Disparities in the Courtroom: Exploring the Influence of Race/Ethnicity and Offense Category on Charge Reductions during Judicial Disposition Making

by

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Abstract

African American males comprise the most overrepresented group in the juvenile justice system. This disparity has been attributed, in part, to implicit biases. Moreover, family structure and prior court referrals also implicitly impact judicial outcomes. However, the preponderance of African Americans has been found to be attenuated among juveniles with sexual offenses relative to other offense categories. The present study broadens the range of prior research by identifying whether select factors significantly impact the dispositional stage of judicial decision making as measured by charge reduction, testing whether the impact of novel and previously tested predictors differentially predict charge reduction. Demographic characteristics, prior court referrals, and family structure were examined as predictors of charge reduction among juveniles with sexual, violent, and general offenses. Few cases of charge reduction were observed overall, but charge dismissal was found to be fairly common. African Americans were slightly more likely to have their charge reduced, whereas European Americans were more likely to have a charge dismissed. Results indicated that youth with no prior charges who had committed a sexual offense and who came from two-caregiver homes were the most likely to have charge reduction or dismissal. Overall, offense category was a more meaningful predictor of charge reduction or dismissal than race, but race and offense category interactions were also significant predictors. County-level information may explain why juveniles with sexual offenses had the highest rate of charge reduction and charge dismissal, but follow-up research is needed to verify this possibility. Implications of these findings and future directions are discussed.

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Table of Contents

List of Tables

List of Figures

List of Abbreviations

JSO   juvenile adjudicated with a sexual offense

JGO   juvenile adjudicated with a general offense

JVO   juvenile adjudicated with a violent offense

DMC   disproportionate minority contact

Introduction

Approximately 57% of the 880,000 juveniles arrested in the U.S. during 2013 will continue to offend into adulthood (Federal Bureau of Investigation, 2015; Loeber & Farrington, 2013). Over one-third of those arrested are identified as African American (Loeber & Farrington, 2013), even though African American juveniles only represent 7% of the U.S. population (Centers for Disease Control and Prevention, 2012). Along with their higher likelihood of being arrested as a juvenile, African American males are also six times more likely to become incarcerated over their lifetime than European American males (Davis & Sorensen, 2013), despite engaging in comparable types and rates of actual offending behavior (Piquero, 2008; Pope, Lovell, & Hsia, 2002). Not surprisingly, African American males have historically comprised the most overrepresented group in the judicial system (e.g., Brinkley-Rubinstei, Craven, & McCormack, 2014; Piquero, 2008).

The term disproportionate minority contact (DMC) has been used to describe the preponderance of racial/ethnic minorities relative to their expected level of contact with the juvenile justice system, across every level of the system, including arrests, convictions, and incarceration (Puzzanchera & Hockenberry, 2013). In fact, in 1988, Congress added a DMC mandate to the Juvenile Justice and Delinquency Prevention Act which advanced efforts aimed at reducing the overrepresentation of racial/ethnic minorities in state juvenile justice systems (Nuñez-Neto, 2007), and funding appropriations have been sustained to the present day to address DMC in the judicial system (Nuñez-Neto, 2007; Office of Juvenile Justice and Delinquency Prevention, 2014). Research funded by such appropriations has informed policies that reduced DMC, yet marked racial/ethnic disparity is still present within the judicial system (Fix, Cyperski, & Burkhart, 2015; Piquero, 2008). Moreover, the target of this funding is to

identify specific individual and structural contributing factors (Piquero, 2008; Thomas, Moak, & Walker, 2013). Accordingly, further research is necessitated to better understand contributing factors to DMC.

The most important stage in juvenile judicial processing is the dispositional stage (e.g., Lotz, Poole, & Regoli, 1985; Sanborn, 1996), which is the final stage of judicial processing during which a youth's case goes to court or trial. To date, models have tested a number of criminological factors, including courtroom procedures and policing practices, as mechanisms contributing to DMC, demonstrating moderate success in explaining how and why such overrepresentation occurs (Piquero, 2008; Pope et al., 2002; Engel, Calnon, & Bernard, 2002). Largely, differential treatment at the dispositional level has been identified as a central foundation for DMC (Pope & Feyerherm, 1992). Such a finding should not be surprising given the presence of implicit biases based on race/ethnicity across a number of groups and settings. However, because judicial decision makers often have limited resources, including time, and they have the burden of making final decision in a juvenile case, they may be especially prone to biased decision making (Ballou et al., 2007; Englich, Mussweiler, & Strack, 2006; Leiber & Peck, 2015).

Ideally, legal factors alone should account for juvenile justice decision making; however, abundant data indicate that such decisions are also influenced by extralegal factors (e.g., Piquero, 2008; Pope, Lovell, & Hsia, 2002). Racial/ethnic background is one particularly impactful extralegal factor that affects juvenile justice processes (Bishop & Frazier, 1996; Engel, Calnon, & Bernard, 2002; Secret & Johnson, 1997; Wu, Cernkovich, & Dunn, 1997). Indeed, racial and ethnic minorities are grossly overrepresented at every level of the juvenile justice system, including arrests, convictions, and confinement (Puzzanchera, & Hockenberry, 2013). Although

2

DMC is observed across all offense categories, preliminary analyses have identified attenuated rates of DMC among juveniles with adjudicated sexual offenses (JSOs) compared with adolescents with adjudicated general, non-sexual, offenses (status, drug, and property offenses; JGOs) (Fix et al., 2015) and with juveniles with adjudicated violent offenses (JVOs) (Fix, Fix, Totura, & Burkhart, 2016). Despite Fix et al. (2015) observing an overrepresentation of racial/ethnic minorities among JSOs in the juvenile justice system, no previous literature has examined rates of DMC among JSOs, indicating a serious need for further research on the effects of race/ethnicity on judicial decision making among JSOs. Such a program of research could elucidate underlying factors that differentially influence judicial decision making regarding juvenile cases and may uncover potentiating and attenuating factors of DMC.

Disproportionate Minority Contact

Initially, when disparities in confinement were observed, only disproportionate minority confinement was measured; however, in 2002, the overrepresentation of racial/ethnic minorities expanded to include all levels of judicial processing, a phenomenon termed DMC (Coleman, 2015; Rovner, 2014). Nine levels of judicial processing are now subject to the examination of DMC: arrest, referral to court, diversion, secure detention, petition (i.e., charges filed), delinquent findings (i.e., guilt), probation, confinement in secure correctional facilities, and/or transfer to criminal/adult jurisdiction.

Racial and ethnic minorities are represented in detention facilities, law enforcement encounters, and courtrooms at a much higher rate than self-reports of delinquency data would indicate should be observed (Lauritsen, 2005). Still, although most racial/ethnic minority groups are overrepresented in the juvenile justice system (Huizinga et al., 2007), African American males have historically experienced the highest levels of DMC in the United States (Piquero,

2008). Literature examining DMC indicates African American adolescents are more harshly

punished for an equivalent charge compared with European American adolescents, with the high

cost of incarceration impacting African American communities more than many other

racial/ethnic groups (Piquero, 2008). Perhaps this information would be less unsettling if

confinement were not inextricably predictive of future offending patterns and mental health

problems. Ultimately, it is troubling to recognize that confining disproportionately higher

percentages of African American or other racial/ethnic minority juveniles will result in an

overrepresentation of these youths in adult prisons and an increased mental health burden on

minority families and communities (Brinkley-Rubenstein et al., 2014; OJJDP, 2014; Piquero,

2008).

Empirical evidence asserts two primary reasons racial/ethnic disparities are embedded in

the justice system: differential selection and differential involvement (Piquero, 2008).

Differential selection is a term that encompasses the dissimilar treatment of racial/ethnic

minorities relative to European Americans within the justice system, whereas differential

involvement refers to potential differences in actual offending behaviors between racial/ethnic

minorities and European Americans. A number of studies provide support that both differential

selection and differential involvement contribute to DMC (e.g., Huizinga et al., 2007; Piquero,

2008); however, differential selection is more influential on DMC at the court level during the

dispositional stage of judicial processing (Piquero, 2008). Moreover, differential involvement

has been tied to implicit biases at the policing level (Kempf-Leonard, 2007). Therefore, the

present discourse will focus on factors related to differential selection.

As mentioned previously, among JGOs, the notion that DMC is accounted for by actual

offending rates has marginal support at best (Huizinga, et al., 2007), indicating there are other

contributing factors. Accordingly, a number of studies have examined other partial causes and

correlates of DMC, including: bias contributing to processing differences at multiple stages of

the justice system (Piquero, 2008), risk factors such as family socioeconomic status and

neighborhood characteristics (Huizinga et al., 2007), and crime policies that target and punish

racial/ethnic minority communities more severely than European American communities (Pope

& Feyerherm, 1990; Piquero, 2008).

Offense Category and DMC

In the courtroom, African Americans are often sentenced to more intensive punishment

with longer sentences, whereas European Americans are more likely to be sentenced to intensive

treatment or rehabilitative services (Bishop & Frazier, 1996). However, despite observing such

strong biases based on race/ethnicity, recent research suggests that offense category (e.g., sexual,

violent, drug) may further bias judicial decision makers (Fix et al., 2015; Leiber & Peck, 2015).

Biases in judicial disposition based on race/ethnicity appears to mirror the profound level of

punishment aimed toward individuals with adjudicated sexual offenses in the justice system

compared with all other groups of offenders (Pickett, Mancini, & Mears, 2013). In fact, studies

comparing community members' perceptions of punishment and rehabilitation on adult general

offenders versus individuals with sexual offenses indicate that mental health or rehabilitative

services are perceived as less effective and punishment is more necessary for persons with

adjudicated sexual offenses (Rogers & Ferguson, 2011). Additionally, penalties for offenses

may be impacted by the perceived severity of a given offense, as African and European

Americans may have a more comparable penalty for serious offense charges (e.g., interpersonal

offenses), and bias may be more impactful on the judicial decision making process surrounding

minor offenses like property offenses (Bishop and Frazier, 1996; Richetelli, Hartstone, &

Murphy, 2009). A similar dynamic may be observed among law enforcement officers and offenders (Richetelli et al., 2009).

Crew (1991) conducted a study among adult offenders with non-sexual convictions and found that, despite presenting with comparable offense seriousness and similar conviction records, African Americans had more severe final charges than European Americans. Results from this and other studies have been partially attributed to the stereotype that African Americans are more violent or dangerous, which may explain the disproportionately higher rates of arrests for violent offenses among African American males, to a degree. Such a dynamic illuminates a recurring pattern within the justice system, which indicates punishment and incarceration are favored for individuals perceived to be more threatening, like sexual offenders, violent offenders, and racial/ethnic minorities, whereas rehabilitative services, which provide more benefits, are more often provided to be less threatening, like European American youth. However, because research on differential effects of race/ethnicity by offense category at the judicial dispositional stage is limited, further studies examining such dynamics are warranted.

Sexual offending and DMC. Six published studies have addressed the importance of race/ethnicity within studies on JSOs, and only one has tested whether race/ethnicity was impactful on judicial decision making. An early review of studies on JSOs reported that 24% of JSOs were African American relative to the 12% of United States population that identified as African American in the 1980s (Davis & Leitenberg, 1987), indicating the presence of, but not explicitly measuring, DMC among JSOs (U.S. Census Bureau, 2012). A more recent sample of JSOs from the Northeastern United States were reported to be 50% Latino, 28% African American, and 17% European American (Martinez, Flores, & Rosenfeld, 2007), again evidencing significant levels of overrepresentation of racial/ethnic minorities. Given that

population data can vary across geographic regions, consideration should be given to local demographics when available. For instance, within a sample of registered JSOs from Texas, nearly 25% identified as African American when only approximately 12% of the local population was identified as African American (Craun, 2006; U.S. Census Bureau, 2012). Within a sample of JSOs residing in the Southwestern United States, 18% were African American and 61% were European American (Ikomi, Gibson, & Samuels, 2009). Lastly, a recent study conducted on confined youth in Alabama observed the significant overrepresentation of African American JSOs relative to their population percentage, despite having comparable offense records to their European American peers (Fix et al., 2015). Overall, given the frequency of disproportionate confinement rates for JSOs across geographic regions in the United States, it appears as though DMC is not restricted to the general offending population, but likely extends to more specialized populations as well, including JSOs. However, although results from these studies suggest DMC was present, DMC was not tested explicitly, meaning expected and prior rates of offending behavior were not considered in tandem with reported demographic information. Moreover, few studies on JSOs have had large enough samples to make statements about relationships between race/ethnicity and judicial outcomes.

Higher rates of arrest and adjudication among racial and ethnic minorities are typically observed when DMC is present, partially because minorities have more contact with law enforcement personnel than European Americans. Data from the Office of Juvenile Justice and Delinquency Prevention (2014) specify African American juveniles were five times more likely to be arrested for a violent offense and two-and-a-half times more likely to be arrested for a property offense in 2011. Mixed findings have been indicated among the few studies that have examined racial/ethnic group differences in rates of specific types of illegal sexual behavior

among juveniles, as African Americans typically are adjudicated with more violent sexual charges like rape or sodomy (Davis & Leitenberg, 1987; Oliver, Hall, & Neuhaus, 1993), whereas European Americans are more often adjudicated with charges like sexual assault (Ikomi et al., 2009).

Charge Reduction and Race/Ethnicity

The best method to date to measure bias associated with dispositional outcomes is through charge reduction (e.g., Bishop, Leiber, & Johnson, 2010; Holmes et al., 1987), though no single method of charge reduction is espoused to be the best form of measurement. To date, four known levels of charge reduction have been measured in previous studies (i.e., type of offense, degree of the most serious offense, number of charges, and most serious offense) (e.g., Bishop et al., 2010; Leiber & Peck, 2015; O'Donell & Lurigio, 2010; Thomas et al., 2013). For a comprehensive overview of the definitions of each construct, please see Tables 1 - 3 or refer to the Method section below.

Although a number of studies have examined the impact of charge severity or number of charges on dispositional outcomes (e.g., probation, confinement) among juvenile offenders, no known studies have specifically looked at the relationship between charge reduction, offense category, and race/ethnicity. Previous research indicates African American juvenile offenders receive more severe punishment and incur more serious charges for comparable offending behaviors relative to their European American peers (Piquero, 2008; Pope, Lovell, & Hsia, 2002). Additionally, African Americans are charged with significantly more violent non-sexual offenses (Office of Juvenile Justice and Delinquency, 2014), in part because racial/ethnic bias influences judicial dispositional outcomes among JGOs (Bishop & Frazier, 1996; Crew, 1991; Richetelli et al., 2009).

Family structure and judicial decision making. Family factors, and particularly family structure, can be highly predictive of delinquent conduct (Fix & Burkhart, 2015), and family factors are also highly impactful on judicial outcomes (e.g., Bishop & Frazier, 1996; Rodriguez, Smith, & Zatz, 2009). Single-caregiver family status has been found to serve as a highly influential detrimental factor on judicial dispositional outcome by courtroom workers (Bishop & Frazier, 1996; Sanborn, 1996), negatively predicts court referral compared with diversion (Leiber & Johnson, 2008), negatively predicts release compared with diversion (Leiber & Johnson, 2008), and negatively predicts referral to court and release relative to diversion (Leiber & Fox, 2005). Though the findings about family structure are relatively consistent, two studies have found single-caregiver status did not predict judicial disposition (i.e., probation versus placement) (Cauffman et al., 2007; Rodriguez et al., 2009). No known studies have examined the impact of family structure on charge reduction during judicial disposition.

An additive effect and an interaction were noted for detention placement and referral to court between race/ethnicity and family status such that African Americans received harsher judicial outcomes than their European American peers, but the effect of parenting can also differentially impact youth depending on their racial/ethnic background (Leiber & Fox, 2005). Specifically, European Americans from single-caregiver families were more likely to be released instead of referred to court, whereas African Americans from single-caregiver families were less likely to be released and more often referred to court. Comparable findings were reported by Bishop et al. (2010). Conversely, Leiber and Mack (2003) indicated a reverse effect of race/ethnicity on judicial disposition, as European American youth were given more severe dispositions if they came from a single-caregiver family and African American

youth's judicial dispositions were not significantly impacted by family structure. However, because Leiber and

Mack (2003) used a sample of male juveniles from one county in Iowa, their findings may not generalize to other regions of the country or even to other counties within Iowa. These findings support the symbolic threat perspective that African American youth, and youth coming from single-caregiver families, may be perceived as more threatening/problematic.

Symbolic Threat Perspective

The present study was informed by the symbolic threat perspective. Theories have been developed to better understand how a system designed to provide "equal and impartial justice under law" (Caldwell v. Texas, 1891) was producing biased dispositions based on race/ethnicity and social class, especially to examine the role of race/ethnicity and social class within the juvenile justice system (e.g., Hagan, 1989; Sampson & Laub, 1993). One particularly influential theory, conflict theory, purports that, in light of differing value systems within society, the legal system has been organized to protect the interests and concerns of individuals in a society who have power and economic security from those who do not have power or economic security (Sampson & Laub, 1993; Siegel, Welsch, Senna, 2006). Basically, this theory posits that persons with power and money in U.S. society control the law, the law differentially impacts persons with power and upper economic status relative to those who have less power (e.g., racial/ethnic minorities, persons from a lower socioeconomic class), and rebellion from juveniles in a lower socioeconomic class is managed with judicial punishment instead of treatment or rehabilitation. As such, those without power are both more vulnerable to the negative consequences associated with involvement in the juvenile justice system and have higher arrest rates.

The symbolic threat perspective is one of many theories and perspectives that arose from conflict theory. In general, the symbolic threat perspective asserts that the differential treatment of minorities within the justice system results from the perceived threat posed by minority

11

characteristics (e.g., race/ethnicity, sexual orientation) to the values and norms of the dominant, middle- and upper-class culture (Sampson & Laub, 1993). Indeed, implicit rules of social evaluation have been examined, and individual perceptions and associations of others are strongly impacted by race/ethnicity such that African Americans are perceived significantly less positively than European Americans (Axt, Ebersole, & Nosek, 2014). Further, decision points in the juvenile justice process that afford more latitude to decision makers are more likely to be impacted by implicit or explicit bias, and therefore could be impacted by symbolic threat (Thomas, Moak, & Walker, 2013). Thus, implicit and explicit biases during judicial decision making could result not only from race/ethnicity, but also offense category (especially sexual and violent offending; e.g., Fix et al., 2015; Leiber & Peck, 2015; Picket et al., 2013; Rogers & Ferguson, 2011), and family structure (e.g., Bishop & Frazier, 1996; Rodriguez, Smith, & Zatz, 2009). Moreover, sexual offending may be perceived as socially unacceptable regardless of race/ethnicity.

Therefore, the symbolic threat perspective will inform the present study, as characteristics or other factors (i.e., race/ethnicity, offense category, prior court referrals, family structure) which are potentially threatening to the dominant U.S. culture will be tested as predictors of charge reduction at the dispositional stage. As mentioned earlier, the extant literature substantiates the impact of implicit biases based on race/ethnicity during the judicial decision making process, but the influence of offense category and prior offense record on judicial disposition have yet to be concurrently examined.

Symbolic threat perspective and juvenile offending. According to the symbolic threat perspective, racial/ethnic minorities represent a threat to the values and norms of the dominant culture in the U.S. (Sampson & Laub, 1993). In addition, when it comes to juvenile

12

offenders, individuals with adjudicated sexual offenses may also threaten the values and norms of the middle class through their socially unacceptable behavior. Previous studies have indicated substantial levels of discrimination in judicial decision making based on race/ethnicity (Fix et al., 2015) and offense category (Fix et al., 2016), even after controlling for prior criminal charges. Furthermore, data have shown an attenuated rate of DMC among JSOs compared with JGOs (Fix et al., 2015), reflecting a potential bias based on offense category above and beyond race/ethnicity.

Findings regarding attenuated rates of DMC suggest European American JSOs could be perceived as more threatening to the dominant culture's values than European American JGOs, but perhaps not more than African American JSOs, JVOs, or JGOs. Finally, family structure can impact judicial decision making differentially for African and European American juvenile offenders (e.g., Bishop & Frazier, 1996; Leiber & Fox, 2005; Leiber & Johnson, 2008; Sanborn, 1996). Juveniles from single-caregiver families are especially subject to discrimination by courtroom employees, as they may be viewed as having less parental monitoring and less discipline, even if other relatives or family friends are closely involved in care of the child.

Current Study

Within the United States, a larger proportion of the African American population is incarcerated than any other racial/ethnic group, resulting in DMC of the African American community in the juvenile justice system at large (Office of Juvenile Justice and Delinquency Prevention, 2014). Though researchers in the field may not be able to entirely disentangle what precipitates DMC, becoming better informed about how African American and European American cases are differentially processed at the dispositional stage can inform future efforts on evidence-based policy reform (Piquero, 2008).

Disproportionate minority contact has been observed across all levels of the justice system, including encounters with law enforcement, adjudication, and secure confinement (Kempf-Leonard, 2007; Pope et al., 2002; Puzzanchera & Hockenberry, 2013). A review of literature examining DMC conducted by Pope et al. (2002) indicated that race/ethnicity could be influential at one or multiple decision points during the legal process, and, moreover, that DMC effects may be more strongly associated with different types of offenses. Furthermore, with two exceptions (Fix et al., 2015; Fix et al., 2016), DMC has only been evaluated among youth who engage in non-sexual offending (i.e., JVOs, JGOs).

Discernible evidence based on demographic reports indicates DMC is present among JSOs (e.g., Craun, 2006; Martinez, Flores, & Rosenfeld, 2007). Unfortunately, though a multitude of differences have been observed between JGOs and JSOs (see Seto & Lalumiére, 2010 for a review), DMC among JSOs had not been directly identified or studied until recently (Fix et al., 2015; Fix et al., 2016). In these studies, a significant attenuation in DMC among JSOs was observed relative to JGOs and JVOs, warranting follow-up research among JSOs, JVOs, and JGOs.

Prior investigations suggest examination of legal and extralegal correlates of DMC at multiple levels of the decision making process is relevant and important. Additionally, racial/ethnic background of an offender can be especially impactful on judicial outcomes (Leiber & Fox, 2005; Leiber & Johnson, 2008; Sampson & Laub, 1993), and studies examining DMC have found a complex interaction between legal and extralegal factors influencing decision making in the juvenile justice system (Piquero, 2008). Because far less is known about DMC among JSOs, and more importantly, as the mitigating factors for attenuated rates of DMC among JSOs remain unclear, an empirical examination of legal and extralegal factors that may

differentially influence DMC is required.

Family structure can significantly impact judicial decision making (Bishop & Frazier, 1996; Rodriguez, Smith, & Zatz, 2009), warranting an examination of the impact of family structure on charge reduction during judicial disposition. Additionally, prior court referrals have been identified as a relevant and influential factor on the judicial decision making process (e.g., Bishop, Leiber, & Johnson, 2010; Leiber & Peck, 2015). In response, the present dissertation project examined factors that could contribute to attenuated rates of DMC among confined JSOs, JVOs, and JGOs. More specifically, the present study assessed for differential rates of charge reduction using the following predictors: offense category (i.e., sexual, violent, general), race/ethnicity (i.e., African American, European American), prior court referrals, and family structure.

Hypotheses. The primary hypothesis in the present study was that level of charge reduction would be partially explained by racial/ethnic group, offense category, prior court referrals, and family structure. Such expectations were based upon previous research that indicates juvenile justice decision making 1) is typically more punitive towards African Americans, and 2) may be impacted by bias towards those who are perceived as threatening, like youth who commit sexual offenses (Fix et al., 2015; Rogers & Ferguson, 2011) or violent offenses (Leiber & Peck, 2015; Office of Juvenile Justice and Delinquency Prevention, 2014). The two specific aims of the present study are outlined below.

Research aim 1: Investigate whether race/ethnicity, offense category, prior court referrals, and family structure predict charge reduction.

Hypothesis 1: Along with race/ethnicity and offense category, there is some indication that psychological and social characteristics perceived as more threatening to U.S. middle class

values can implicitly influence the judicial decision making process. As such, it was hypothesized that relevant legal factors (i.e., offense category, offending record, prior detainment), and other individual factors (i.e., age, race/ethnicity) would significantly predict charge reduction. For example, African American race/ethnicity, JSO offense category, single caregiver families, and more prior court referrals were anticipated to adversely influence the judicial decision making process, meaning produce less charge reduction (Bishop & Frazier, 1996; Cappon & Vander-Laenen, 2013; Leiber & Fox, 2005; Leiber & Johnson, 2008; Sanborn, 1996).

Research aim 2: To examine DMC-related effects at the court level, this study investigated whether African Americans and European Americans charged with a sexual, violent, or general non-sexual offense were equally likely to have their charge reduced.

Hypothesis 2: Based on prior research (e.g., Bishop et al., 2010; Crew, 1991; Spohn, Grulh, & Welsh, 1981), it was hypothesized that African American juvenile offenders will have fewer reduced charges than European American juvenile offenders. Moreover, the symbolic threat perspective and preliminary findings from Fix et al. (2015) suggest there would be less discrepancy in charge reductions based on racial/ethnic group among JSOs compared with JGOs and among JVOs compared with JGOs. Further, there were no anticipated differences in charge reduction between JSOs and JVOs, as both groups were expected to be perceived as more delinquent and more threatening to social norms.

Attenuated rates of DMC among JSOs relative to JVOs and JGOs suggest JSOs could be perceived as a particularly threatening class of juvenile offenders to the dominant culture's values (Fix et al., 2015). Thus, it was hypothesized that race/ethnicity and offense category would interact such that the largest charge reductions would be observed for European

American JGOs, followed by European American JVOs and JSOs, African American JGOs, and African American JVOs and JSOs. It was further hypothesized that there would not be a significant difference in charge reduction between European American JVOs and JSOs or between African American JVOs and JSOs.

METHOD

Participants

Information for the present study was obtained from a sample of 145,988 male juveniles who had been referred to an Alabama juvenile court between 2004 and 2014. This sample included male youths with adjudicated sexual offenses (JSOs; $N = 26,545$), adjudicated violent offenses (JVOs; $N = 32,811$), and adjudicated property and drug offenses (JGOs; $N = 85,632$). African American juveniles were overrepresented among all juvenile offenders (51.2%), among JGOs (58.3%), and among JVOs (63.4%), but were slightly underrepresented among JSOs (30.2%), assuming a statewide juvenile population that is 31.7% to 32.7% male and African American (CDC, 2012).

An Univariate ANOVA was run with offense category and race of participants as IVs and age as the DV. Participant age differed significantly across offense categories: JSOs ($M = 14.63$, $SD = 1.98$ years), JVOs ($M = 15.07$, $SD = 1.66$ years), JGOs ($M = 15.46$, $SD = 1.59$ years), $F(2, 145,982) = 2327.09$, $p < .001$, $\eta^2 = .03$. Post-hoc analysis indicated that JSOs were significantly younger than both JVOs ($p < .001$) and JGOs ($p < .001$), and that JVOs were also significantly younger than JGOs ($p < .001$). Additionally, African American participants ($M = 15.18$, $SD = 1.67$ years) were significantly younger than European American participants ($M = 15.28$, $SD = 1.76$ years), $F(2, 145,982) = 183.81$, $p < .001$, $\eta^2 = .001$. Further, there was a significant interaction between offense category and race on age, $F(2, 145,982) = 184.63$, $p < .001$, $\eta^2 = $

.003, such that African American JSOs were older than European American JSOs, but African American JVOs and JGOs were younger than European American JVOs and JGOs (see Figure 1). For more descriptive information, please see Table 4.

Procedure

Approval for the data informing the current study was obtained from an Institutional Review Board at a southeastern university. Data for the present study were collected through the National Juvenile Court Database, an organization who obtained and compiled data from the Alabama Administrative Office of Courts. Data consisted of all referred juvenile court cases in Alabama between 2004 and 2014, reflecting data from 11 years, including the following information: race/ethnicity of the juvenile, the date of the juvenile's court referral, the juvenile's date of birth, whether the juvenile resided with at least one biological parent, whether the juvenile had prior court appearances, up to three initial charges for each juvenile, and up to three final charges for each juvenile.

A total of 338,942 cases were present in the initial data set received from the Administrative Office of Courts. Cases that were not relevant for the present research study and/or specific aims were removed as follows: all status, probation violation, and other court/administrative charge categories (74,140 cases); cases in which the race/ethnicity was not specified as African American or European American (2,144), female juvenile cases (65,118), cases in which the family information was not properly documented by the courts (46,524 cases), and cases in which the juvenile's year of birth was missing or where the recorded age was miscoded and inaccurate (5,028; e.g., saying the juvenile is 65-year-old; saying the juvenile is 96-years-old). Cases that were removed because they were not identified as African or European American were designated as Asian American, American Indian, Hispanic, or other.

Study Variables

Demographic information. General demographic information was obtained through archived legal records. In obtained archived records, data were collected pertaining to participant race/ethnicity and date of birth/age. Race/ethnicity was coded as a dichotomous variable to differentiate African Americans and European Americans.

Legal information. Legal records were obtained to determine whether participants had prior or current adjudicated sexual, violent, and/or general offenses. Accordingly, initial charges were used to classify participants into one of three offense category groups: JSO, JVO, or JGO. The following hierarchy was used to classify participants with multiple categories of initial charges from most serious to least: sexual, violent, and general. Therefore, JGOs only included youth with no sexual or violent initial charges. All initial and final charges that were sexual in nature were coded as adjudicated sexual offenses, first because youth with sexual offending are often separated from the general offender population in correctional facilities (e.g., indicating a difference in offender type), and also because charges that are often considered violent such as rape and sexual assault are sexual in nature. To summarize, all documented sexual offenses (e.g., sexual assault, rape, sexual abuse, indecent exposure) were coded as sexual offending.

Initial and final violent offenses were defined based on a modified version of the FBI Uniform Crime Reports (2013) (i.e., assault, armed robbery, murder, resisting with violence, capital murder). Initial and final general offenses consisted of property, drug, and violation offenses. Offense category was dummy coded into two variables (i.e., JSO, JVO). In addition, the following dummy variables were created to test for interaction effects: African American JSOs, African American JVOs, and African Americans residing with a biological parent. A history of prior court appearances was also documented by the Alabama Administrative Office

19

of Courts. However, this variable was coded dichotomously (i.e., present or absent), and did not include the number of prior court appearances or number of prior charges.

Charge reduction. Three measures of charge reduction were included in the present study (i.e., overall charge reduction, dismissed charges, a measure including other types of charge reduction). During the coding process, charge reduction was measured in four different ways: change in offense type, whether the charge was dismissed, change in the degree of the offense, and change in offense category. Offense category is a broad term regarding whether an offense would best be classified as sexual, violent, or general (i.e., drug, property, status). Offense type is more specific and each offense type falls within one offense category. For example, rape and sexual assault are types of offenses that would be classified within a sexual offense category, whereas theft of property and possession of cocaine are types of general offenses (see Table 3). The degree of an offense refers to whether the offense had no degree or was classified as a 3rd degree, 2nd degree, or 1st degree offense (see Table 3). Whether the juvenile's charge(s) was/were dismissed entirely means all charges were dismissed by the court.

Measures of charge reduction were informed by methods from prior studies, though the measurement of the offense type and offense category (Leiber & Peck, 2015) was modified to separate out sexual and violent offenses and to more explicitly measure offense type for the purposes of the present study. Each measure of charge reduction was coded into a dichotomous variable (i.e., charge reduction present, charge reduction absent). For a more comprehensive overview of the coding system used for the present study, please see Table 1, Table 2, and Table 3.

Intended measures of charge reduction were observed infrequently: reduction in degree, reduction by offense type, and offense category reduction. Because these measures of charge

reduction were infrequently observed, they were combined into one category of other or miscellaneous charge reduction. In sum, three measures of charge reduction were utilized in the present study: overall charge reduction, whether a charge was dismissed, and miscellaneous or other charge reductions.

Family structure. Family structure/living arrangement was coded based on information obtained from the Alabama Administrative Office of Courts. Because so many categories were included in their family structure variable, four different classifications were developed for the present study: single caregiver, two-caregiver, other relative, and Department of Human Resources (DHR) housing or other. Single caregiver included single mother and single father categories, while two-caregiver included families with two biological parents or a stepparent and a biological parent residing together. The other relative classification consisted of grandparents and other relatives. DHR housing included foster homes, juvenile correctional facilities, job corps, and group home living situations, while other was undefined in the dataset. Because these categories were the least common and least clearly defined, they were combined into their own classification. The single parent classification was used as the reference group because it was observed in 60.6% of cases.

Data Analytic Plan

To test the above-mentioned hypotheses, the present study employed a cross-sectional case-control design (Kazdin, 2003; Loftin & McDowall, 1988). The case-control design afforded the opportunity to examine critical causes and correlates pertaining to the nature of a particular variable through selection of subjects who fit predetermined criteria (e.g., juvenile offenders; JSOs and JVOs; Kazdin, 2003). Data were mostly categorical and so normality was not examined for these data; however, age was found to be normally distributed. An initial

examination of the data indicated that only categorical and nominal data were missing (e.g., sex of juvenile, race/ethnicity of juvenile, whether juvenile resided with a biological parent). Accordingly, when relevant data were missing, those cases were removed (as described in the Procedure section).

To test whether charge reduction was predicted by race and offense category, and also to test for any differences in prior referrals by race and offense category, two separate Cross-Tab and Chi-Square Statistics were run. This type of analysis can be used in place of a log-linear analysis (Lowry, 2001), and also calculates odds ratios. A hierarchical binary logistic regression, which estimates effects for predictors while simultaneously controlling for the possible influence of other factors in the model, was conducted to test which factors predict charge reduction. A follow-up hierarchical binary logistic regression analysis was added to the study after observing the charge reduction data to assess whether tested factors differentially predicted a dismissed charge relative to miscellaneous/other charge reduction. Age was controlled for within both the regression models and odds ratios were used to compare and assess the magnitude of effects.

Four steps were included in the hierarchical binary logistic regression models (see Tables 5 and 6). In Step 1 of the regression model, race/ethnicity and age were entered into the model (e.g., Bishop, Leiber, & Johnson, 2010; Leiber & Peck, 2015). Step 2 involved the addition of offense categories, prior court appearances, and family structure categories. Within Step 3, two-way interactions between race/ethnicity and offense categories were added to the model. Finally, Step 4 entailed the addition of race by family structure interaction terms. European American race was used as the reference group for race, JGOs were the reference group for offense category, and single parent family status was the reference group for family structure.

22

Predictors of Charge Dismissal

   Charge reduction and dismissal model. The Chi-Square Goodness of Fit Test was

significant across all steps of the tested hierarchical binary logistic regression model, and this

value increased at each step. It should be noted that the model fit significantly increased at Step

1 ($\chi^2(2) = 506.59$, $p < .001$), from Step 1 to Step 2 ($\chi^2(6) = 2093.71$, $p < .001$), and from Step 2 to

Step 3 ($\chi^2(2) = 27.23$, $p < .001$), but not from Step 3 to Step 4 ($\chi^2(4) = 6.80$, $p = .147$), suggesting

the inclusion of later model variables improved the overall model fit through Step 3, but not Step

4.

   In Step 1 of the hierarchical binary logistic regression model, African American race ($p <$

.001) and age ($p < .001$) predicted overall charge dismissal. In Step 2, prior court referrals ($p <$

.001) and JSO status ($p < .001$) were significantly predictive of charge dismissal. Additionally,

coming from a two parent/caregiver household ($p < .001$) and coming from a relative's

household ($p < .001$) were significantly predictive of dismissed charges (single parent household

was the reference group). The JVO group status did not predict overall charge dismissal with the

JGO group as the reference group, and DHR/other housing ($p = .194$) was also not a significant

predictor of charge dismissal/dismissal.

   Race by offense category interactions were added to the model in Step 3, with results

indicating race ($p < .001$), age ($p < .001$), prior court referrals ($p < .001$), JSO status ($p < .001$),

coming from a two parent/caregiver household ($p < .001$), and coming from a relative's

household ($p < .001$) remained significant predictors of charge dismissal. Moreover, JVO status

($p < .001$), became a significant predictor of charge dismissal. The interaction between African

American race and JSO group membership ($p = .003$) and the interaction between African

American race and JVO group membership ($p < .001$) were also significantly predictive of charge dismissal.

As mentioned earlier, Step 4 did not improve the model fit. Furthermore, none of the added family status interactions were significant. However, many previously included variables remained significant, including: race ($p = .001$), age ($p < .001$), prior court referrals ($p < .001$), JVO ($p < .001$) and JSO ($p < .001$) group membership, coming from a two parent/caregiver household ($p < .001$), and coming from a relative's household ($p = .007$). Additionally, the interaction terms for African American and JSO category ($p = .003$) and African American and JVO category ($p < .001$) remained significant predictors of dismissed charge.

Charge reduction model. A model was run on participants with a reduced charge ($N = 1,401$) to evaluate whether variables of interest predicted other charge reduction (i.e., reduction in degree, offense type reduction, offense category reduction). Similar to the first model predicting overall charge reduction, Chi-Square Goodness of Fit Tests were significant across all but the final step of the tested hierarchical binary logistic regression model, and this value increased at each step. Also paralleling the charge dismissed model, the model fit increased significantly at Step 1 ($\chi^2(2) = 8.01$, $p = .018$), from Step 1 to Step 2 ($\chi^2(6) = 121.84$, $p < .001$), and from Step 2 to Step 3 ($\chi^2(2) = 64.93$, $p < .001$), but not from Step 3 to Step 4 ($\chi^2(4) = 1.30$, $p = .728$).

Step 1 of the hierarchical binary logistic regression model included African American race ($p = .008$) but not age ($p = .349$) as a predictor of dismissed charges over other charge reduction. During Step 2, offense category, prior court referrals, and family structure were added to the model. Offense category predictors were significant: JVO status ($p < .001$), and JSO status ($p < .001$). Although African American race remained a significant predictor ($p < .001$),

age and the newly added prior court referrals and family structure variables did not predict charge reduction.

In Step 3, race by offense category interactions were added to the model. Results indicated JSO group membership ($p = .025$) remained significant predictors of dismissed charges, whereas the main effect of race ($p = .082$) and JVO group membership ($p = .626$) became non-significant. Again, age, prior court referrals, and levels of family structure did not predict other charge reduction. The newly added interaction terms African American race by JSO group membership ($p < .001$) and African American race by JVO group membership ($p < .001$) were significantly predictive of charge reduction.

Step 4 did not improve the model fit, and none of the added family status by race interactions were not significant. JSO group membership ($p = .023$) remained a significant predictor of charge reduction. Interactions between race and sexual offense category ($p < .001$) and race and violent offense ($p < .001$) category also remained significant. Race, age, prior court referrals, JVO group membership, and family structure again did not predict charge reduction.

Comparisons by Race and Offense Category

To test whether a charge reduction or dismissal was predicted by race and offense category, and also to test for any differences in prior referrals by race and offense category, two separate Cross-Tab and Chi-Square Statistics were run. Odds ratio values were only calculated for race, as offense category was a three-category variable.

There was a main effect of offense category on prior court referrals ($\chi^2(1) = 2089.49$, $p < .001$), such that JGOs (69.6%) and JVOs (70.7%) were more likely to have had prior court referrals than JSOs (55.4%). There was also a main effect of race on prior referrals, such that African American juveniles (73.3%) were significantly more likely to have prior referrals than

25

European Americans juveniles (60.1%), $\chi^2(1) = 2861.26$, $p < .001$, $OR = 1.82$. Effects of race on

prior court referrals were impacted by offense category such that African American juveniles had

significantly higher levels of prior court referrals than European Americans, but the difference in

prior referrals was greater among JVOs relative to JSOs, and was the greatest among JGOs, such

that African American JGOs had more prior court referrals than European American JVOs and

European American JSOs (see Figure 2).

There was also a main effect of offense category on overall charge reduction ($\chi^2(1) =$

1337.46, $p < .001$), such that JGOs (8.6%) and JVOs (8.8%) were less likely to have charge

reduction than JSOs (16.1%). A main effect of race on overall charge reduction was also

observed, such that African American juveniles (9.5%) were significantly less likely to have

charge reduction than European Americans juveniles (10.6%), $\chi^2(1) = 47.59$, $p < .001$, $OR =$

0.89. Effects of race on charge reduction were attenuated by offense category. While European

Americans had more charge reduction than African Americans within JSO and JVO offense

categories, within the JGO group, African American JGOs had more charge reduction than

European American JGOs (see Figure 3).

Discussion

The preponderance of African American males in the juvenile justice system indicates a

systemic injustice that is partially the result of implicit and explicit racial bias (e.g., Brinkley-

Rubinstei et al., 2014; Piquero, 2008), yet there are data that indicate other factors beyond race

may indirectly influence decision making, such as offense category (e.g., Fix et al., 2015; Fix et

al., 2016). Further, empirical evidence suggests some factors may interact with race to influence

judicial decision making (e.g., offense category, family structure; Fix & Burkhart, 2015; Leiber

& Fox, 2005). Though a number of models have examined race as a predictor of judicial

decision making, few have studied decision making using charge reduction during disposition, and no known models to date have considered sexual offense category, which may uniquely attenuate racial bias during juvenile sentencing (Fix et al., 2015).

The present study is the first known study to expand upon prior models of charge reduction by including offense categories (i.e., sexual, violent, general), by testing race by offense category interactions, by including a more comprehensive measure of family structure category beyond those typically included in research, and by evaluating whether different measures of charge reduction have different predictive patterns. Indeed, use of a large data set with juvenile court cases allowed for the development and evaluation of a charge reduction and dismissal model. In general, findings indicate African Americans were slightly more likely to have their charge reduced, whereas European Americans were significantly more likely to have a charge dismissed. Further, youth with no prior charges who had committed a sexual offense and who lived with two caregivers were the most likely to have any form of charge reduction.

Predictors of Overall Charge Reduction (Charge Reduction and Dismissal)

Consistent with stated hypotheses, African American race predicted less charge dismissal in the first step of the model. During subsequent stages of the model, African American race remained a significant predictor of charge dismissal. However, the effect of race on charge dismissal reversed when prior court appearances, offense category, and family structure were entered into the model such that African American race became a negative predictor of charge dismissal. It is possible that African American race in the first step was capturing variance associated with other variables which were included in later steps. For instance, African American male youth often have more prior charges, are more likely to come from homes with non-traditional family structures (e.g., Fix & Burkhart, 2015; Fix et al., 2016), and were

27

overrepresented among JGOs (the reference group) in the present study.

Offense category and charge dismissal. The JSO offense category was a significant predictor of charge dismissal, whereas JVO status only became significant once race by offense category interaction terms were added into the model, making its effect on charge dismissal and dismissal difficult to disentangle. While findings that the sexual offense category was associated with more charge dismissal than other offense categories were unexpected, there are a number of possible reasons that judges may be so forgiving of this population relative to JVOs or JGOs. One possible explanation for this observation is that of victim credibility. Coupled with the equivocal nature of sexual offenses, the believability of a victim can make or break a case during many stages of the juvenile justice process (Campbell, Menaker, & King, 2015). Thus, it may be that JSOs had far more charge dismissal and dismissal because these cases involve far more uncertainty, and factors like victim credibility can significantly influence case outcomes.

Another largely unexplored factor which may be contributing to more charge dismissal and dismissal among JSOs has to do with judges' experiences. Some of the county-level data from the present dataset suggest that select counties had fewer than 20 total juvenile sexual offense cases between 2005-2015. Accordingly, these and other judges may be more inclined to accept plea bargains or dismiss a charge with which they are less familiar. Conversely, some counties had more JSO cases than JGO or JVO cases during the same timeframe (over 1,000), which could produce a similar outcome as having few JSO cases through different means. If a judge predominantly worked with JSO cases, they may be more likely to dismiss JSO cases because they may be familiar with the low level of threat JSOs pose to the community (e.g., low reoffending rates) or they may dismiss more JSO cases because they have been exposed to many more serious JSO cases than judges with fewer JSO cases.

28

Besides prevalence of JSO cases in a county affecting judicial outcomes, within the timeframe during which study data were obtained, the Adam Walsh Child Protection and Safety Act of 2006 was passed in the state of Alabama during 2011. The Adam Walsh Act is a law that could seriously impact the livelihood and overall well-being of JSOs (Fix et al., 2015) through forced sex offender registration and notification policies. It is therefore also possible that following implementation of this new policy, judges were more lenient with JSO cases than in previous years.

Race and offense category interactions. Race and offense category interactions were significant, but in a divergent pattern from what was hypothesized. More specifically, approximately 16% of JSOs had charge dismissal or dismissal, whereas this was only the case for between 8% and 9% of JVOs and JGOs. Furthermore, among JGOs, African Americans were more likely to have a charge dismissal or dismissal than European Americans, while European Americans had a greater likelihood of having a charge reduced compared with African Americans among JSOs and JVOs.

Previous studies indicate that African American race negatively predicts JSO status (Fix et al., 2016), but it was unexpected that youth with a sexual offense charge would be more likely to have a reduced charge relative to JGOs or JVOs. Further, European American JSOs were the most likely group to experience charge dismissal or dismissal. Nevertheless, both African and European American JSOs were far more likely to experience charge dismissal or dismissal than JGOs or JVOs identifying as either race.

To better understand these findings, it is important to recognize sample sizes by racial and offense category grouping and also to consider how frequently charge dismissal and dismissal was observed in the present study within each group. African American JGOs

29

represented the largest race by offense category interaction group (over 50,500), with the second largest group being European American JGOs ($N \sim$ 36,100). Further, 9% of African American JGOs had a reduced or dismissed charge relative to 8% of European American JGOs, whereas far smaller samples of African and European Americans JSOs were seen in courts (8,028 and 18,517, respectively). It is possible that the large JGO group may be driving many observed effects in the tested models. Although general offenses were not broken down into subcategories (e.g., drug, property, status), it is likely that doing so would produce a more clear picture of the higher charge dismissal rate among African Americans JGOs relative to European American JGOs.

In sum, results concerning offense category and race suggest both of these factors contribute meaningfully to charge dismissal, and warrant inclusion in follow-up models of juvenile justice decision making and the DMC literature, and indicate race by offense category interaction terms may also deepen our understanding of DMC. Because we recognize there is likely an attenuated rate of DMC among JSOs relative to JVOs or JGOs (e.g., Fix et al., 2015), it is important that offense category be included in future models to better understand how such classifications impact decision making across the juvenile justice decision making stages. In respect to the present study, we now might need to recognize that biases may produce more favorable outcomes for African American JSOs at a later judicial stage. These findings mirror results from Bishop et al. (2010), who argued that judicial disposition is susceptible to bias, but that European Americans may have harsher outcomes than African Americans at the final stage. Arguments for such findings generally rely on the premise of judges working to resolve inequalities from earlier stages of processing; yet, it is also important to keep in mind the different focus of adult and juvenile justice systems, particularly because the juvenile system

tends to have a stronger treatment orientation (Bishop et al., 2010). Thus, it is possible that

African American JSOs in the present study who had fewer prior court appearances and who

were older were seen as more in need of treatment as opposed to punishment, particularly if they

seemed to pose less of a risk to society compared with African American JGOs or JVOs.

However, follow-up research is needed to better understand this finding, as we know little about

perceptions of juvenile offenders by race and offense category.

Family structure effects on overall charge dismissal. Statewide data afforded a novel

and more comprehensive measure of family structure than has been used in prior research on

juvenile justice outcomes. It was expected that juveniles coming from two-caregiver households

would experience more leniency at the hands of the court relative to juveniles from single-

caregiver households, meaning that they would have greater charge dismissal. This anticipated

effect was realized in the present study, as youth who had been residing in two-caregiver

households had a far greater likelihood of receiving charge dismissal than youth from single-

caregiver households. Indeed, previous studies have observed a similar phenomenon, with

single-caregiver homes having a decidedly negative impact on judicial disposition (Bishop &

Frazier, 1996; Sanborn, 1996). Results also indicated that juveniles who resided with non-

parental relatives were less likely to have a reduced charge relative to juveniles coming from a

single caregiver home. Finally, although previous research has indicated unique race by family

structure interaction effects (Leiber & Fox 2005, Leiber & Mack 2003), no such interactions

were observed in the present study.

Divergent findings on race by family structure effects on judicial outcomes from previous

literature may be related to the unique population from which these data were obtained. The

South, and Alabama in particular, has a particularly high number of single-caregiver households,

both single mother and single father households (Vespa, Lewis, & Kreider, 2013). Furthermore, Alabama is among several southern states with significantly lower unmarried partner households relative to the U.S. average. Taken together, it is possible that anticipated interaction effects were not observed because the norms of the state from which the data were obtained do not reflect the norms of the U.S., and therefore may deviate from findings in previous research. In addition, the present study used a more nuanced measure of family structure which deviates from previously used measures of family structure which tend to use two categories: single- and two-caregiver households. Accordingly, observed family structure effects may indicate the importance of considering multiple family structure categories as opposed to only coding for the standard single- versus two-caregiver family structure categories.

Age effects on overall charge dismissal. Younger age was associated with more charge dismissal. While the effect size associated with age was small (0.95), results support previous research which suggests the role of age on judicial disposition cannot be overlooked. Even when all other variables which were estimated to have a meaningful influence on charge dismissal were added into the model, some of which are often highly correlated with age (e.g., prior court referrals), age remained a significant predictor. This finding is consistent with the literature, as youth are more likely to be treated with greater leniency and understanding (Axt et al., 2014). While it is appropriate that younger children (who typically have fewer prior offenses and also have less developed neuroanatomy than their older peers) be punished less harshly, all adolescents are developmentally immature. Indeed, researchers argue juvenile offenders should be given consideration for charge dismissal in light of their developmental stage (Steinberg & Scott, 2004).

Prior court referrals and overall charge dismissal. Similar to prior research and

aligned with what we would expect from decision makers in the juvenile justice system, more prior court referrals meant less charge dismissal in the tested model (e.g., Bishop et al., 2010; Leiber & Peck, 2015). Although this effect was anticipated and is congruent with prior research, this finding supports the notion that the influence of prior court referrals on charge dismissal is at least partly independent of race or offense category. While it is promising that one's prior offense record is playing a role in judicial decision making, many extralegal variables remained significant predictors of charge dismissal beyond a youth's prior offense record.

Other Forms of Charge Reduction

Few cases of charge reduction as opposed to charge dismissal were observed overall. Still, predictors of other forms of charge reduction (e.g., the initially proposed mean of charge reduction measurement) were estimated. Few factors were found to predict other charge reduction without charge dismissal (hereafter referred to in this section as charge reduction). More specifically, JSO status and both race by offense category (i.e., JSO, JVO) interaction terms predicted charge reduction.

Unlike the model of overall charge reduction and dismissal, age, family structure, and prior court appearances did not predict charge reduction. African American race was associated with more charge reduction. Actual charge reduction rates were slightly higher among African Americans using offense type and offense category compared with European American rates, byt 0.1%. Again, the rates of charge reduction were very low overall and were minor relative to charge dismissal rates, evidencing that judges were more likely to dismiss a case outright than to reduce it by degree, type, or category.

Findings also indicated JSOs were more likely to experience charge reduction relative to JGOs. However, when race by offense type interaction terms were entered into the model, this

33

effect disappeared, indicating interaction effects were an important addition to the model. If only main effects had been tested, it would have seemed as if race and offense category were impactful. In actuality, findings from this model indicate both are meaningful, but their influence is best understood when they are simultaneously considered. Indeed, a youth does not present to court as an offense category or a race, but with a number of overlapping identities, some of which may be more influential on judicial decision making than others.

Effects of offense category and race interactions on charge reduction paralleled results from the charge reduction and dismissal model, as African American JVOs were more likely to experience charge reduction in reference to European American JGOs. Additionally, African American JSOs had a greater likelihood of charge reduction. Ultimately, while it may be important to measure charge reduction, results indicate that there were far more dismissed charges than reduced charges, and measurement of both forms of 'charge reduction' provides a more informed perspective on judicial outcomes in Alabama's juvenile courts.

General Study Implications

While DMC was not directly evaluated in the present study, findings support previous assertions from a study of confined males from an Alabama juvenile correctional facility that DMC is present yet attenuated among JSOs (e.g., Fix et al., 2015; Fix et al., 2016). Although few studies on JSOs have considered the potential influence of racial/ethnic background on disposition, most studies suggest either a markedly reduced overrepresentation of African Americans relative to European Americans among JSOs, or note that African Americans are underrepresented among JSOs (Fix et al., 2015; Ikomi et al., 2009). Thus, results from the present study align with prior findings that models of judicial outcomes would be enhanced if offense category were included in the model alongside race/ethnicity, both independently and as

an interaction term with race/ethnicity.

Results also remind us that it is imperative that legal factors and needs of youth be given full consideration in the courtroom, yet results from the present study indicate bias based on offense category, race, and family structure are also impacting judicial outcomes. Punishment should be used with care, even in the courtroom, as negative consequences associated with juvenile corrections involvement can be longstanding, reducing and sometimes eliminating educational and occupational opportunities, among other potentially harmful outcomes (Belzer, 2015). Indeed, such detrimental outcomes can be especially pernicious for JSOs. Thus, age of the offender, and readily available legal information which predicts recidivism (e.g., prior offense record, prior confinement record) should be more heavily relied upon as opposed to extralegal factors which can implicitly or explicitly contribute to judicial decision making (e.g., race/ethnicity, offense category). To summarize, judicial decision making in the Alabama juvenile court system appears to have been influenced by extralegal factors, especially offense category. Yet, the existing overrepresentation of African American juveniles presenting to juvenile courts indicates that bias is impacting decision makers in far earlier stages of the juvenile justice process.

Unique race by offense category interactions and strong predictive ability of JSO status on charge reduction and dismissal indicate a need for further research, particularly examination which includes sexual offending as a category separate from violent offending. Based on results from the present study and current Alabama policy specific to JSOs, JSOs have more risk when they enter the courtroom than if they were charged with a general or violent offense because there is a greater likelihood that they will either have their charge dismissed or will be labeled as a sexual offender. Even for juvenile offenders, having an adjudicated sexual offense provides

the possibility of a lifetime of sexual offender registration and notification for the youth (Adam Walsh Act, 2006, adopted in Alabama in 2011). Ultimately, because the risk is so great for JSOs, and they are an understudied population in the sentencing and DMC literature, findings indicate the need to better understand how offense category influences charge reduction and dismissal.

Implications for the Symbolic Threat Perspective

The symbolic threat perspective asserts that youth who do not exemplify middle class standards and values will be perceived as more threatening (Sampson & Laub, 1993). Based on this theory, it was anticipated that JSOs, and especially African American JSOs, would produce a high level of perceived threat and would therefore have the least charge reduction. Contrary to this prediction, African American JSOs and European American JSOs had the highest likelihood of having a charge reduced or dismissed of all studied race and offense category classifications. Based on the premise of symbolic threat, results would therefore indicate that JSOs are not in fact posing a greater perceived threat to middle class standards and values than are JVOs and JGOs. It could also be that the perceived threat is lesser for JSOs because sexual offenses are more equivocal (Campbell et al., 2015), perhaps more so than general and violent offenses.

Because victim credibility contributes substantially to outcomes in the justice system, it is important to dismantle potential false beliefs about victim statements. In general, when a child says they have been sexual abused, empirical evidence indicates they should be believed (Fergusson, Horwood, & Woolward, 2000). However, many survivors of childhood sexual abuse never report their abuse, and of those who do, some will initially deny being abused but will later report the abuse and others will deny being abused after they initially reported the abuse (Fergusson et al., 2000; Hanson, Resnick, Saunders, Kilpatrick, & Best, 1999; Hardt &

Rutter, 2004). Given the unreliability of sexual abuse reporting due to associated stigma and

sensitivity surrounding reporting of childhood sexual abuse, processes like a higher likelihood of

case dismissal could be perceived as discounting of sexual abuse claims, further dissuading

future reporting. High numbers of case dismissals are also likely to negatively impact public

education and understanding about the seriousness of sexual offenses, again contributing to less

reporting. Findings from the present study may therefore reflect the ambiguity with which JSO

cases are responded to by judges. Further research is needed to clearly understand the political,

personal, and community forces which influence these decisions.

While beliefs about sexual abuse may be impacting case dismissal rates, other influential

factors may be occurring prior to or during the dispositional stage, impacting JSO cases relative

to JGO or JVO cases. Judges may be responding to their differential number of JSO cases, their

own biases, community pressure to punish, or other factors when making decisions in JSO cases.

It is therefore important that researchers examine factors from attitudes to official procedures

that could impact processing at different stages. For instance, the deciding factor may be

whether or not witnesses or victims testified in a given case, or it may be the severity of the case

(e.g., sexual torture versus sexting). Other factors that could influence judges may be attitudes

and perspectives of juvenile probation officers on a given case.

Beyond implications for judges, determining which factors are contributing to more

favorable or less desirable outcomes could also inform law enforcement officers' decision

making far earlier in the juvenile justice process. It is possible that judges are dismissing such a

large percentage of JSO cases because law enforcement officers are not charging the right people

or are charging youth with inappropriate crimes such as sexting (Fix, Falligant, & Alexander,

2017). Further, each judge may have different guidelines regarding which charges they dismiss.

Through workshops or joint meetings for law enforcement officers, juvenile probation officers, and judges, information on recent policy changes such as the Adam Walsh Act could be disseminated and discussed. A unified appreciation for implications of this policy and which cases are best to target could develop as a result of such intervention. Ultimately, policy modifications which could clarify and shape decision making among law enforcement officers, juvenile probation officers, and judges would be the best way to identify the most effective decision making processes (e.g., cause the least harm to the juvenile offender, reduce recidivism) that align with the law. Another exciting potential result of follow-up research would be to develop a decision tree to assist law enforcement officers, juvenile probation officers, and judges in making the most cost-effective decisions that also lead to the lowest rates of recidivism, similar to decision tree models in cardiovascular medicine (Soni, Ansari, Sharma, & Soni, 2011). The implications resulting from this observation extend beyond the need for further examination of this phenomenon, especially for judges and potentially for law enforcement officers.

Previous studies have found that as the proportion of African American juveniles increases at the state or county level, so too could the perceived threat of these youths on the dominant U.S. culture (e.g., Sampson & Laub, 1993; Siegel, Welsch, Senna, 2006). Findings from the present discourse highlight disparities in the Alabama juvenile justice system, which occur across processing stages from suspension in schools through judicial disposition. Results emphasize a need for intervention across juvenile justice processes and investigation into where in the school-to-prison pipeline intervention can be most effective in reducing juvenile offending and recidivism. Taken together, the results from the present study could help inform policies that aim to reduce the amount of DMC within the Alabama judicial system, and may ultimately lead to a program of research that informs policies related to discrimination in the juvenile

justice system across the United States.

Limitations and Future Directions

While the present study had good power and tested a unique model of decision making, there are several study limitations worth noting, the majority of which are related to the obtained court-level data. While obtained data allowed for examination of charge reduction, few instances of charge reduction (e.g., lessening of offense type, offense category, or charge degree) were observed overall, and measurement of charge reduction was somewhat limited by the data presentation. For instance, the received dataset was constrained to a maximum of three initial and final charges for each juvenile case. Though it was helpful to have up to three charges for each youth, restricting the number of reported offenses is problematic when charges or counts are in a juvenile's court record extend beyond the three that were documented in received records. Limiting the number of reported offenses removed the option to measure charge reduction through change in number of charges, because the vast majority of offenders had three offenses documented. Furthermore, while initial charges were often clearly documented, there were a number of cases in which the respective corresponding final charges were missing but not demarcated as dismissed, which obfuscated assessment of charge reduction for select cases. Ultimately, these limitations indicate that researchers aiming to conduct parallel studies should be flexible with their measurement of charge reduction, and that it must be developed based on available data.

A few other problems arose following receipt of the current dataset: repeat juvenile offenders could not be identified and family structure coding was problematic given the proposed categorization of family structure. Within the received dataset, all of the data were de-identified, and while date of birth was available for each case, this information alone could not

be used to match cases due to the large sample size. Information concerning whether or not juveniles had prior court referrals proved useful, but the exact number of prior charges and prior adjudicated charges were undocumented and therefore unavailable for inclusion in the present study. Finding ways to obtain more detailed prior court referrals will provide researchers who conduct follow-up studies with valuable control or test variables. Future studies should consider finding ways to obtain more comprehensive measures of prior offenses and also consider testing prior offense category effects on judicial outcomes.

Two other unanticipated coding issues arose for family structure. First, family structure was coded into 12 separate categories, and second, it was unclear under which classification same sex families were coded. While the large number of available family structure categories offered more information than is typically obtained in similar studies, the categories were atypical (e.g., did not state whether child lived with a guardian, using the term "relative" for situations in which a youth had either one or two caregivers), making it difficult to fit the data into the developed model which was to be tested in the present study. Also, many cases were missing information on presence of biological parents or with whom the youth resided.

Family structure is an informative construct, yet it can be difficult to determine how best to code information surrounding one's family. Future studies may benefit from clarification of how a data source codes family structure, or may wish to obtain family structure information using a corroborative source, if such information is available. Moreover, follow-up studies would benefit from including information directly measuring family structure and other empirically derived family and community factors such as parental monitoring and community violence exposure (Fix & Burkhart, 2015). Such studies are encouraged to assess for family and individual buffers against discrimination (Fix & Burkhart, 2015), with a particular focus on what

the family/juvenile could do to mitigate race effects in the justice system.

There were a few other minor limitations of the present study based on the data obtained from the administrative office of courts. Data were obtained from the court level; however, data from probation officers or district attorneys could provide other information about factors which might contribute to judicial decision. In addition, it would be beneficial to have more sources to corroborate documented information or to provide missing data. Future studies may benefit from examining juvenile justice decision making at other critical points in the decision making process. Yet, researchers are also encouraged to continue examining decision making at the dispositional stage. Courtroom proceedings are important to the long-term trajectory of juvenile offenders and their families, and other factors which could be proxies of charge reduction (e.g., many forms of disposition) have yet to be tested with race and offense category as predictors.

Data in the present study reflect Alabama court appearances from 2005-2015, the most recent charge reduction data evaluated within published literature. Still, data prior to 2005 were not obtained and thus were unable to be included in the present study both because older data were coded differently from succeeding data, and incongruent variables were collected in the years prior to 2005. Data were obtained from one southeastern state, creating a geographic limitation. Furthermore, Alabama state demographics differ from other places in the United States, as the state consists of mostly African Americans and European Americans and includes few other racial/ethnic groups. Accordingly, similar analyses should be conducted with data from other states, especially states with overlapping and differing population-level demographic characteristics. Only male juveniles were examined in the present study; it is therefore recommended that follow-up studies include female participants when possible.

Repeat offenders were unable to be identified, and therefore cross-sectional analytic

techniques were employed. Future studies could examine whether policies passed in Alabama or other states impacted charge reduction by offense category before and after the passing of new legislation. Future models should also consider multilevel modeling approaches in which youth could be nested by county.

Finally, literature on disproportionate minority discipline suggests a potential quadratic relationship within the symbolic threat literature, which should be tested in future studies (Rocque & Paternoster, 2011). Evidence from previous research suggests that European Americans in positions of authority disproportionately focus on racial/ethnic minorities as the percentage of racial/ethnic minorities increase, but there may be a threshold over which punitive responses decline. Such an effect could be present with such disparate rates of demographic characteristics and referrals for different offense categories at the county level.

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Table 1. Main Scoring Template for Charge Reduction

Score Change	Key for New Category	Type	Category	Degree	Number of Charges	Most Serious Charge
1	Favorable change (charge reduction)	One or more type(s)	One or more categories	One or more degrees	One or more charge(s) removed	Most serious charge(s) removed
0	No change	Same type	Same Category	Same Degree	No change in number	No change of serious charge

Note. Codes will be created for each of the following based on the difference between the presenting and adjudicated charge: type, category, degree/severity, number of charges, and whether the most serious presenting charge was dismissed or retained. Overall, a "0" will represent no change in charge, a "1" will represent a change of one degree.

Table 2. Specification of Offense Category and Offense Degree Hierarchy

	Category	Degree
Least severe	Drug	No degree associated with charge
Somewhat severe	Property	3rd degree
Moderately severe	Violent	2nd degree
Most severe	Sexual	1st degree

Note. Severity of type of charge is based on psychological and legal outcomes.

Table 3. Example of Offense Type Category Hierarchy

Sexual	Violent	General	
		Property	Drug
Rape	Murder	Burglary/Breaking & Entering	Manufacturing or Distributing
Sodomy	Robbery	Larceny/Theft of Property	Possession
Sexual Assault	Aggravated Assault	Motor Vehicle Theft	DUI
Sexual Abuse	Assault	Arson	Public Intoxication
Sexual Misconduct	Weapons Violations	Forgery	
Sexual Harassment	Animal Cruelty	Buying/Receiving Stolen Property	
Indecent Exposure	Harassment	Destruction of Property	
Pornography Possession	Disorderly Conduct	Criminal Trespass	

Note. Most severe offenses at top of table. Hierarchy developed using recommendations from the Uniform Crime Reporting Program (Federal Bureau of Investigations, 2004; 2013).

Table 4. Descriptive characteristics of study sample

Variable	African Americans (N = 79,354)	European Americans (N = 66,634)	Full Sample (N = 154,988)
	M	M	M
Age at referral	15.18 years	15.28 years	15.22 years
	Percent	Percent	Percent
Living arrangement			
Single mother	64.0	39.7	52.9
Single father	4.6	11.5	7.7
Two caregivers	15.8	36.9	25.4
Other relative	11.3	8.4	10.0
DHR/other	4.3	3.4	3.9
Prior court referrals	73.9	60.1	67.2
Offense category			
JGO	63.7	54.2	59.3
JVO	26.3	18.0	22.5
JSO	10.1	27.8	18.2
Charge reduction			
Charge dismissed	8.2	9.5	8.8
Misc charge reduc			
Offense type	1.0	0.9	1.0
Offense category	0.3	0.2	0.3
Degree reduced	0.2	0.2	0.3

Note. For any category of charge reduction, participants could have multiple types of charge reduction. Misc charge reduc = miscellaneous charge reduction.

Table 5. Hierarchical Binary Logistic Regression Predicting Charge Reduction and Dismissal

	Step 1	Step 2	Step 3	Step 4
	OR	*OR*	*OR*	*OR*
Intercept	0.59**	0.28**	0.26**	0.26**
Age	0.90**	0.95**	0.95**	0.95**
AA	0.88**	1.12**	1.22**	1.20**
Prior charges		0.56**	0.56**	0.56**
JSO		1.84**	1.97**	1.96**
JVO		1.01	1.16**	1.16**
Two caregivers		1.13**	1.13**	1.10**
Other relative		0.88**	0.88**	0.87*
DHR/other housing		1.01	1.01	1.10
AA x JSO			0.88*	0.88*
AA x JVO			0.79**	0.79**
AA x Two caregivers				1.06
AA x Other relative				1.03
AA x DHR/Other housing				0.86

Note. $* = p < .01$; $** = p < .001$; AA = African American.

Table 6. Hierarchical Binary Logistic Regression Predicting Miscellaneous Charge Reduction

	Step 1	Step 2	Step 3	Step 4
	OR	*OR*	*OR*	*OR*
Intercept	0.01	0.01	0.01	0.01
Age	0.99	1.01	1.01	1.01
AA	1.15*	1.32**	0.87	0.87
Prior charges		1.08	1.09	1.10
JSO		2.10**	1.24*	1.24*
JVO		1.46**	1.06	1.09
Two caregivers		1.14	1.14	1.11
Other relative		1.00	0.99	1.01
DHR/other housing		1.07	1.07	1.26
AA x JSO			2.85**	2.84**
AA x JVO			1.69**	1.69**
AA x Two caregivers				1.06
AA x Other relative				0.98
AA x DHR/other housing				0.76

Note. ^ $= p < .02$; * $= p < .01$; ** $= p < .001$; AA = African American.
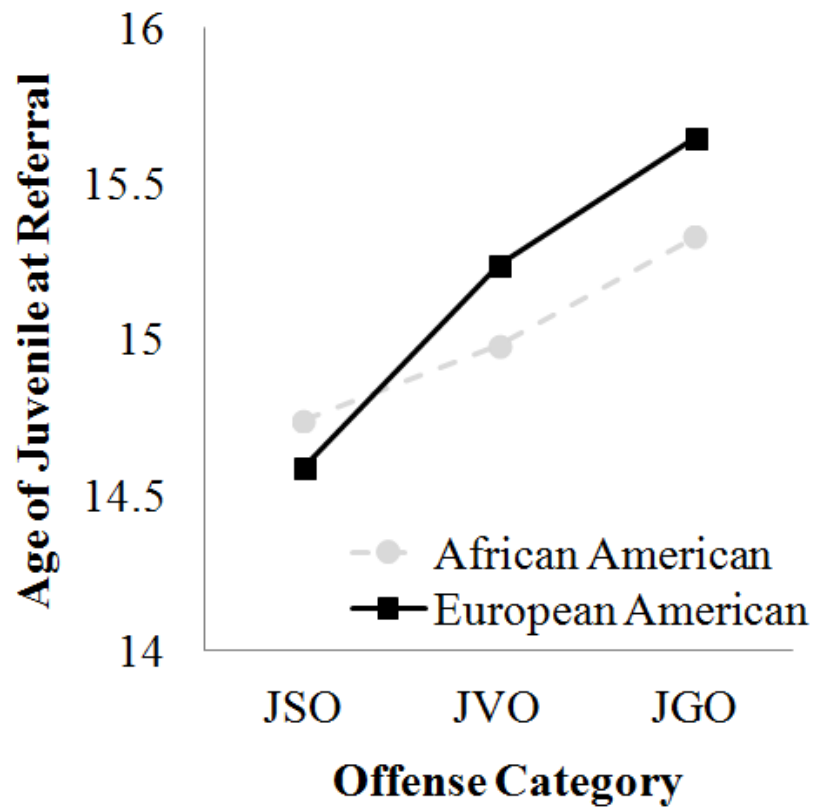
Figure 1. Interaction between juvenile's race and juvenile's offense category on age at referral.
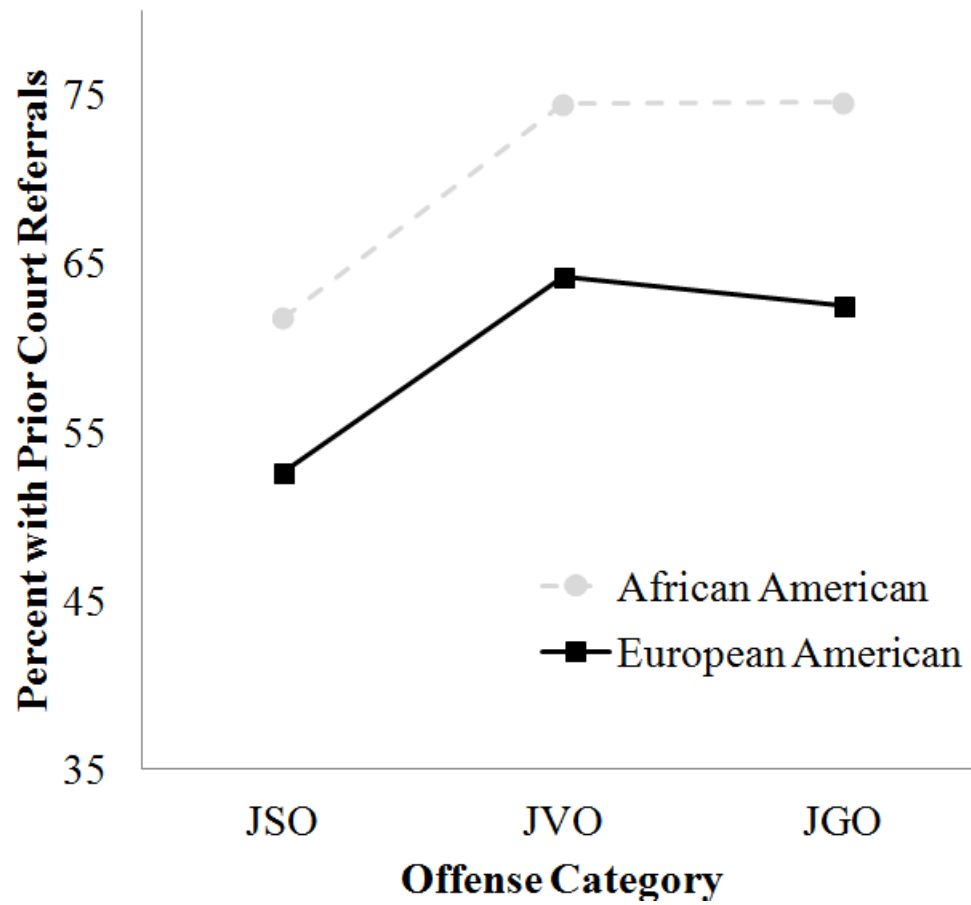
Figure 2. Interaction between juvenile's race and juvenile's offense category on prior court referrals.
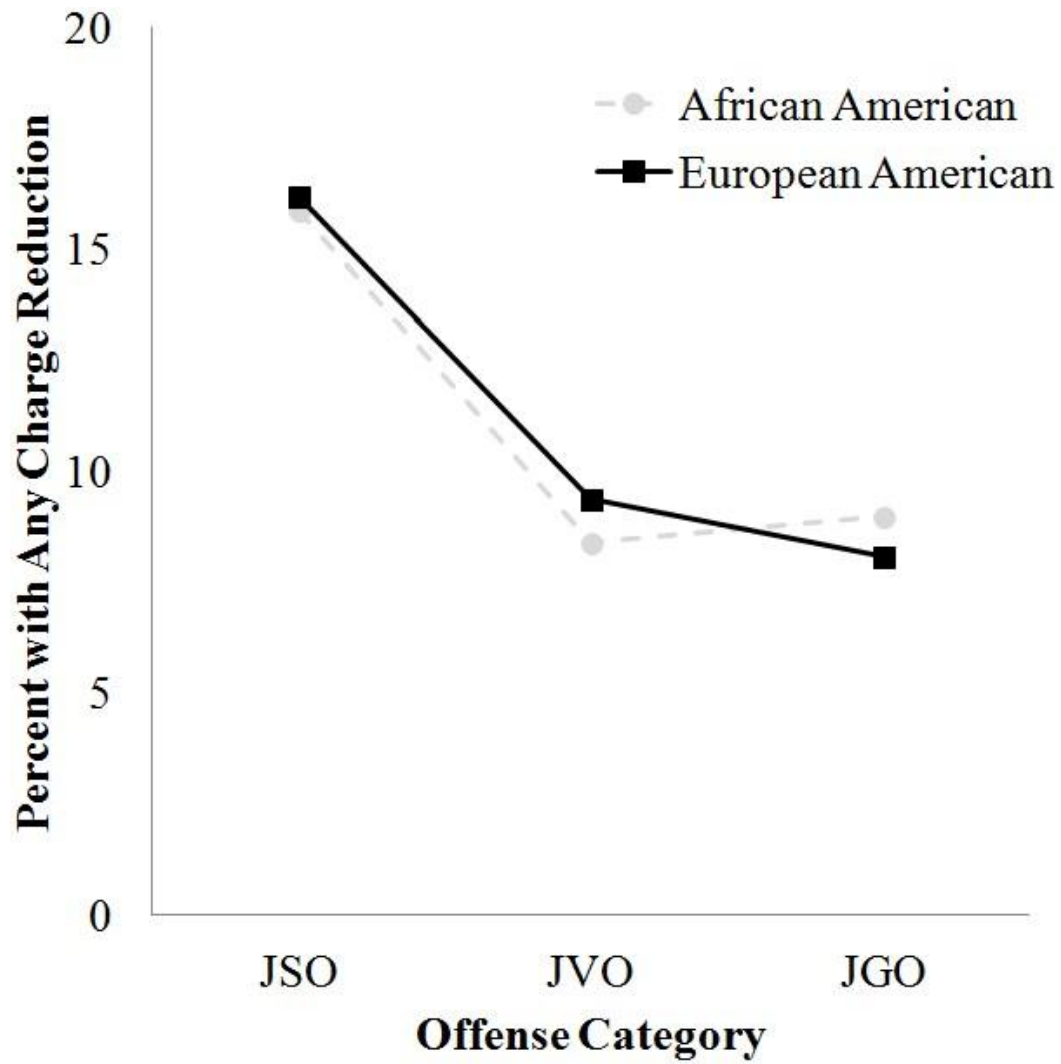
Figure 3. Interaction between juvenile's race and juvenile's offense category on charge reduction and dismissal.