limited samples of youth (Kempf-Leonard, 2007). Few studies have also examined DMC during the early stages of involvement with the law (e.g., post-arrest handling decisions) wherein substantial discretion is exercised by law enforcement actors. In this study, we addressed these critical gaps in the literature by utilizing data from the National Incident Based Reporting System (NIBRS), a reporting system based on the submission of crime information by law enforcement agencies, to examine the effects of race and ethnicity, as well as extralegal and contextual factors on post-arrest handling of juvenile cases by the police.

Theoretical Frameworks for Explaining DMC

Although the presence of DMC in the juvenile justice system is well-established, the mechanisms by which it exists remain unclear. Two theoretical frameworks generally guide the
assumptions and propositions associated with DMC. First, according to differential involvement hypothesis, DMC is primarily attributed to minority youth’s involvement in more criminal activity and serious offending (Leiber, 2002; Piquero, 2008; Tillyer & Engel, 2012). Proponents of this framework focus on the social and contextual factors that may contribute to minority youth’s increased involvement in crime. For example, low socioeconomic status, poor educational attainment, lack of employment, and disadvantaged neighborhood are among the common factors associated with greater likelihood of involvement in crime (Cottle, Lee, Heilbrun, 2001; Sampson & Groves, 1989; Kubrin & Wo, 2016). A significant proportion of racial and ethnic minority youth often experience such convergent and cumulative disadvantages, which may place them at an increased risk for offending (Ginwright & Cammarota, 2002). The differential involvement hypothesis, therefore, suggests that accounting for these extralegal and contextual factors would reduce or eliminate racial and ethnic disparities in justice processing (Davis & Sorensen, 2013a).

Comprehensive reviews of the literature, however, indicate that social and contextual factors alone cannot account for racial disparities in contact with the juvenile justice system (Bishop, 2005; Leiber 2002). Guided by conflict and social control theories (see Sampson & Groves, 1989), differential selection and processing hypothesis suggests that racial and ethnic stereotypes and profiling lead to disproportionate contact of minorities in the juvenile justice system (Leiber et al., 2011; Piquero, 2008). This framework aligns with the symbolic threat theory, which underscores the importance of perceptions of and attributions to delinquent behavior particularly among racial and ethnic minority youth (Tittle & Curran, 1988). Central to these theories is the notion that minorities are perceived as threats to the political and economic advancement of the dominant group (Blalock, 1967). Consistent with these assumptions are
findings from experimental and cross-sectional studies that document the effects of race and ethnicity on attributions to and perceptions of offender’s risk to reoffend and dangerousness. These studies indicate that racial and ethnic minority youth’s delinquencies are more likely to be attributed to character flaw and they are more likely to be perceived as dangerous and receive recommendations for harsher punishments (Graham & Lowery, 2005; Bridges & Steen, 1998; Gilliam & Iyengar, 2000).

Both the differential involvement and differential selection and processing hypotheses have been considered the backdrop of DMC research and have guided an understanding of how DMC might operate at different stages of juvenile justice processing. Although proposing various competing arguments, central to both frameworks is the notion that the effects of race and ethnicity on contact with the juvenile justice system do not happen in isolation.

**The Effects of Legal, Extralegal and Contextual Factors on DMC**

Differential involvement and differential selection and processing hypotheses underscore the importance of examining the contexts in which DMC may operate. For example, the effects of race and ethnicity may vary by legal factors such as crime severity. Research suggests that racial and ethnic disparities may be more evident in less serious crimes than more serious crimes. Black youth are more likely to be formally processed at intake than White youth for drug-related offenses; however, this finding is not true for person or property crimes (Bishop et al., 2010). During disposition, White youth are less likely to receive correctional placement for property crimes than their Black youth counterparts (Bishop et al., 2010). Scholars posit that these findings could be attributed to the greater decision-making discretion that legal actors typically have for less serious versus more serious offenses (Piquero, 2008). Further, consistent with differential selection and processing hypothesis, perceptions and attitudes of legal actors toward
racial and ethnic minority youth may influence how they respond to crime (Lurigio & Caroll, 1985), which may exacerbate DMC.

The extent to which race and ethnicity interact with extralegal factors associated with offending may also contribute to overrepresentation of racial and ethnic minority youth in the juvenile justice system. For example, although some studies suggest that racial and ethnic minority youth receive harsher treatment in the juvenile justice system regardless of gender (Leiber, Brubaker, & Fox, 2009), some studies also show that DMC may be more pronounced among racial and ethnic minority girls. Black girls compared to White girls are more likely to be recommended for formal processing (Bishop et al., 2010) and receive harsher dispositions, including commitment to correctional facility and transfer to adult court (Moore & Padavic, 2010). Hispanic/Latino girls also experience more severe dispositions such that they are more likely to be found delinquent than White girls even after accounting for important individual and case characteristics (Freiburger & Burke, 2011). These findings are consistent with the notion that intersecting subordinate identities may create a cumulative disadvantage for members of racial and ethnic minority groups (Samuels & Rose-Sheriff, 2008). Evidence to the contrary suggests, however, that Black girls relative to their White counterparts are less likely to receive court referral at intake (Leiber et al., 2011). In addition, racial and ethnic minority boys, arguably, may be at a greater disadvantage in various stages of juvenile justice processing than racial and ethnic minority girls simply due to the fact that boys compared to girls are more likely to engage in chronic delinquency (Miller, Malone, & Dodge, 2010).

**Limitations of Previous Research and Implications for the Current Study**

Although well-supported empirically, limitations on research design and sampling methodology often restrict the implications of these studies. For example, very few studies have specifically focused on exploring DMC among Hispanic/Latino youth. The Uniform Crime

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Reports (UCR), the leading source of crime and arrest statistics in the United States, does not include information about the ethnicity of offenders. Studies utilizing other administrative data sets that do not systematically capture ethnicity are also restricted to racial comparisons between White and Black youth, and in most cases, treat race and ethnicity as a single composite variable (e.g., Chauhan, Reppucci, Burnette, & Reiner, 2010; Peck & Jennings, 2016). This is problematic given that racial and ethnic minority groups may have different experiences of disparities in the justice system. For example, some studies suggest that although racial and ethnic minority youth experience disparities at various decision-making points in juvenile justice processing, such disparities are greater among Black than Hispanic/Latino youth (Bontrager, Bales, & Chiricos, 2005; Leiber, 2016; Wang & Mears, 2010; for counterarguments, see Steffensmeier & Demuth, 2000). However, to our knowledge, no research has examined the intersectionality of race and ethnicity at post-arrest decision-making by the police. Consistent with intersectionality theory (Samuels & Rose-Sheriff, 2008), it is possible that intersecting racial and minority identities would create a greater disadvantage in post-arrest handling decisions than intersecting dominant and minority race and ethnicity.

Many of the DMC studies are also geographically limited thereby restricting the generalizability of findings. Currently, NIBRS is the only large scale administrative criminal justice data collection that provides information about the ethnicity of suspects after an arrest has been made. Thus, NIBRS allows for a more nuanced examination of DMC by considering the main and interactive effects of race and ethnicity on post-arrest handling decisions by the police and also allow for the exploration of jurisdictional variation in handling of juvenile arrestees.

Finally, DMC research in juvenile justice processing has primarily focused on decisions made within the jurisdiction of a juvenile court (Bishop et al., 2010; Higgins, Ricketts, Griffit, &
Jirard, 2013; Leiber & Stairs, 1999). However, substantial decision-making discretion occurs even before a case reaches the juvenile court. As the primary source of delinquency referrals to juvenile court (Hockenberry & Puzzanchera, 2015), law enforcement officials (e.g., the police) exercise great discretion in case decision-making during and after an arrest. An arresting officer, for instance, may informally handle the arrest and divert the youth from further processing in the juvenile justice system. In such cases, a youth may be released with a warning or released into the custody of a parent or guardian. Alternatively, a police officer may decide to formally handle the arrest and refer the youth to the juvenile justice system. Thus, arrest marks a critical juncture of a youth’s contact with the legal system.

Studies that examined the effects of race and ethnicity on arrests have consistently shown that racial and ethnic minority youth are more likely to be arrested compared to White youth (Tapia, 2010). There is much uncertainty, however, on what happens after an arrest. Surprisingly, the effects of race and ethnicity on post-arrest handling decision by the police have received relatively less empirical attention. Because post-arrest handling decision by the police may determine the extent a youth may become deeply involved in the juvenile justice system, it is critical to examine how race and ethnicity may influence decisions made at this critical decision-making stage.

**Current Study**

This study integrates and extends research findings on DMC in the juvenile justice system. Specifically, we utilized NIBRS to examine the effects of race and ethnicity and contextual factors on post-arrest handling decisions by the police. Consistent with previous research, we hypothesized that racial minority and Hispanic/Latino youth would be more likely referred to the juvenile justice system compared to White and non-Hispanic/Latino youth, respectively, after controlling for extralegal and case-related variables (Bishop et al., 2010;
Higgins et al., 2013). We also hypothesized that DMC would be less pronounced for those who committed more severe types of crime and, conversely, that DMC would be stronger for less severe types of crime (Bishop et al., 2010; Piquero, 2008). Given the mixed findings on the interactive effects of race, ethnicity, and gender on juvenile justice processing (see Bishop et al., 2010; Leiber et al., 2011; Moore & Padavic, 2010), we did not formulate specific hypotheses for these variables.

**Method**

The goal of the current study is to investigate the degree of racial and ethnic disparity in the post-arrest handling of juveniles. The study utilized data from the National Incident-Based Reporting System (NIBRS) and the American Community Survey (ACS).¹ Data for NIBRS are submitted by participating law enforcement agencies to the Federal Bureau of Investigation (FBI) on a monthly basis. Developed as an alternative to the summary Uniform Crime Reports (UCR), NIBRS provides detailed information on the characteristics of crime incidents in participating jurisdictions, including demographic characteristics of the offenders and incident characteristics such as weapon use. Unlike UCR, NIBRS does not adhere to a hierarchy rule where only information on the most serious offense is collected, but instead gathers information pertaining to offenders and victims for all offenses committed in a criminal incident. The ACS involves monthly data collection through internet, mail, telephone, and personal visit across the United States and Puerto Rico to produce detailed annual information about population and housing characteristics of communities. The Westat Institutional Review Board granted human subjects approval for the study.

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¹ NIBRS resources and data are available at [http://www.icpsr.umich.edu/icpsrweb/ICPSR/series/00128](http://www.icpsr.umich.edu/icpsrweb/ICPSR/series/00128). ACS resources and data are available at [http://www.census.gov/programs-surveys/acs/](http://www.census.gov/programs-surveys/acs/).
Participants

The study included juvenile arrestees from 14 states that submitted data from all state jurisdictions from 2010 through 2012 (Arkansas, Idaho, Iowa, Michigan, Montana, New Hampshire, North Dakota, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, and West Virginia). State definitions of juvenile were used to define the age limits for each state (Table 1 lists the number of cases by State). Arrests from one full reporter state (Delaware; n=14,721) were excluded because all were coded as referred to authorities. Arrests were pooled across three years to ensure that the study had sufficient statistical power and enough cases to fit each racial and ethnic category of interest, and to smooth out the potential impact of statistically anomalous arrest characteristics within counties.

Variables

The dependent variable was the disposition of juvenile arrestees, coded as referred to authorities (e.g., juvenile court, probation, adult court, or welfare agency; 67.9%) or as handled within the police department (e.g., released to parents, released with a warning; 32.1%). With the focus on disparity in disposition, the main independent variables for the study were juvenile race and ethnicity. In the arrestee segment of NIBRS, police agencies are asked to provide information on the race (i.e., White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander) and the Hispanic/Latino origin of each individual, collected separately from the arrestee’s race. This pair of variables allows for greater specificity and is a distinct strength over other official sources of crime data. Overall, 85.2% (n=424,923) of the participants had complete data on ethnicity and race. A comparison of records with missing data on ethnicity (14.3% of the overall sample) and race (1.5% overall) with
complete-data records found very weak associations with the case disposition ($\phi < .02$) \(^2\) and juvenile-level control variables ($\phi < .06$). However, missing data were much more likely in certain states (e.g., 84% of cases with missing ethnicity data and 22% of those missing on race were from Michigan jurisdictions).

Overall, 7.8% of youth were Hispanic/Latino (see Table 2). Regarding race, most were White (61.8%) or Black (34.7%), with fewer arrestees identified as American Indian-Alaska Native (2.9%) or Asian-Pacific Islander (0.7%). NIBRS specifies 22 offense categories made up of 46 crimes as Group A offenses, which were categorized as violent (18.1% of arrests), property (26.2%), drug (9.8%), public order (0.2%) and weapons (1.4%) crimes. In addition, NIBRS identifies 11 less severe offenses as Group B offenses (e.g., curfew, loitering, vagrancy, disorderly conduct and liquor law violations; 44.3% of arrests) (see Appendix for a complete list of Group A and Group B offenses). Juvenile-level variables also included extralegal characteristics (arrestee gender, arrestee age) and incident characteristics (offense type, arrestee armed). The sample was 15.2 years old on average, about two-thirds were male (67.6%), and only 1.3% of arrestees were armed.

Contextual variables were developed using 5-year ACS estimates from 2011 for the 773 total counties in the relevant states. A measure of structural disadvantage in each county was constructed by creating a factor score using principal components analysis based on five measures: 1) percent of residents without a high school diploma or equivalent, 2) percent households living below poverty level, 3) percent unemployed, 4) percent of single parent households, and 5) median household income (see Chamberlain & Hipp, 2015; Moak, Thomas, \footnote{The Phi coefficient is a type of correlation between two variables when both are dichotomous (i.e., have two values) as with a 2x2 crosstabulation (Vogt & Johnson, 2015). Phi measures the strength of an association and is equivalent to Pearson’s correlation coefficient. For example, a phi coefficient could be used to compute the correlation between sex (male/female) and employment status. However, it could not be used for age and income because these are not dichotomous variables.}

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Walker & Gann, 2012). All variables loaded onto one factor, with the first four loading positively and the last (median household income) loading negatively.

**Analytic Approach**

First, descriptive and bivariate analyses allowed an assessment of the extent of disparity in juvenile arrests and the handling of juvenile arrestees. Analyses were conducted to explore whether DMC varied across extralegal characteristics and case specific characteristics. Next, a series of hierarchical generalized linear models were estimated based on the impact of juvenile-level and contextual constructs on the odds of referral (Raudenbush & Bryk, 2002). Because we expected DMC to vary by offense severity, models were tested for all arrestees, juveniles with Group A offenses, and juveniles with Group B offenses. Juvenile-level variables included race, ethnicity, gender, age, offense type, and whether or not an arrestee was armed. Outcome differences between White and non-White Hispanic/Latinos were tested by adding a race by ethnicity interaction to each model. The age variable in each model was grand mean-centered.

Hierarchical linear modeling allows the determination of juvenile outcomes while controlling for the clustering of individuals in geographic units. A particular strength of multilevel modeling is that a randomly varying error term can be specified for juvenile-level variables to explore whether the effects of juvenile characteristics vary across aggregate level (county) units. Here, once a full two-level model was fit, random error terms for the effects of race and ethnicity were added to the model. Results with a significant error term suggested that the effect of race or ethnicity differed across counties. If a significant random effect of race or ethnicity was found, we fit a model exploring whether relevant aggregate level measures of social context help to explain the random variation in the effect. Such a model, in essence, explores whether the effects of ethnicity/race are different at different levels of the social context. Structural disadvantage is the contextual variable of primary interest. The models meet sample size recommendations to obtain
unbiased and accurate estimates for fixed effect parameters in hierarchical logistic regression models (Maas & Hox, 2005; Moineddin, Matheson, & Glazier, 2007).

**Results**

Chi-square findings showed that disposition differed significantly by race and ethnicity. In these unadjusted tests, Hispanic/Latinos were less likely to be referred to authorities than non-Hispanic/Latinos (65.7% vs. 68.1%; $\chi^2=78.9, p < .000$). Regarding race, referral was highest for American Indian-Alaska Natives (73.6%), followed by Whites (69.1%), Asian-Pacific Islanders (67.6%), and Blacks (65.3%) ($\chi^2=836.5, p < .000$). Notably, juveniles arrested for Group A offenses were more likely to be referred than those with Group B charges (72.4% vs. 62.4%; $\chi^2=4812.9, p < .000$). Further, males were slightly more likely than females (68.4% vs. 66.3%, $\chi^2=243.2, p < .000$) and juveniles who were armed were more likely than unarmed juveniles to be referred (76.7% vs. 67.8%, $\chi^2=200.9, p < .000$). Referred youth were slightly older (15.22 vs. 15.19 years of age), a statistically but not practically different difference, $t(424,921) = 5.755, p < .000$.

Table 3 presents fixed effect estimates for the multivariate hierarchical generalized linear models predicting the odds of referral for all juveniles (Model 1), individuals with Group A charges (Model 2), and those with Group B charges (Model 3). Consistent with the first hypothesis, Model 1 showed that Hispanic/Latino juveniles were 7% more likely to be referred to authorities, and White juveniles were 8% less likely to be referred. The addition of a race by ethnicity interaction term failed to significantly improve the model fit (not shown), indicating that White and non-White Hispanic/Latinos had similar outcomes.

Models 2 and 3 show differences in DMC related to charge severity consistent with the second hypothesis. For the more severe Group A charges, statistical tests of race and ethnicity found no differences in the disposition of minority and Hispanic/Latino youth. For the less
severe Group B charges, however, DMC effects were observed: Hispanic/Latino juveniles were 10% more likely to be referred than non-Hispanic/Latinos, and White juveniles were 14% less likely to be referred than minority youth. Race by ethnicity interaction terms did not contribute to either model (not shown).

For each model, statistically significant random variance terms were found for race and ethnicity, indicating that the effects of race and ethnicity varied across counties. The addition of a structural disadvantage term at the county level, however, did not significantly improve the fit for any of the models. In Models 1 and 2, juveniles charged with violent crimes were the most likely to be referred, followed by those with weapons, property, public order, and drug crimes. Consistent with previous research, males and older juveniles were significantly more likely to be referred to the courts, as were juveniles who were armed and faced more serious charges.

Next, the study examined whether DMC differed for boys and girls. Tests of the interaction between gender and ethnicity (not shown in Table 3) found that, for less severe Group B charges, Hispanic/Latino girls were less likely to be referred to authorities ($p < .001$). Examination of the predicted probabilities showed that Hispanic/Latino girls (52.8%) were less likely to be referred than non-Hispanic/Latino girls (62.4%), non-Hispanic/Latino boys (62.8%), and Hispanic/Latino boys (63.4%). For more serious charges, gender by ethnicity differences were not observed ($p > .05$). Gender differences by race, on the other hand, were observed only for more serious charges. In these cases, minority girls (69.0%) were slightly less likely to be referred than minority boys (71.5%), White girls (72.4%), and White boys (73.8%) ($p < .001$). No gender by race differences were found for Group B charges ($p > .05$).

Finally, to account for unmeasured heterogeneity at the state level and to explore the potential impact of missing data, dummy variables representing the states in which jurisdictions
were located were added to each model (results available upon request). Although the likelihood of referral to authorities for juveniles differed across states, the odds ratios for race and ethnicity showed no change, providing further support for the DMC findings.

**Discussion**

The current study investigated racial and ethnic disparity in the post-arrest handing of juveniles by police and found that DMC was related to the type and severity of the charges faced by juveniles. Individuals with less severe charges faced increased DMC, such that Hispanic/Latino juveniles were 10% more likely to be referred to authorities and White juveniles were 16% less likely to be referred. DMC was not observed for juveniles with more severe charges, including violent, weapons, property, public order, and drug crimes. For all charges, the effects of ethnicity and race on juvenile disposition were independent, and no differences between White and non-White Hispanic/Latinos were observed. Contrary to previous research, the study found that when charges were less serious, Hispanic/Latino girls were less likely to be referred to authorities, and when charges were more serious, racial minority girls were slightly less likely to be referred.

The findings are noteworthy because formal handling serves as the crucial decision making stage at which youth transition into the court system. Early contact with the police has been found to increase the odds of further contact later in adolescence (Crutchfield, Skinner, Haggarty, McGlynn & Catalano, 2009). Prior research on youth has focused primarily on arrest and adjudication outcomes, and few large studies address the key decision making stage at which youth proceed beyond arrest and toward adjudication, and whether ethnic and racial disparities in rates of referral can be attributed to this decision point. To our knowledge, NIBRS is the only official source of police arrest statistics that systematically collects information on this critical and often undocumented stage of the police handling of youth arrestees, and the only large scale administrative criminal justice data collection that provides information about the ethnicity of
suspects after an arrest has been made. By drawing upon a large multi-state sample, the findings of ethnic and racial disparity are less susceptible to the effects of stricter local law enforcement or juvenile justice systems unique to a single jurisdiction or State.

Research has frequently described findings of disparity at early decision points in the juvenile justice process (Crutchfield, Fernandez, & Martinez, 2010) and identifies the important role that extralegal and contextual factors play in determining the presence and magnitude of racial and ethnic disparities in youth punishment. Consistent with previous studies, analyses disaggregated by crime severity found that ethnic and racial disparities were more pronounced for less serious offenses, such as status offenses (e.g., Bishop and Frazier, 1996), but after controlling for extralegal and case characteristics, were absent for more severe charges. Males were more likely to be referred regardless of race, ethnicity, and crime severity, a finding that suggests that males are more likely to be involved with chronic antisocial and delinquent behaviors than girls (Miller et al., 2010), and older youth, who may be judged more mature and blameworthy than younger juveniles, were also referred at higher rates.

DMC varied across counties, but structural disadvantage was not significantly related to disposition, i.e., juveniles in less advantaged areas were not more likely to be referred to authorities. Similarly, disadvantage does not account for variation in length of juvenile preadjudication detention (Moak et al., 2012) or juvenile intake, adjudication, and disposition outcomes (Leiber, Peck & Rodriguez, 2016). Future research on disposition, however, should explore the relation between community disadvantage and youth race and ethnicity, including empirical advancements that may improve the understanding of these interactions.

The findings demonstrate that law enforcement actors are less likely to refer racial and ethnic minority girls to the juvenile justice system, although the context in which these findings
operate differ: racial minority girls received more lenient treatment for more serious offenses, whereas ethnic minority girls received more lenient treatment for less serious offenses. Hispanic/Latino girls were less likely to be referred to the juvenile justice system compared to non-Hispanic/Latino girls, but only for less severe offenses. Perceptions of legal actors toward Hispanic/Latino girls’ motivations for offending may help explain this finding. Studies have shown that juvenile court actors share similar perceptions about Hispanic/Latino and White girls’ delinquency, which they primarily attribute to low self-esteem and peer pressure (Miller, 1994). Research also suggests that juvenile justice actors’ perceptions of struggles between ethnic and American identities among Hispanic/Latino girls may mitigate harsher dispositions for Hispanic/Latino girls (Gaarder, Rodriguez, & Zatz, 2004). Although these perceptions may elicit leniency for Hispanic/Latino girls who committed less serious offenses, the findings suggest that law enforcement actors may not exercise the same leniency for Hispanic/Latino girls when it comes to more serious offending. Law enforcement officials referred Hispanic/Latino girls to the juvenile justice system at similar rates as non-Hispanic/Latino girls.

Compared to White girls, however, racial minority girls were less likely to be referred to the juvenile justice system for more serious charges. These findings contradict previous research suggesting that minority girls are more likely to experience harsher treatment (Bishop et al., 2010; Moore & Padavic, 2010) and that intersecting subordinate identities may result to a greater disadvantage for minority girls (Samuels & Rose-Sheriff, 2008). Notably, this finding was significant only for more serious offending—racial minority girls are no more likely to be referred than White girls for less serious offenses. It is possible that because more serious offenses also entail more severe dispositions, including placement in a secure correctional facility, law enforcement officers “correct” for earlier biases in their decisions similar to juvenile
court actors (Bishop et al., 2010; Leiber, 2009). For example, some scholars suggest that inconsistencies in DMC findings at later stages of juvenile court processing (see Bishop et al., 2010; Peck & Jennings, 2016) may be attributed to a “correction effect” wherein juvenile justice decision-makers attempt to remedy disparities at earlier stages of juvenile justice processing (Bishop et al., 2010; Leiber, 2009). Finally, since the study did not control for previous juvenile arrests or delinquency, the impact of differential offending cannot be ruled out, even when differential treatment may be the goal of legal actors. These findings highlight complexities in the intersections of gender with race and ethnicity.

**Strengths and Limitations**

The study encompassed a large number of communities with diverse socioeconomic status, rather than focusing on a single State or community. However, while NIBRS covered approximately 30% of the U.S. population when these arrests occurred, many of the full reporter States have small total populations and a large proportion of non-urban residents. Estimates of the handling of juvenile arrestees can only generalize to similar jurisdictions and States. Multilevel analyses incorporated ACS data, which allowed the study to control for county-level correlates of arrest disposition. The study also controlled for key extralegal and incident characteristics, including offense type, but is limited by the absence of information on delinquency and previous juvenile arrests in NIBRS. The present findings are influenced to the extent that an offender’s arrest history directly or indirectly influences referral to authorities. Due to the structure of NIBRS, the study was able to make separate estimates of the effects of race, ethnicity, and their interaction on DMC. Although a sizeable proportion of NIBRS cases had missing information on ethnicity, this deficiency was only weakly associated with the study outcome and control variables.
Conclusions

The findings of this study contribute to the literature on racial and ethnic disparities in the juvenile justice system by focusing on an early stage in the decision-making process and by broadening the geographic scope of past studies (Duran & Posadas 2013; Freiburger & Burke 2011; Guevara, Boyd, Taylor, & Brown 2011; Moore & Padavic 2010). The findings highlight the way race and ethnicity influence post-arrest decision-making for less serious charges and point to the ongoing need to strive for equitable treatment of youth. Because even small disparities at this point may accumulate over subsequent levels, these results underscore the need to better understand arresting officer behaviors and attitudes and agency-level intervening processes that result in differential treatment by race and ethnicity.
References


### Tables

**Table 1. Number of Cases by State\(^1\)**

<table>
<thead>
<tr>
<th>State</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>28,421</td>
</tr>
<tr>
<td>Idaho</td>
<td>33,751</td>
</tr>
<tr>
<td>Iowa</td>
<td>41,638</td>
</tr>
<tr>
<td>Michigan</td>
<td>8,087</td>
</tr>
<tr>
<td>Montana</td>
<td>19,297</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>11,517</td>
</tr>
<tr>
<td>North Dakota</td>
<td>13,690</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>12,723</td>
</tr>
<tr>
<td>South Carolina</td>
<td>34,516</td>
</tr>
<tr>
<td>South Dakota</td>
<td>15,934</td>
</tr>
<tr>
<td>Tennessee</td>
<td>101,859</td>
</tr>
<tr>
<td>Vermont</td>
<td>33,328</td>
</tr>
<tr>
<td>Virginia</td>
<td>94,545</td>
</tr>
<tr>
<td>West Virginia</td>
<td>5,617</td>
</tr>
</tbody>
</table>

\(^1\) Youth were included in the analyses if they were at least 10 years old and at or below the upper age of original jurisdiction in a State. The upper age of jurisdiction was typically 17 years old but was 16 during the study period in three states (MI, NH, SC), per the U.S. Department of Justice, [http://www.ojjdp.gov/ojstatbb/structure_process/qa04101.asp?qaDate=2015](http://www.ojjdp.gov/ojstatbb/structure_process/qa04101.asp?qaDate=2015)
Table 2. Demographic and Descriptive Characteristics of Juveniles by Disposition Status.

<table>
<thead>
<tr>
<th></th>
<th>Total (n=424,923)</th>
<th>Referred (n=288,611)</th>
<th>Handled (n=136,312)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic/Latino</td>
<td>7.8%</td>
<td>7.6%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>7.8%</td>
<td>7.6%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>61.8%</td>
<td>62.9%</td>
<td>59.4%</td>
</tr>
<tr>
<td>Black</td>
<td>34.7%</td>
<td>33.3%</td>
<td>37.5%</td>
</tr>
<tr>
<td>American Indian-Alaska</td>
<td>2.9%</td>
<td>3.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Native</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian-Pacific Islander</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Male</td>
<td>67.6%</td>
<td>68.4%</td>
<td>66.0%</td>
</tr>
<tr>
<td>Age (Mean (SD))</td>
<td>15.2 (1.6)</td>
<td>15.2 (1.6)</td>
<td>15.2 (1.6)</td>
</tr>
<tr>
<td>One or more weapons</td>
<td>1.3%</td>
<td>1.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Offense Type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violent</td>
<td>18.1%</td>
<td>20.0%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Property</td>
<td>26.2%</td>
<td>27.6%</td>
<td>23.2%</td>
</tr>
<tr>
<td>Public Order</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Weapons</td>
<td>1.4%</td>
<td>1.5%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Drug</td>
<td>9.8%</td>
<td>10.0%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Group B</td>
<td>44.3%</td>
<td>40.7%</td>
<td>52.0%</td>
</tr>
</tbody>
</table>

Note. Group B offenses include bad checks, curfew/loitering/vagrancy violations, disorder conduct, driving under the influence, drunkenness, nonviolent family offenses, and liquor law violations.
Table 3. Fixed Effect Estimates (and 95% Confidence Intervals) For Models of Post-Arrest Disposition of Juveniles by Offense Type.

<table>
<thead>
<tr>
<th>Odds Ratio (95% CI)</th>
<th>Model 1 (Groups A and B)</th>
<th>Model 2 (Group A)</th>
<th>Model 3 (Group B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.64 *** (1.44, 1.87)</td>
<td>1.83 *** (1.59, 2.11)</td>
<td>1.76 *** (1.53, 2.03)</td>
</tr>
<tr>
<td>Community-Level Indicator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Disadvantage</td>
<td>0.89 † (0.78, 1.01)</td>
<td>0.89 † (0.78, 1.02)</td>
<td>0.88 † (0.77, 1.01)</td>
</tr>
<tr>
<td>Juvenile-Level Indicators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino (vs. non-Hispanic)</td>
<td>1.07 *** (1.04, 1.10)</td>
<td>1.04 † (1.00, 1.08)</td>
<td>1.10 *** (1.06, 1.14)</td>
</tr>
<tr>
<td>White (vs. non-White)</td>
<td>0.92 *** (0.90, 0.93)</td>
<td>0.98 † (0.96, 1.00)</td>
<td>0.86 *** (0.84, 0.89)</td>
</tr>
<tr>
<td>Male</td>
<td>1.10 *** (1.09, 1.12)</td>
<td>1.17 *** (1.14, 1.19)</td>
<td>1.06 *** (1.04, 1.08)</td>
</tr>
<tr>
<td>Age</td>
<td>1.03 *** (1.02, 1.03)</td>
<td>1.05 *** (1.04, 1.06)</td>
<td>1.01 * (1.00, 1.01)</td>
</tr>
<tr>
<td>Armed</td>
<td>1.30 *** (1.21, 1.39)</td>
<td>1.39 *** (1.29, 1.50)</td>
<td>0.97 (0.82, 1.15)</td>
</tr>
<tr>
<td>Offense Type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violent</td>
<td>1.73 *** (1.70, 1.77)</td>
<td>1.47 *** (1.43, 1.51)</td>
<td>--</td>
</tr>
<tr>
<td>Property</td>
<td>1.34 *** (1.32, 1.37)</td>
<td>1.13 *** (1.10, 1.16)</td>
<td>--</td>
</tr>
<tr>
<td>Public Order</td>
<td>1.26 ** (1.09, 1.46)</td>
<td>1.02 (0.88, 1.19)</td>
<td>--</td>
</tr>
<tr>
<td>Weapons</td>
<td>1.55 *** (1.46, 1.66)</td>
<td>1.28 *** (1.19, 1.37)</td>
<td>--</td>
</tr>
<tr>
<td>Drug</td>
<td>1.20 *** (1.18, 1.23)</td>
<td>-- (reference)</td>
<td>--</td>
</tr>
<tr>
<td>Group B</td>
<td>(reference)</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Notes. ***p < .001. **p < .01. *p < .05. †p < .10. Group B offenses include bad checks, curfew/loitering/vagrancy violations, disorder conduct, driving under the influence, drunkenness, nonviolent family offenses, and liquor law violations.
Appendix A-1 – NIBRS Group A and B Offenses

Group A Offenses

1. Arson (Crime Against Property)
2. Assault Offenses (Crimes Against Persons)
   a. Aggravated Assault
   b. Simple Assault
   c. Intimidation
3. Bribery (Except Sports Bribery) (Crime Against Property)
4. Burglary/Breaking and Entering (Crime Against Property)
5. Counterfeiting/Forgery (Crime Against Property)
6. Destruction/Damage/Vandalism of Property (Except Arson) (Crime Against Property)
7. Drug/Narcotic Offenses (Except Driving Under the Influence) (Crimes Against Society)
   a. Drug/Narcotic Violations
   b. Drug Equipment Violations
8. Embezzlement (Crime Against Property)
9. Extortion/Blackmail (Crime Against Property)
10. Fraud Offenses (Except Counterfeiting/Forgery and Bad Checks) (Crimes Against Property)
    a. False Pretenses/Swindle/Confidence Game
    b. Credit Card/Automatic Teller Machine Fraud
    c. Impersonation
    d. Welfare Fraud
    e. Wire Fraud
11. Gambling Offenses (Crimes Against Society)
    a. Betting/Wagering
    b. Operating/Promoting/Assisting Gambling
    c. Gambling Equipment Violations
    d. Sports Tampering
12. Homicide Offenses (Crimes Against Persons)
    a. Murder and Nonnegligent Manslaughter
    b. Negligent Manslaughter
    c. Justifiable Homicide (Not A Crime)
13. Kidnaping/Abduction (Crime Against Person)
14. Larceny/Theft Offenses (Crimes Against Property)
    a. Pocket-Picking
    b. Purse-Snatching
    c. Shoplifting
    d. Theft from Building
    e. Theft from Coin-Operated Machine or Device
    f. Theft from Motor Vehicle (Except Theft of Motor Vehicle Parts or Accessories)
    g. Theft of Motor Vehicle Parts or Accessories
    h. All Other Larceny
15. Motor Vehicle Theft (Crime Against Property)
16. Pornography/Obscene Material (Crime Against Society)
17. Prostitution Offenses (Crimes Against Society)
    a. Prostitution
    b. Assisting or Promoting Prostitution
18. Robbery (Crime Against Property)
19. Sex Offenses, Forcible (Crimes Against Persons)
    a. Forcible Rape (Except Statutory Rape)
    b. Forcible Sodomy
    c. Sexual Assault with an Object
    d. Forcible Fondling
20. Sex Offenses, Nonforcible (Except Prostitution Offenses) (Crimes Against Persons)
    a. Incest
    b. Statutory Rape
21. Stolen Property Offenses (Crimes Against Property)
22. Weapon Law Violations (Crimes Against Society)

Group B Offenses

1. Bad Checks (Except Counterfeited Checks or Forged Checks) (Crime Against Property)
2. Curfew/Loitering/Vagrancy Violations (Crimes Against Society)
3. Disorderly Conduct (Crime Against Society)
4. Driving Under the Influence
5. Drunkenness (Except for Driving Under the Influence) (Crime Against Society)
6. Family Offenses, Nonviolent (Crimes Against Persons and Society)
7. Liquor Law Violations (Except Driving Under the Influence and Drunkenness) (Crimes Against Society)
8. Peeping Tom (Crime Against Society)
9. Runaway (Persons Under Age 18) (Not A Crime)
10. Trespass of Real Property (Crime Against Society)
11. All Other Offenses (Crimes Against Persons, Property, And Society)