Disproportionate Minority Contact in North Carolina: An Assessment Study

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Executive Summary

In July of 2018 the Governor's Crime Commission, Juvenile Justice Planning Committee/State Advisory Group and DMC Subcommittee issued a Request for Proposals for an assessment study of Disproportionate Minority Contact (DMC) within the North Carolina juvenile justice system. Cambiare Consulting and Dr. Michael Leiber responded to the solicitation and received the award for the study beginning in September of 2018. The goal of the assessment study was to determine whether, where and why DMC exists in North Carolina's juvenile justice system.

After meeting with staff from the Governor's Crime Commission (GCC) and the Department of Public Safety (DPS), the researchers designed an assessment study consisting of three elements. The first element consisted of an analysis of relative rate index (RRI) data maintained by DPS. The second component of the study was an analysis of case processing data maintained by DPS. Finally, a survey of key stakeholders was conducted to obtain their opinions of, and experiences with, DMC in their jurisdictions.

Relative Rate Index (RRI) Analysis

The RRI is the ratio of the proportion of minority youth at a given stage to the proportion of White youth at that same stage. If both groups are being processed at the same rate, then the RRI would be equal to 1. RRIs above 1 indicate disproportionate minority contact at that stage of the system.

DPS provided the five most recent years of RRI data (FY14-FY18) for all localities in the state from the North Carolina Juvenile Online Information Network (NC-JOIN). Analysis of RRIs for FY18 showed that RRIs were highest for complaints received, detentions, and juveniles confined to YDCs. For these three stages RRIs for Black youth were higher than for other

minority groups, with the differences being particularly notable for complaints received and juveniles confined. Generally, RRIs were around 1 for all groups for complaints approved, cases adjudicated, and cases disposed.

RRIs for complaints received in the Central and Piedmont regions were higher than the state average. RRIs for Black youth confined to YDCs were much lower than the state average in the Central region and higher than the state average in the Piedmont region. Analysis of RRIs for the state's two largest counties, Wake and Mecklenburg, showed that RRIs for complaints received and detentions were much higher in these two counties than in the rest of the state.

There was wide variation among counties in the amount of disproportionality. Most counties for which RRIs could be calculated had RRIs of greater than 1 for Black youth for complaints received and complaints approved, and almost half of counties had RRIs of greater than 1 for secure detention for Black youth. For all stages, fewer than half of the counties had RRIs greater than 1 for Latino youth.

In the county with the largest number of Native American youth, Robeson County, RRIs for complaints for Native American youth were lower than in the rest of the state, but RRIs for use of secure detention were much higher for Native American youth in Robeson County than for the rest of the state.

Trends in RRIs for Black youth over the last five years showed that state-level RRIs were relatively stable over this time period. RRIs for Wake and Mecklenburg Counties showed much more variation over time. Except for cases approved in Mecklenburg County and cases adjudicated for the entire state, RRIs for Black youth in FY18 were higher than they had been in FY14 (although they may have been lower in FY18 than in previous years).

Comparison of North Carolina's RRIs with national data showed that for Black youth disproportionality was greater in North Carolina than the nation as a whole for complaints received and youth confined to YDCs. RRIs for the other stages were roughly the same in NC and the US. For Latino youth, disproportionality in NC and the nation was similar across stages, with RRIs being slightly lower in NC for use of secure detention and slightly higher for confinement.

Overall, the RRI analyses suggest that DMC was a problem at the state level in FY18, particularly for complaints received and confinement in YDCs for Black youth and, to a lesser degree, for Black youth confined in secure detention. Disproportionality was much higher for complaints received and secure detention of Black youth in the state's two largest counties, Wake and Mecklenburg, than in the state as a whole (this was also true for Latino youth, but to a much lesser extent). There was little to no disproportionality at the state level for complaints approved, cases adjudicated, and cases disposed.

Statewide Analysis of Case Processing Data

The case processing data for this study were obtained from NC-JOIN. The dataset included data from FY11-FY16 and supervisory data from FY17. It included data on juvenile demographics, offense type and severity, decisions made on cases prior to and during court, risk and needs profiles of the juveniles in the cohort, detention events and YDC commitments. A combined dataset was created by merging several data files including complaints, detention, YDC, risk assessments, needs assessments, prior complaints, supervision, and demographics. After dropping duplicate complaints, referrals with an undecided or incomplete decision outcome, youths 16 years or older at the time of the delinquent offense, and status offenders, the resulting dataset included 97,489 cases over the six-year time frame.

The decision points examined in the analyses included intake, adjudication and disposition. Intake was conceptualized both as approved vs. not approved, and as approved vs. closed, approved vs. diverted, and diverted vs. closed. Fifty-two percent of the complaints in the sample were approved, while 48% were not approved (28% diverted and 20% closed). Youth who were approved or petitioned reached the adjudication stage, where they may have been either non-adjudicated or adjudicated delinquent. Forty-four percent of the approved cases in the sample were adjudicated delinquent. Youth who received an adjudication of delinquency may have received a judicial disposition of some form of supervision or probation in the community, or out of home placement (either commitment to a YDC or secure detention). Thirteen percent of the adjudicated cases in the sample received an out of home placement.

Multivariate statistical techniques were used to analyze the data. These techniques allow for the identification of the predictors (independent variables) of each decision point (dependent variable). The first step of the analyses was to examine the direct or main or additive impact of each independent variable (race/ethnicity, crime type, etc.) on the dependent variable (intake, adjudication, judicial disposition). Next, models were estimated for each racial/ethnic group (White, Black, Latino, Native American, Asian/Pacific Islander) separately to examine the predictors of case outcomes and assess if relationships differed or were comparable across racial/ethnic categories. In some instances, separate models for race/ethnic groups could not be computed because there were too few cases. All analyses were conducted at the state level, and separately for each of the five counties in the state with the largest juvenile populations (Wake, Mecklenburg, Guilford, Forsyth, and Cumberland).

At the state level, when intake was conceptualized as approved vs. not approved, the only racial/ethnic effects observed were for Native American youth, who were more likely to have

their cases approved. When comparing cases closed vs. cases approved, Black and Latino youth fared better than their White counterparts, being less likely to have their cases approved. When the comparison was closed vs. diversion, Black, Latino, and Native American youth all were more likely to have their cases closed than diverted. When the decision was diversion vs. approval, Blacks, Latinos and Native Americans fared more poorly, being more likely to receive an approval outcome than a diversion outcome relative to White youth.

All minority youth were less likely to be adjudicated than their White counterparts. Black youth were more likely to receive an out of home placement than White youth. Committing a drug offense increased the odds of receiving an out of home placement for Black youth, while committing the same offense decreased the odds of an out of home placement for White youth.

A complex set of regional interactions emerged from the analyses. In the Central, Eastern, and Western regions, relative to the Piedmont, Black youth were more likely to have their cases diverted or approved than closed. This was also true of Latinos, but in only two of the three regional comparisons. Latino youth were more likely to have their cases approved than diverted in all three regions, and this was true of Black youth in two of the three regions.

At various stages legal factors, such as the severity of the offense and risk and needs assessments, explained decision-making at intake, adjudication and judicial disposition. The effects of the legal variables not only explained case outcomes but some of the observed racial/ethnic disproportionality.

For the five largest counites, the sample consisted of 5,736 cases for Wake County, 11,035 cases for Mecklenburg County, 5,668 cases for Guilford County, 4,330 cases for Forsyth County, and 4,833 cases for Cumberland County. The county analyses showed that when the intake decision was conceptualized as approved vs. not approved, Black youth were more likely

to have their cases approved in four of the five counties, and Latino youth were also more likely to have their cases approved in Wake County. Comparing the three sets of intake outcomes showed that in Mecklenburg and Guilford Counties, Latino youth were more likely to receive a diversion outcome vs. a closed outcome, and this was true of Black youth in Forsyth County as well.

In four of the five counties (excluding Forsyth), Black youth were more likely to have their cases approved than closed, and this was true of Latino youth in Mecklenburg and Guilford Counties. Black youth were also more likely to have their cases approved vs. diverted in the same four counties, and this was also true of Latino youth in Wake County and minority youth as a group in Cumberland County (where the number of cases was too small to examine individual minority groups).

Black youth in Wake and Mecklenburg Counties and Latino youth in Wake were less likely to be adjudicated delinquent. None of the five counties showed any racial/ethnic effects related to the disposition decision.

For every comparison where statistically significant race/ethnicity effects were observed, these effects were in the same direction for all minority youth within the same jurisdiction. While there were many decision points that showed only one or two minority group differences, there was no instance where in one jurisdiction one minority group was more likely to receive one outcome while another minority group received the opposite outcome.

Survey Results

In order to provide some context for the quantitative findings, a survey was developed to assess views and opinions of stakeholders across North Carolina regarding DMC. The survey consisted of a relatively small number of closed and open-ended questions asking about:

respondents' familiarity with the DMC issue, their assessment of the seriousness of the problem in their locality or region, and how they think their locality or region compares with others in the state with regard to DMC; system factors that respondents thought contributed to DMC in their locality or district and whether these were related more to differences between minority and non-minority youth, bias, or a combination of the two; the helpfulness of various strategies to address DMC in their locality or district; and initiatives that have affected, or could affect DMC, either positively or negatively, in the respondent's locality or district.

Ten groups were targeted to receive the survey: defense attorneys, district attorneys, Juvenile Crime Prevention Council (JCPC) Chairs, judges, juvenile court counselors, local program managers/service providers, police chiefs, school resource officers, sheriffs, and YDC/detention center directors. A link to the online survey was provided in emails to these various groups of stakeholders.

A total of 220 respondents completed the survey, for an overall response rate of just under 12%, which is low. School resource officers and defense attorneys were under-represented among survey respondents, while local program mangers/service providers, JCPC chairs, and juvenile court counselors were over-represented. The low response rate suggests that survey results should be interpreted with caution.

Most (but not a majority of) respondents thought that DMC was a serious problem in their localities. Respondents who were more familiar with the issue of DMC were more likely to view it as a serious problem in their jurisdiction.

Regarding system decision points where DMC might be apparent, respondents identified arrest and detention as the two points at which DMC was most likely to occur (although only arrest was identified by a majority, about 6 of every 10, of respondents). At the other end, only

about 1 in 5 respondents believed that minority youth were more likely to be transferred and less likely to be selected for participation in substance abuse and treatment programs. Although the survey focused on systemic issues, the open-ended questions produced explanations for DMC such as socio-economic, family and parenting issues.

When asked about the helpfulness of potential DMC reduction strategies, respondents tended to endorse treatment, prevention and service delivery options. They were less enthusiastic about legal and law enforcement strategies, such as reducing SRO referrals and decriminalizing status offenses. When asked about the kinds of strategies that they believe have worked to reduce DMC in their own jurisdictions, respondents most often mentioned diversion programs, such as teen courts; school-related initiatives, such as school-justice partnerships; and training initiatives, such as implicit bias and cultural diversity training. Prevention programs were also mentioned as a possible strategy for reducing DMC.

On both close- and open-ended survey questions, responses tended to be similar based on the respondents' job categories. Specifically, law enforcement officers, including SROs, police chiefs, and sheriffs, tended to express similar viewpoints regarding the seriousness of DMC (viewing it as less serious than other groups), and a lack of enthusiasm for law enforcement-related strategies to reducing DMC, such as reducing SRO referrals and decriminalizing status offenses. Law enforcement officers were more likely to express the belief that DMC was not a problem in their jurisdictions, and that the problem was more related to differences between minority and non-minority youth, such as parental involvement and socio-economic issues. Defense attorneys and local service providers were more likely to rate DMC as a more serious problem, to attribute it to bias, and to endorse DMC reduction strategies such as reducing SRO referrals and decriminalizing status offenses.

Comparison with 2013 Assessment Study

The results of the current assessment study are consistent with some of the findings from the Winston-Salem State University Center for Community Safety's 2013 assessment study, though not their overall conclusions. Baffour and her colleagues found that for the decision to approve the youth for further court proceedings at the state level, the rate was higher for Native American youth, lower for Latino youth, and not significantly different for Black youth relative to comparable White youth. The current assessment also found that Native American youth were more likely to be approved, when the approved cases were compared with closed and diverted cases combined. We did not find significantly lower rates for approval of Latino youth, but our study also found no difference in approval of Black youth at the state level. However, our findings showed that in four of the five largest counties in the state Black youth were more likely to have their cases approved than White youth.

When the intake outcome was examined more closely by considering all three options, additional race/ethnic effects were observed in the current assessment. Some of the effects observed at the state level seemed to favor minority youth (Blacks and Latinos more likely to have their cases closed than approved), while others seemed to be to the detriment of minority youth (Black, Latino, and Native American youth more likely to have their cases approved than diverted). Analyses in the five largest counties seemed to negate the effects favoring minority youth; for example, in four of the five counties Black youth were more likely to have their cases approved than closed.

The authors of the previous assessment study conclude that for "Blacks and Latinos across the state of North Carolina as a whole, the DMC that exists was not a result of disproportionate treatment at the stage of approval" (Baffour et al., 2013, p. 34). While this

statement is supported by our findings involving the state analyses, the picture with regard to DMC at the complaint evaluation stage is more complicated than the statement suggests.

The previous assessment study found that Black and Latino youth were less likely to have their complaints adjudicated. Our findings are consistent and show that this is also the case for Native American and Asian/Pacific Islander youth. Baffour and her colleagues also found that Black and Latino youth were less likely to receive a disposition of probation than White youth. We found this to be the case for Black (but not Latino) youth.

The qualitative findings are generally similar in both studies. Both studies found similar assessments on the part of stakeholders regarding the factors associated with DMC and the types of interventions that might be useful in addressing DMC.

The previous study's authors concluded that their findings "clearly demonstrate that progress in reducing DMC is taking place." While our findings are generally in line with those of the previous study (with the exceptions discussed above), we do not endorse the authors' conclusion. Our findings suggest that minority youth, and particularly Black youth, appear to fare more poorly than their White counterparts at the complaint/intake evaluation phase (in four of the five largest counties) and the dispositional phase (at the state level). Moreover, examination of RRIs shows no change/improvement over the last five years at the state level, and somewhat higher rates for complaints received and youth confined in NC than those seen in the nation as whole. In short, the findings of the current assessment study support the conclusion that in North Carolina DMC is not solely the result of legal factors; the race/ethnicity of youth matters, as does the measurement of intake decision-making.

Recommendations

Based on the findings of the current assessment study and the literature on DMC, we offer the recommendations listed below. Some of the initiatives recommended here may already be in the process of being executed in some form as a result of implementation of the 2017 Juvenile Justice Reinvestment Act (JJRA).

1. ***The Juvenile Justice Planning Committee's DMC subcommittee should conduct a "listening tour" around the state to obtain specific ideas and recommendations from the field on DMC reduction strategies in general, and on developing diversion/alternatives to detention in particular.***

One of the most common interventions for addressing DMC has been to develop diversion programs and alternatives to secure detention. We realize that DPS has already made much progress in this area, and that the state and localities are working on expanding JCPC funding to provide community-based programming as part of the implementation of "Raise the Age." However, as with many of these efforts across the country, the degree to which they positively affect DMC is open to question. Some of the DMC reduction ideas provided by respondents to the survey in the present study suggest that much good information would be generated by seeking input from local practitioners across the state.

2. ***DPS/GCC should conduct/fund an analysis of the use of diversion in key localities in the state.***

Our findings show that minority youth, and particularly Black youth, are less likely to be diverted than White youth. In some instances, minority youth are more likely to have their cases closed, while in other instances they are more likely to be approved. Additional research and analyses should be undertaken to determine exactly where and why this is occurring. These analyses should examine how diversion decisions are being made, what types of diversion contracts/plans are being implemented, and to what degree is there compliance with these plans.

The study should also examine diversion outcomes, and how these vary among racial/ethnic minority youth.

3. ***DPS/GCC should continue to develop, fund, and implement delinquency prevention programs*.**

Our findings and those of the 2013 assessment study show that legal factors predict much of the overrepresentation in the juvenile justice system. This finding suggests that minority youth may be involved in the system in part because of their involvement in crime and/or the kinds of crimes that they are charged with. Therefore, to reduce the disproportionate number of minority youth coming into contact with the system, community resources and programs that focus on delinquency prevention need to be established and/or continued. It is important that minority youth have access to, and the opportunity to participate in, these programs.

4. ***The state should develop and implement a training curriculum for local law enforcement personnel who work with youth to raise awareness of the DMC issue and provide knowledge regarding the issue.***

Our findings suggest that law enforcement personnel (police chiefs, sheriffs, and SROs) are less likely to be aware of DMC, less likely to think it is a problem in their jurisdictions, and more likely to offer explanations for DMC related to juveniles' behavior and decision-making rather than systemic issues. We would therefore suggest the development, implementation, and assessment of a training curriculum that would provide information on DMC and juvenile decision-making. Part of the 2017 Juvenile Justice Reinvestment Act (JJRA) required that both entry level and in-service training for law enforcement officers include information on best practices for incidents involving juveniles, adolescent development and psychology, and promoting relationship building with youth as a key element of prevention. We would recommend adding a component on DMC that would include information on statewide and local

DMC rates, the findings of this study and the 2013 assessment study, and information about implicit bias and how it can be addressed. Any DMC training developed and implemented should be thoroughly evaluated

5. ***The state should develop and implement a seminar on DMC for juvenile justice system stakeholders and related professionals who work with youth to raise awareness of the DMC issue and provide knowledge regarding the issue.***

Our findings regarding beliefs about DMC extend beyond law enforcement personnel to include other groups surveyed who interact with juveniles. The survey responses suggest other misconceptions regarding DMC that might be cleared up with information and data for specific jurisdictions. We would therefore suggest the development, implementation, and assessment of a training curriculum that would provide information on DMC on a local, district or regional level. The training would serve to increase knowledge and awareness of the issue.

6. ***DPS should develop a section of their website specifically related to DMC.***

Devoting a section of the DPS website to DMC has the potential to increase awareness of, and knowledge about, the issue. A number of states provide RRI information, copies of three-year plans (or at least the parts that address DMC) submitted to OJJDP as part of the requirements of the JJDP Act, and other DMC-related materials on their websites. We recommend that DPS do the same.

7. ***GCC should consider DMC-related requirements for juvenile justice grantees.***

Several states have implemented the use of racial impact statements to uncover unintended racial disparities that might be produced by implementing specific legislative initiatives, usually related to sentencing. In Iowa, state agencies are mandated to obtain Minority Impact Statements from all grant applicants. Our recommendation is that North Carolina consider implementing a minority impact statement, or something similar, for its juvenile justice

grant applicants. While such an approach is certainly not a panacea, it at least requires local stakeholders to begin to think about racial and ethnic disparities in their localities.

8. ***GCC should fund a comprehensive evaluation of the School-Justice Partnership program.***

The School-Justice Partnership program, authorized as part of the 2017 JJRA, has the potential to address the issue of racial/ethnic disparity associated with referrals from schools. As the partnerships get implemented in counties across the state, it is imperative that they be the subject of a comprehensive evaluation that will identify reasons for success and failure at the local level.

9. ***DPS/GCC should conduct/fund evaluations of all state-funded local DMC reduction efforts.***

It is critical that any and all DMC reduction efforts be evaluated to determine their impacts. This is the only way to determine whether to expand existing initiatives to other jurisdictions and to identify which programs/program components work for which minority groups. Evaluations must examine reductions in DMC as a key outcome.

10. ***DPS/GCC should create a Task Force to examine the question of how risk and need assessments are currently being used, and whether current instruments may be racially biased.***

The risk and needs scores are significant predictors of the approved-not approved decision at the state level and in all five of the largest counties. Our findings also show that Black youth are the only racial/ethnic group significantly more likely to score higher on both indicators. While this may speak to the impact of a variety of social and economic factors on Black youth, it may also be the case that the factors that comprise the indicators are themselves related to race. An examination of how the risk and needs assessments are implemented, to what degree the various items that comprise the assessments contribute to the overall score, and how

racial and ethnic minorities score on these various components would be a useful first step for a task force. We understand that the JJPC has recommended funding for the state to implement the Youth Assessment and Screening Instrument (YASI) at all stages of contact with court-involved youth. If the YASI is in fact implemented in NC, then the training and implementation process should be carefully monitored to ensure uniform assessments regardless of race, ethnicity and gender.

11. DPS/GCC should continue to encourage and fund coordination and collaboration efforts at the local level.

There should be a continued effort to build cross-system coalitions within each jurisdiction to address DMC reduction efforts. This can take the form of local DMC committees operating independently, or DMC reduction efforts that fall under the auspices of the JCPCs. This coalition should continue to learn about DMC, how to interpret data that define DMC, and pinpoint areas in which policies, practices, and procedures can be fine-tuned to address DMC.

12. DPS/GCC should develop a statewide DMC reduction plan based on best practices identified in OJJDP's case study of nine jurisdictions.

As noted in the literature review, Spinney et al. (2014) identified common elements of successful DMC reduction strategies in nine jurisdictions. We would point in particular to the following elements from the OJJDP-funded case study: focusing intentionally on DMC reduction (and not just on general system improvement) while using a non-accusatory tone; making DMC reduction a long-term priority; leadership at the local level, the state level, or both; collaboration among state and local agencies, police, judges, and the community; and changing the institutional culture away from a punitive or procedural focus toward a focus on what was best for the youth and the community.

North Carolina has a unique opportunity to make an impact on DMC in the next several years through the "Raise the Age" initiative. It is our recommendation that the state use the coalition formed to address this issue to also consider identifying, implementing and assessing knowledge-based strategies to reduce racial and ethnic disparities in the state's juvenile justice system.

Chapter 1: Background

In July of 2018 the Governor's Crime Commission, Juvenile Justice Planning Committee/State Advisory Group and DMC Subcommittee issued a Request for Proposals for an assessment study of Disproportionate Minority Contact (DMC) within the North Carolina juvenile justice system.[1] Cambiare Consulting and Dr. Michael Leiber responded to the solicitation and received the award for the study beginning in September of 2018. The goal of the assessment study, paraphrased from the RFP, is to determine whether, where and why DMC exists in North Carolina's juvenile justice system.

After meeting with staff from the Governor's Crime Commission (GCC) and the Department of Public Safety (DPS), the researchers designed an assessment study consisting of three elements: an analysis of relative rate index (RRI) data maintained by DPS; an analysis of case processing data maintained by DPS; and a survey of key stakeholders to obtain their opinions of, and experiences with, DMC in their jurisdictions.

This report provides a summary of the results of the analyses outlined above. The next chapter provides an overview of previous research on DMC at the national level, as well as previous studies of DMC in North Carolina. Chapters 3-6 present the findings of the RRI analyses, case processing data, and survey results. Chapter 7 presents a discussion of the findings, and Chapter 8 presents conclusions and recommendations. Throughout this report we refer to youth of African origin as "Black," youth of South or Central American origin as "Latino," and youth of European origin as "White."

[1] The term "disproportionate minority contact" has since been replaced by the term "racial and ethnic disparities." Since DMC was the term used in the RFP, we will use that term throughout this report.

Chapter 2: Review of the Literature

Background on the DMC Mandate

Racial and ethnic disparities in arrests and presence in the juvenile justice system prompted a Federal mandate for addressing the problem of disproportionate minority confinement or DMC (Juvenile Justice and Delinquency Prevention (JJDP) Act, 1974). In 1988, Congress reauthorized the JJDP Act of 1974, introducing a mandate that addressed the overrepresentation of racial/ethnic minority youth in the juvenile justice system with a specific focus on confinement. In the 1992 reauthorization, Congress elevated DMC to a "core requirement" of the JJDP Act, tying 25% of states' Title II Formula Grant Funds to compliance. Within the 2002 reauthorization, Congress expanded the DMC mandate to include preventing minority youth from coming into contact with the juvenile justice system, which expanded efforts to reduce DMC at all juvenile justice processing stages (Hsia, 1999; Leiber, 2002).

Ultimately, to fully comply, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) required states to engage in five sustained and interrelated efforts: (1) identify the extent of DMC; (2) assess the reasons for DMC if present; (3) develop an intervention plan to address identified reasons for DMC; (4) evaluate the effectiveness of interventions designed to reduce DMC; and (5) continue to monitor DMC over time (Hanes, 2012). If states failed to comply with these requirements, they could lose one-fifth of their annual Formula Grants allocation for subsequent fiscal years (Leiber, 2002; Leiber & Rodriguez, 2011; Parson-Pollard, 2017).

Following the reauthorization of the JJDPA in 1988, OJJDP provided some directions or guidance for the states to be considered in compliance. As an example, over the years OJJDP published four editions of the DMC Technical Assistance Manual (in 1990, 2000, 2006, and 2009). In addition, and although it has been modified over the years, OJJDP introduced the

Relative Rate Index, or RRI, to assist states and localities in reporting the extent of minority youth overrepresentation in their juvenile justice systems (for a detailed discussion of the RRI, see Feyerherm, Snyder, & Villarruel, 2009 and Pollard-Parsons, 2017). OJJDP also launched a DMC website with various resources to assist states and localities that included the Technical Assistance Manual, instructions for how to calculate RRIs, and a DMC data codebook displaying national DMC rates (the online data codebook is no longer available).

Both the House and Senate passed JJDPA reauthorization bills in 2018 (S.860 and H.R. 1809) that in part changed the DMC mandate. Beginning October 1, 2019, Title II applications will be less cumbersome and OJJDP will simplify data collection requirements, ask states to identify how they define success and ask them to evaluate the outcomes of their efforts. These activities and reported results will be posted on the OJJDP website (Harp, 2018). Furthermore, states will no longer be required to submit data for the RRI; states and localities are expected to use their own methods (that could still involve calculating RRIs) to assess DMC. States will report simple percentages compared to Census numbers to monitor DMC. The number of stages examined has also been reduced from nine to five (arrest, detention, diversion, confinement, and transfer to adult court). As part of this effort, states no longer need to follow the DMC Technical Assistance Manual, which was rescinded by the Attorney General in 2018 (Smith, 2018)[2].

Mechanisms Contributing to DMC

Even though some research finds that legal factors (such as crime severity and prior record) predict court outcomes (Cauffman et al., 2007; Pope & Feyerherm, 1990; Tracy, 2005), a number of comprehensive reviews have shown that legal and extra-legal (such as age and gender) factors are unable to account for race differences or DMC in juvenile justice processing

[2] For critical commentary on these changes, refer to Marshall, Rovner and Bryer (2018) and Smith (2018).

(Bishop, 2005; Bishop & Leiber, 2011; Pope & Feyerherm, 1993; Pope, Lovell, & Hsia, 2002). Race/ethnicity has been found to be either directly related to court outcomes or to interact with legal and/or extra-legal variables.

Leiber and colleagues (2011), for example, examined the effectiveness of the DMC mandate to bring about equality for youth by focusing on the extent to which legal criteria (such as crime severity) and extra-legal considerations (such as family structure, youth age, and youth race/ethnicity) changed over time as predictors of intake and judicial disposition case outcomes in one juvenile court in Iowa. Juvenile court case files were examined for a period of 21 years (1980–2000), roughly 10 years before and 10 years after the DMC mandate. One expectation was that legal factors would increase in statistical significance as predictors of decision-making while the effects of race/ethnicity on the dependent variables would be reduced.

The findings indicated that the factors impacting decision-making, for the most part, did not change in significance or relative impact. After controlling for a wide array of potentially confounding variables, Black youth were more likely than White youth to be referred at intake for further proceedings both before and after the implementation of the DMC mandate. In other words, the relative influence of race/ethnicity on intake decision-making did not change following the implementation of the DMC initiative. Furthermore, in addition to finding that race directly impacted intake decision-making, the study found that being identified both as Black and as coming from a single-parent-household was also a strong determinant of decision-making at this stage in the DMC reform period. However, at judicial disposition, Black youth were unexpectedly less likely than White youth to receive out-of-home placement following DMC reform. The authors explained this occurrence as a "correction effect" whereby judges may be

overcorrecting for past racial bias in the system to the point where White youth could possibly be disadvantaged (Leiber et al., 2011).

Two studies were conducted by Donnelly (2017, 2018) who examined changes in the size of the minority youth population involved in Pennsylvania's juvenile courts alongside the impact of race and legal considerations of court outcomes. Pennsylvania is very active in terms of programs and activities to reduce DMC, such as the use of objective risk instruments, holding of community forums, implementing a DMC training curriculum for law enforcement, hiring translators, use of evening reporting centers, and participation in the MacArthur Foundation's Models for Change initiative (Donnelly, 2017). In the first study, Donnelly (2017) observed substantial declines in the number of Black and Latino youth in the juvenile court, as measured by determinations of delinquency, out-of-home placements, and commitments to secure facilities, in counties that had DMC interventions versus those that did not. Donnelly concluded that "a national reform can inspire racially conscious and egalitarian change in state juvenile justice operations" (2017: 364).

In her second study, Donnelly (2018) decomposed the relative size of the effects of youth race/ethnicity and legal and extralegal considerations in three DMC intervention counties in Pennsylvania before and after reform. Focusing on detention and judicial disposition decision-making, Donnelly reported that, following the interventions, prior record became a more influential determinant of case outcomes and a contributor to racial differences in detention and placement. The relative impact of race by itself on the two dependent variables decreased in the post reform time frame (see also Maggard, 2015).

A number of possible mechanisms have been found to contribute to DMC in the juvenile justice system (Leiber, Richetelli & Feyerherm, 2009). Some of these are summarized below.

Differential Involvement in Crime or Types of Crime

The research literature raises the possibility that the rates at which youth from various racial and ethnic subgroups are involved in delinquent activity may differ (e.g., Lauritsen, 2005). Differing rates of involvement is not a universal phenomenon, nor is it presented here to suggest that disproportionate contact is acceptable. As the JJDP Act specifies, one of the means of addressing DMC is through prevention activities, which may not only address DMC but also provide substantial benefits to children and youth generally.

Racial Stereotyping and Cultural Insensitivity

Assessment studies have found that racial stereotyping and cultural insensitivity on the part of the police, juvenile court workers, prosecutors and judges contribute to DMC (see Leiber & Fix, 2019; Leiber & Rodriguez, 2011). Minority youth, especially African Americans, are often perceived to be more dangerous, involved in drug offending, and less suitable for rehabilitation and in need of greater intervention than similarly situated Whites. While sometimes intentional, racial stereotyping and cultural insensitivity are often discovered to be unintentional and tied to legitimate criteria that work to the disadvantage of minorities relative to Whites. Justifiable criteria such as assessments about the family, basing interventions on technical violations (e.g., failure to comply with curfew stipulations, missing an appointment, or failure to pass urinalysis), and process factors such as being held in secure detention have been found to result in more severe outcomes, further movement into the system and, consequently, an accumulative disadvantage for minorities relative to Whites (Bishop & Leiber, 2011; Leiber et al., 2009).

Unintended Consequences of Laws and Policies

Research has shown that the implementation of laws and policies may have unintended consequences impacting minority youths and contributing to DMC. Zero-tolerance and transfer/waiver adult certification of youths are examples cited as laws and policies that when implemented contribute to DMC (Leiber et al., 2009; see also Nellis & Richardson, 2010).

Lack of Access to Alternatives and Diversionary Programs

Studies have reported that the lack of alternatives and diversionary programs is a cause of minority youth receiving severe outcomes, additional interventions and, ultimately, confinement in juvenile facilities. Results from assessment studies also reveal that minority youth are not provided the same opportunities to participate in diversion programs in general, and specifically as an alternative to secure detention, as are comparable Whites.

Lack of Culturally and Linguistically Appropriate Services

The lack of bicultural and bilingual staff and the availability and use of English-only informational materials for the non-English speaking population consisting of parents, guardians and youth has been cited as contributing to DMC. The inability to effectively communicate to the non-English speaking and to those of limited English proficiency may result in the possible lack of understanding on the part of the decision-makers as to the situation surrounding the referral, the need for intervention, and the needs of the youth. The inability to effectively communicate may also lead to a lack of comprehension on the part of minorities as to the severity of the situation and the need to cooperate with the court proceedings and may contribute to difficulties in successfully navigating the juvenile justice system.

Justifiable Criteria and Process Factors

Studies have begun to examine how justifiable criteria relied upon by decision-makers, such as the age of the youth, technical violations, prior record and the results of assessment tools, as well as procedural factors, like being detained, may work to the disadvantage of some groups relative to others. In some jurisdictions, technical violations comprise a significant portion of the justification for a secure detention. Black youth have been found to be referred to detention for technical violations more often than Whites (Steinhart, 2001). Since Black youth are more likely to be detained and detention is a significant explanation for further penetration into the system, Black youth are subject to harsher outcomes as a result of the detention decision.

Juvenile Justice Decision-Making as a Process

Assessment studies have revealed that decision-making within a juvenile court may vary by each stage, and decisions made early in the proceedings may influence outcomes at later stages (e.g., detention status). A number of studies have found that the greatest disparities in case outcomes for minority youth occur at intake and detention and thus by the time a youth reaches judicial disposition a cumulative disadvantage has occurred for minorities (see, for example, Leiber, 2013; Rodriguez, 2007). It is therefore important to examine decision-making across all stages in the proceedings, or at least at the front and back ends of the system, typically intake and judicial disposition.

Justice by Geography and the Context of Decision-Making

"Justice by geography" refers to the concept that youth in general, and minority youth in particular, may be processed or handled differently in one jurisdiction than in another within the same state. Differing responses may occur based on whether the youth was processed in an urban, suburban, or rural setting. Jurisdictions may differ in terms of resources (such as the

availability of diversion services) or in operating philosophies (for instance, how a jurisdiction defines accountability for youthful misconduct or whether a jurisdiction uses deterrence as a primary rationale for system action as opposed to other philosophies of public safety) (see, for example, Bridges and Steen, 1998; Feld, 1991).

Leiber (2003) found that in one Iowa jurisdiction the juvenile court adhered to an ideology of juvenile accountability and racial stereotyping of Black youth as being more delinquent and in need of intervention. This resulted in Black youths being subjected to different case processing and outcomes than similarly situated White youths. In another jurisdiction, the juvenile court espoused a strong emphasis on *parens patriae* at a time when multiple minority groups were moving into the area and local perceptions held that these groups did not adhere to middle-class standards of dress, demeanor, marriage, and respect for authority. Consequently, the court responded to minority youth differently than non-minority youth (Leiber, 2003).

Another example of justice by geography can occur when minority youth in a large jurisdiction (e.g., a state) are concentrated in areas or jurisdictions (communities) where rates of processing differ from those prevalent in other portions of the larger jurisdiction. The end result is that minority youth are more likely to live in jurisdictions where higher rates of contact with the system occur; therefore, in the aggregate state-level calculations, minority youth are more likely to have high rates of system contact compared with White youth who live in other jurisdictions. A similar explanation can lead to lower levels of DMC when minority youth live in jurisdictions in which lower levels of system processing occur.

Characteristics of a Good Assessment Study

Past studies and commentaries have revealed several key factors that comprise a good assessment study of DMC (Leiber et al., 2009). These studies address or recognize the

contributing factors to DMC as well as the need to do the following: 1) focus on multiple minority groups in addition to Blacks; 2) include a wider array of factors that decision-makers may take into consideration when arriving at a case outcome; 3) use both quantitative and qualitative analyses; and 4) recognize the contextual effects of decision-making by looking at the macro- and micro-level characteristics or predictors of case outcomes across multiple jurisdictions (Baffour et al., 2013; Leiber et al., 2009).

In addition to these factors associated with a good assessment study of DMC, a full report should be given as well as an executive summary and possibly a brief. These methods for disseminating the results should be written so the audience can understand what is reported and contain specific recommendations to guide the development and implementation of strategies and interventions to enact change that may reduce DMC and produce equitable treatment for youth in juvenile justice proceedings.

Strategies for Addressing DMC

A number of strategies have been proposed for addressing DMC. Unfortunately, there have been few attempts to evaluate the utility of these strategies, and many evaluation efforts fail to measure actual reductions in DMC (Carlton, Orchowsky & Iwama, 2017; National Research Council, 2013).

Over the years, OJJDP has issued reports to highlight what it considers to be successful or promising DMC reduction efforts. Most recently, Spinney et al. (2014) published case studies of nine jurisdictions that implemented initiatives that appear to have successfully reduced DMC. The authors identified eight general strategies that were common to all nine jurisdictions: 1) focusing on data collection and utilization; 2) increasing collaboration with other state and local agencies, police, judges, and the community; 3) changing the institutional culture away from a

punitive or procedural focus toward a focus on what was best for the youth and the community; 4) affiliating with national juvenile justice reform initiatives; 5) creating alternatives to secure detention, secure confinement, and formal system involvement; 6) focusing intentionally on DMC reduction (and not just on general system improvement) while using a non-accusatory tone; 7) leadership at the local level, the state level, or both; and 8) making DMC reduction a long-term priority (Spinney et al., 2014).

One of the nine jurisdictions examined by Spinney and her colleagues was the state of Connecticut (the other eight were local jurisdictions). The lessons learned in CT include recognizing the importance of concentrating specifically on DMC reduction and not on general juvenile justice system improvement alone; emphasizing changing the behavior of system practitioners, not youth; building awareness of DMC issues; and fostering working relationships between schools and police (Spinney et al., 2014). To address the last point, the state's Juvenile Justice Advisory Council (JJAC) convened a School/Police Task Group. The Task Group developed a six-page model memorandum of agreement (MOA) to be implemented between school superintendents and police chiefs in local communities to formalize their working relationships. The goals of the MOA were to reduce school-based arrests and referrals and to ensure a consistent response to incidents of student misbehavior. Communities that adopted the MOA could apply for up to $20,000 in funds for preventive and intervention services (Spinney et al., 2014).

The CT JJAC also formed a Police/Juvenile Task Group, which created a course titled *Effective Police Interactions With Youth*. The curriculum targets patrol officers and their knowledge of DMC, youth behavior, and effective strategies for interacting with young people, as well as their general attitudes toward young people. It consists of three components: *Equal*

Treatment of Diverse Youth, which provides information on youth population statistics, youth behavior data, and DMC study results; *Why Youth Do What They Do*, which focuses on police culture and youth culture, adolescent development, and brain development and youth decision-making; and *Police/Youth Relations*, which addresses youth attitudes toward police, communication 101, and adolescents and stress. An evaluation of the curriculum showed that the one-day training increased knowledge of youth behavior and attitudes toward youth among patrol officers, including the idea that they can eliminate unequal treatment of minority youth (although this change in attitude was not evident after the 5-7 month follow-up assessment (Sanderson, Kosutic, Griggs & Anderson, 2008).

Previous DMC Studies in North Carolina

In the early 1990s, North Carolina was one of five model states that received funding to identify the extent of DMC, examine contributing factors, and develop and implement strategies to address DMC (Devine, Coolbaugh & Jenkins, 1998; Pope & Leiber, 2005).[3] Caliber Associates (1996) conducted the study of DMC in North Carolina's juvenile justice system. Decision-making outcomes were examined in 10 counties and the methodology used was multivariate regression and focus groups. It was reported that minority youth (primarily Black and in some counties, Native Americans) were more likely to be arrested, detained, and committed to a training school in the majority of counties studied. The nature and extent of the effects found by the study varied by racial group and locality.

The Winston-Salem State University Center for Community Safety's assessment study (see description below) reports that in 2004 four demonstration counties (Forsyth, Guilford, New Hanover, and Union) were selected by the GCC to develop plans to address DMC. In New

[3] The other four states were Arizona, Florida, Iowa, and Oregon.

Hanover DMC was present at most decision points, especially for African Americans, although the extent of DMC varied by the stage (Frabutt & Hefner, 2007). A major theme that emerged from focus groups was the need to improve communication between parents and school personnel. In Union, strategies focused on educating residents about DMC and identifying gaps in services. The effort in Forsyth county involved the aggregation of data from schools, law enforcement, and the Division of Juvenile Justice and Delinquency Prevention. It was found that the RRI for arrests was 6.0, meaning that African American youths were six times more likely than White youths to be arrested. At the complaint level, the RRI was 4.4. However, the RRI at the approval decision point was only 0.96, meaning that African Americans were actually less likely than Whites to have their complaints approved. The conclusion was that the disproportionality in Forsyth County was not a result of the decision of intake counselors but rather occurred outside of the juvenile justice system (Baffour et al., 2013). The last county, Guilford, conducted a comprehensive suspension and expulsion analysis that measured disproportionate minority suspensions using the RRI.

As noted above, the Center for Community Safety (CCS) at Winston-Salem State University conducted an assessment study of juvenile court decision-making and DMC in North Carolina (Baffour et al., 2013). The researchers used juvenile complaint data from 2011 from the North Carolina Juvenile Online Information Network (NC-JOIN). The study focused on DMC at the state level and in the five most populous counties (Cumberland, Forsyth, Guilford, Mecklenburg, and Wake). Additional analyses also examined DMC in 20 other counties that had large enough numbers of White and non-White juveniles to make comparisons. A number of independent variables (such as race/ethnicity, age, gender, location of offense, offense severity, and risk and needs scores) were included in the analyses. Seven decision points or dependent

variables were examined: approved, diverted, closed, adjudicated, dismissed, disposed, and probation. The quantitative analyses involved frequency distributions, bivariate comparisons, one-way analysis of variance (ANOVA), and multivariate regression (Cox regression survival analysis).

The CCS study found that for the decision to approve or petition the youth for further court proceedings at the state level, the rate for Native American youth was higher than for comparable Whites. Latinos evidenced lower rates of approval than Whites. For Black youth no significant difference existed compared to White youth after accounting for the range of legal and social variables. According to the authors the results indicated that for "Blacks and Hispanics across the state of North Carolina as a whole, the DMC that exists was not a result of disproportionate treatment at the stage of approval" (2013: 34).

An examination of decision-making involving diversion showed that Blacks, Latinos, and Native Americans were less likely to get their cases diverted than Whites after controlling for the relevant independent variables. Being Asian was not found to be a statistically significant determinant of the diversion decision.

Concerning the decision to close a case, Black, Latino, and Asian youth were statistically less likely to have their cases closed than Whites after accounting for the independent variables. Native Americans were statistically more likely to have their cases closed than comparable Whites.

Blacks and Latinos were less likely to have their complaints adjudicated. No significant difference for Asians or Native Americans was found.

Black and Native American youth were found to be significantly more likely than Whites to have their cases dismissed. There was no significant difference for Hispanics or Asians.

Blacks and Latinos were less likely than Whites to have their complaints disposed, after controlling for region, type of crime, age, prior complaints, risk score, and needs score. There was no significant difference for Asians or Native Americans.

In the last stage of the quantitative analyses involving statewide decision-making, Blacks and Latinos were significantly less likely than Whites to get probation. There were no significant differences for Asians or Native Americans.

In summary, the statewide analyses showed that rates for Blacks were lower for diversion, closed, adjudication, disposition, and probation. Rates for Latinos were lower for approval, diversions, closed, adjudication, dismissed, disposition, and probation. American Indians had lower rates of diversion.

Analyses of the five largest counties for the various decision points in the state showed either no racial differences or, when racial differences did exist, Blacks and Latinos fared better than their White counterparts (e.g., less likely to be adjudicated).

Similar analyses were conducted in an additional 25 counties. In Gaston County, at the approval stage, Blacks were significantly more likely to have their cases approved than Whites, even after accounting for the severity of their offense, needs and risk score, number of prior offenses, and other factors related to approval. In Buncombe, New Hanover, and Wayne, Blacks were significantly less likely to have their case diverted than Whites.

The CCS study also included a series of six focus groups held in Buncombe County (Asheville), Cumberland County (Fayetteville), Durham County (Durham), Forsyth County (Winston-Salem), Mecklenburg County (Charlotte), and New Hanover County (Wilmington). Focus groups were comprised of 6–12 key stakeholders, including school officials and school resource officers, law enforcement, judges, court counselors, clergy, social workers, mental

health service providers, community members, and other service providers who work directly with juvenile offenders.

Three major themes emerged from the qualitative component: 1) intervention/prevention strategies (factors that lead to reduction in DMC and juvenile court involvement); 2) risk factors contributing to DMC (factors that lead to DMC and juvenile court involvement); 3) systems of civic responsibility (holding all stakeholders, including youth, accountable for their actions and responsible for promoting community justice and well-being).

Intervention/prevention strategies included those focused on youth (programs such as mentoring, after-school programs, and providing resources to address mental health and substance use issues among youth) as well as adults (e.g., parent education, cultural diversity and sensitivity training for SROs, teachers, and schools). Risk factors identified by focus group participants included those related to individual youth (e.g., substance abuse), families (e.g., lack of parental involvement), neighborhoods (e.g., economic disadvantage), schools (e.g., suspension), and policies (e.g., [mis]use of discretion).

Responses related to "systems of civic responsibility" included individual responsibility/accountability for delinquent behavior, responsibility/accountability of parents and school systems, and inadequate communications between schools and other professionals who have direct contact with youth.

Chapter 3: Relative Rate Index (RRI) Analysis

Calculating RRIs

OJJDP developed the concept of the RRI as a straightforward method of expressing the degree of disproportionality at any given decision point/processing stage (complaint, detention, adjudication, confinement, etc.) of the juvenile justice system. The RRI is the ratio of the proportion of minority youth at a given stage to the proportion of White youth at that same stage. If both groups are being processed at the same rate, then the RRI would be equal to 1. RRIs above 1 indicate disproportionate minority contact at that stage of the system.

In order to avoid the problem of cumulative effects of disproportionality from previous stages at any given stage, the calculation of the rates that comprise the RRI is based on the number of youths being processed at any given stage (the numerator) and the number of youths processed at the previous stage (denominator). For example, to calculate the RRI for the adjudication stage, we first divide the number of youth cases adjudicated by the number of youths whose complaints were approved. The RRI is the ratio of this proportion for minority youth to the comparable proportion for White youth. Thus, the RRI represents an attempt to isolate the effects of disproportionality in one stage from those of other (previous) stages.

While the RRI can be a quick and intuitive way of representing DMC in the juvenile justice system, it suffers from several limitations. The first issue is defining an appropriate denominator for the first stage of the system, which is arrest or complaints received, depending on the state. The appropriate denominator for number of juveniles arrested would be the number of juveniles who commit crimes, but that number is unknown. Therefore, the number of juveniles in the population is used as a proxy for the number of juveniles who commit crimes. If

minority youth, *for whatever reason*, commit proportionally greater or fewer crimes than their White counterparts, then the RRI calculation for the first stage of processing will not be accurate.

Second, RRIs cannot be calculated when zeros appear in the numerator or the denominator. This means that if no minority youth are present at a given stage, the RRI will be 0. However, it also means that if no White youth are present at a given stage, the RRI cannot be calculated, since the denominator of the ratio will be 0. For example, if a specific jurisdiction processes equal numbers of minority and non-minority youth and places a total of 10 youths in secure detention, all 10 of whom are minorities, then an RRI cannot be calculated, although clearly disproportionality exists in this case.

Third, the RRI estimates can become unstable and misleading if we are dealing with very small numbers of youths. This is a problem in small localities with few juvenile complaints, particularly at later stages of juvenile justice system processing. As a rule of thumb, OJJDP suggests not calculating RRIs when the number of juveniles processed at a particular stage (numerator) is less than 5, or when the number processed at the previous stage (denominator) is less than 50. While this seems prudent, it is also true that large racial and ethnic disparities can exist in jurisdictions that have relatively small numbers of cases.

Finally, while the RRI attempts to isolate the effects of disproportionality from one stage to the next, an RRI of 1.0 at one stage does not mean that there is racial equity at that stage. For example, if 90% of the complaints received in a given jurisdiction are against minority youth, and 90% of the youth placed in secure detention in that jurisdiction are minority youth, then the RRI for secure detention for that jurisdiction will be 1, since minority and White youth are placed in secure detention in the same relative proportions as complaints received. Yet 9 of 10 youth in secure detention will be minority youth, which might be considered serious disparity.

Data Source

DPS provided the five most recent years of RRI data (FY14-FY18) for all localities in the state from the NC-JOIN system. Juvenile population data were provided by DPS, and taken from OJJDP's online tool, Easy Access to Juvenile Populations (EZAPOP).[4]

RRIs were calculated by DPS and included in the dataset for localities with at least 50 occurrences in any given stage (e.g., at least 50 cases adjudicated) for the following juvenile justice system decision points/stages: complaints received; placement in secure detention; complaints approved; cases adjudicated; cases disposed; and confinement in youth detention centers (YDCs). When we calculated data for sub-groups, such as Black and Latino youth, we included all localities, regardless of how many instances occurred for that stage. When RRIs for specific localities were analyzed, we adhered to the OJJDP guidance of at least five instances for the numerator and 50 for the denominator.

It should be noted that the RRI data represents occurrences and not individuals. For example, a White juvenile who had two complaints received in a year would be counted as two White juveniles. Thus, although the analysis refers to "youths" for the sake of convenience, the reader should keep in mind that the data do not represent individuals. Similarly, the data do not "track" cases, so that the number of cases at a given stage may be higher or lower than the number at a previous stage. Finally, the data provided excluded occurrences where the race of the juvenile was missing/unknown.

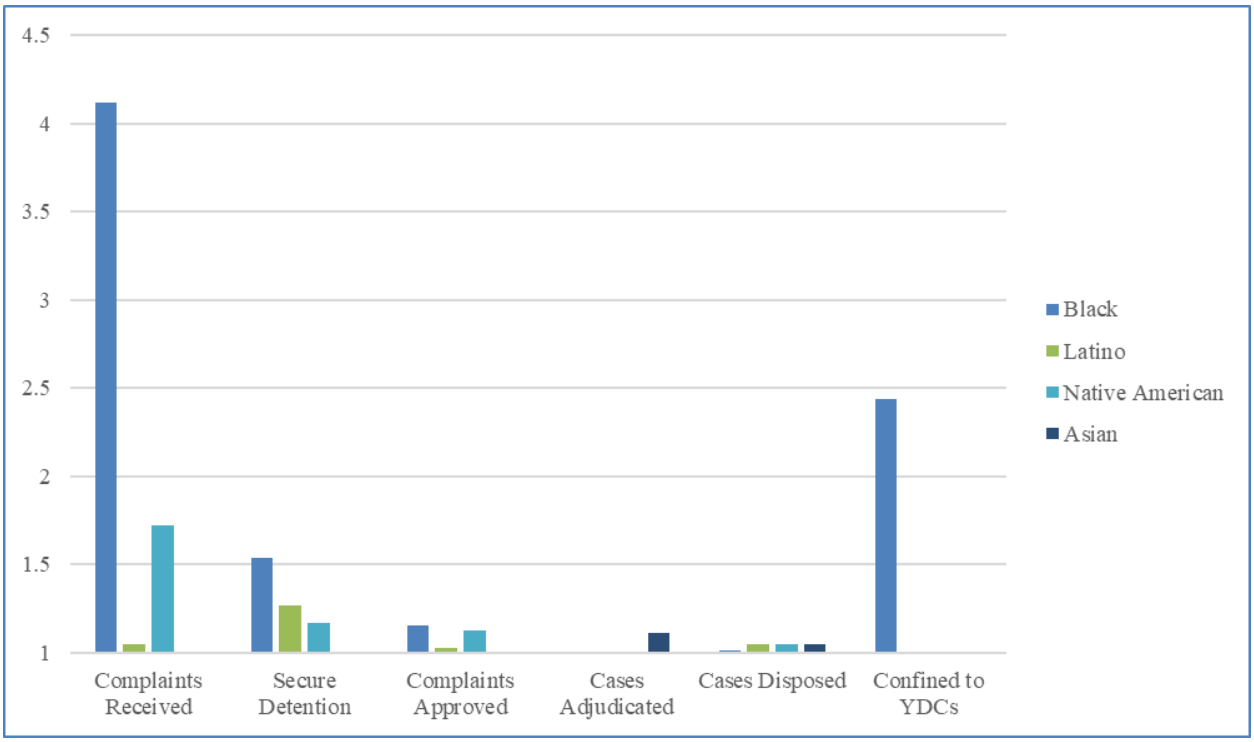
[4] Puzzanchera, C., Sladky, A. and Kang, W. (2018). *Easy Access to Juvenile Populations: 1990-2017*. Developed by the National Center for Juvenile Justice for the Office of Juvenile Justice and Delinquency Prevention. Online. Available: https://www.ojjdp.gov/ojstatbb/ezapop.

Statewide RRIs

In FY18, Black youth comprised 24.4% of the state's total youth population ages 0-15. In that same year, Black youth accounted for 55.8% of complaints received; 64.2% of cases involving secure detention; 58.9% of complaints approved; 54.9% of cases adjudicated; 54.7% of cases disposed; and 74.4% of cases confined in YDCs.

Figure 1 shows the FY18 RRIs for minority youth at each of the six stages of juvenile justice system processing for which these data were available. Note that the starting point for the RRIs ('Y' axis) shown in the figure (and all subsequent figures depicting RRIs) is 1, the point at which the minority youth rate is equal to that of White youth. This means that only RRIs greater than 1, indicating over-representation of minority youth, will be visible in the graphs.[5]

Figure 1. FY18 RRIs for Six Stages of JJ System Processing



[5] Conversely, RRIs less than or equal to 1 are not shown in the figures.

Figure 1 shows that RRIs were highest for complaints received, detentions, and juveniles confined to YDCs. For these three stages RRIs for Black youth were higher than for other minority groups, with the differences being particularly notable for complaints received and juveniles confined. RRIs were slightly elevated for Blacks, Latinos, and Native Americans for complaints approved. Generally, RRIs were around 1 for all groups for complaints approved, cases adjudicated, and cases disposed.

Based on the results shown in Figure 1, the remainder of this chapter will focus largely on Black and Latino youth.

Regional Differences

Figures 2 and 3 show the RRIs for Black and Latino youth, respectively, by region.

Figure 2. FY18 RRIs for Black Youth by Region

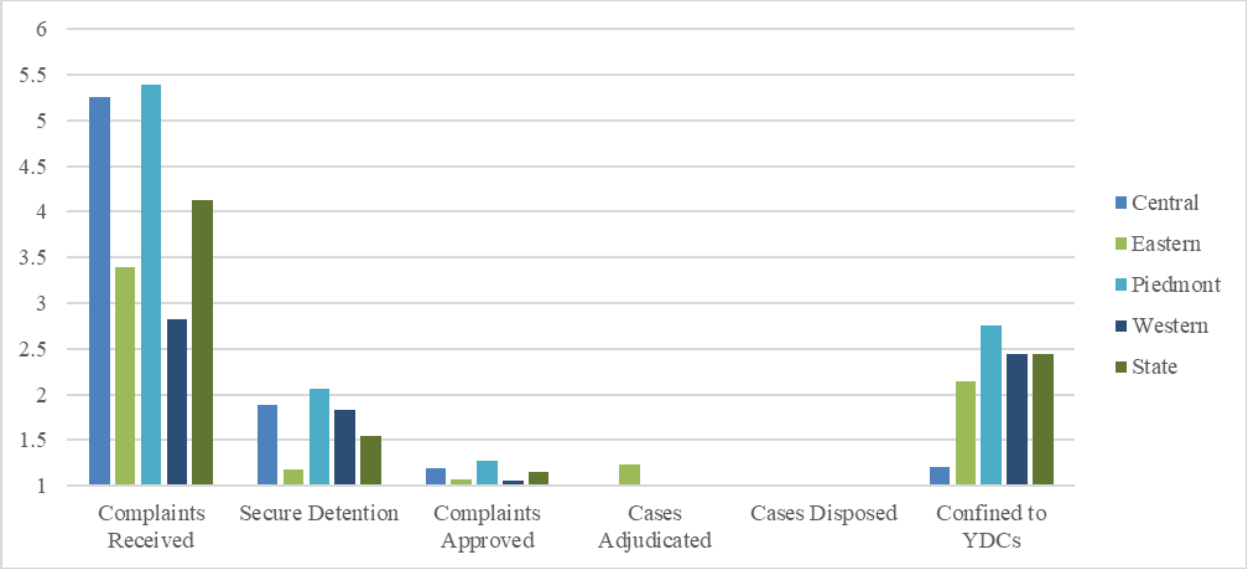


Figure 2 shows that RRIs for Black youth were higher for complaints received, confinements and secure detention than for other stages of the juvenile justice system. RRIs for complaints received in the Central and Piedmont regions were higher than the state average.

RRIs for Black youth confined to YDCs were much lower than the state average in the Central region and higher than the state average in the Piedmont region. RRIs for detentions of Black youth were high for all regions but were only slightly elevated for the Eastern region. This region was the only one of the four that had lower RRIs for detentions of Black youth than the state average. For cases adjudicated, RRIs for Black youth were higher in the Eastern region than in the other three. RRIs for cases disposed for Black youth were uniformly low in all four regions.

Figure 3. FY18 RRIs for Latino Youth by Region

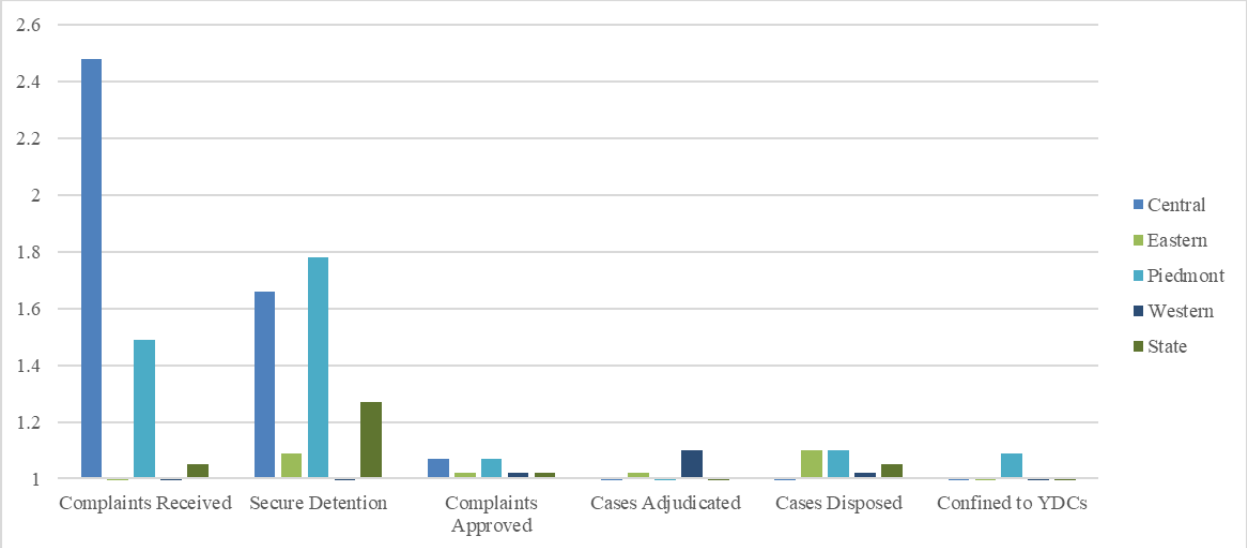


Figure 3 shows that RRIs for Latino youth were higher for complaints received and detentions than for other stages of the juvenile justice system. Unlike for Black youth, RRIs for confinements were not high, except for the Piedmont region, where RRIs were just barely above 1. As with Black youth, complaints received in the Central and Piedmont regions were higher than the state average. RRIs for detentions of Latino youth were higher than the state average in all regions but the Western and were particularly high in the Piedmont and Central regions. While there were some slight variations in RRIs for complaints approved, cases adjudicated, and

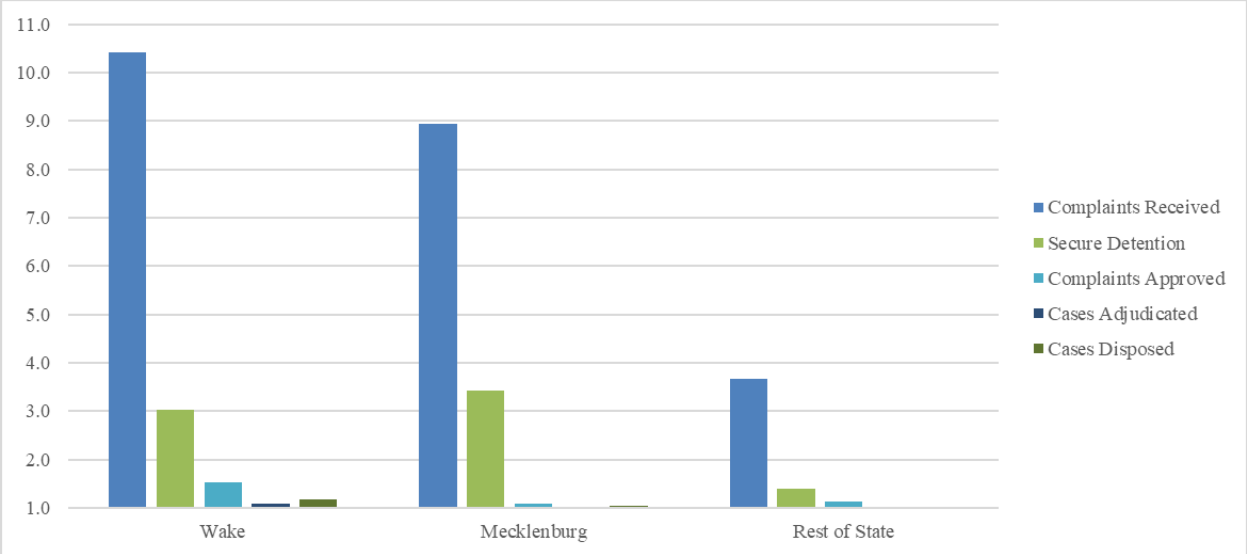
cases disposed among the regions, RRIs for all these stages were at or just slightly above 1 for Latino youth.

Mecklenburg and Wake Counties

Two North Carolina counties, Wake and Mecklenburg, each account for about twice as many youths (ages 6 to 15) as the next most populous county. Wake County accounts for 11.4% of the state's total youth population and accounts for 10.2% of the state's Black youth population and 10.8% of the state's Latino youth population. Mecklenburg County accounts for 11% of the state's total youth population and has 15.8% of the state's Black youth population and 13.5% of the state's Latino youth population.

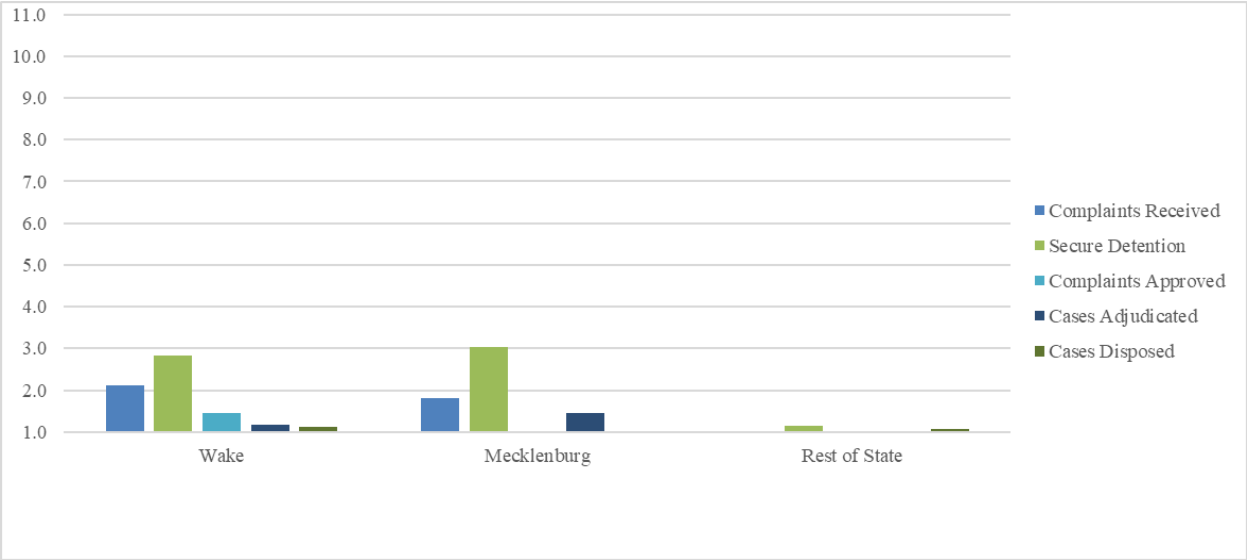
Figures 4 and 5 show the RRIs for five stages of juvenile justice system processing for Black and Latino youth, respectively, in Wake and Mecklenburg counties.[6]

Figure 4. FY18 RRIs for Black Youth in Wake and Mecklenburg Counties vs. Rest of State



[6] RRIs for youth confined to YDCs could not be computed because no White youths from these two counties were confined in FY18. In Mecklenburg, 40 of 41 youths confined were Black and one was Latino and in Wake, 6 of 7 youths confined were Black and one was Latino.

Figure 5. FY18 RRIs for Latino Youth in Wake and Mecklenburg Counties vs. Rest of State



As was the case with the state-level RRIs, RRIs were highest for complaints received and detentions. RRIs for these stages were much higher in Wake and Mecklenburg counties than in the rest of the state. RRIs for complaints received were higher for Black than Latino youth in both counties, as they were for the entire state. Differences in RRIs between the two minorities were much smaller for the other system stages, and RRIs for cases adjudicated for Latino youth were actually higher in the two counties than for Black youth.

Analysis of RRIs by County

Complaints Received

RRIs for complaints received were calculated for all counties except Washington, where there were no complaints against White youths (16 of 17 complaints were against Black youths).

The statewide RRI for minority youth was 2.77. The statewide RRI for Black youth was 4.12, while the RRI for Latino youth was 1.05. Of the 99 counties for which RRIs could be calculated, 87 (87.9%) had RRIs greater than 1 for Black youth, while 32 (32.3%) had RRIs greater than 1 for Latino youth. Of the 29 counties that had minority youth populations greater

than 5,000 in FY18, none had RRIs for minority youth for complaints received equal to or less than 1.

Of the 99 counties, 74 had over 50 complaints received in FY18. The RRI for Black youth in these counties was 4.21, while the rate for Latino youth was 1.07. Of the 74 counties, 69 (93.2%) had RRIs greater than 1 for Black youth, while 29 (39.2%) had RRIs greater than 1 for Latino youth.

Two counties stood out for their extremely high RRIs for Black youth: Edgecombe County, with an RRI of over 36, and Durham County, with an RRI of over 23. Edgecombe's total youth population in FY18 was just over 6,900: 71% of these youths were minorities, with roughly 61% Black and 9% Latino. In that year there were 158 complaints received: 152 against Black youths, 4 against Latino youths, and 2 against White youths. RRIs for Black (and Latino) youth in Edgecombe were 1 or less for all other stages of the juvenile justice system.

Durham's total youth population in FY18 was just under 35,000: 71% of these youths were minorities, with roughly 42% Black and 25% Latino. In that year there were 474 complaints received: 410 against Black youths, 46 against Latino youths, and 12 against White youths. The RRI for complaints approved for Black youth in Durham was 1.8; all other RRIs for Black (and Latino) youth were 1 or less.

Of the 27 counties with over 3,000 Black youths, the lowest RRIs were seen in Cleveland (2.47; 174 of 384 complaints received) and Robeson (2.57; 111 of 326 complaints received). Of the 30 counties with Latino youth populations over 2,000, 16 (53.3%) had RRIs of 1 or lower.

Secure Detention

There were 24 counties for which RRIs for secure detention could not be calculated. In 7 of these counties there were no secure detention cases; in 11, no White youths were placed in

secure detention; and in six no Black youths were placed in secure detention. Most of the 11 counties where no White youths were placed in detention had fewer than five youths placed in detention over the course of the year. Of the youth placed in secure detention: 4 of the 5 in Avery County were Black, 6 of the 7 in Warren County were Black; 9 of the 10 in Hoke County were Black; and 18 of the 20 in Wilson County were Black.

The overall minority RRI was 1.48. The RRI for Black youth was 1.54, while the RRI for Latino youth was 1.27. Of the 76 counties for which RRIs could be calculated, 37 (48.7%) had RRIs greater than 1 for Black youth, while 30 (39.5%) had RRIs greater than 1 for Latino youth. In FY18, 10 counties placed 50 or more youths in secure detention. Of these, six had RRIs for minority youth of 1 or greater for secure detention.

Of counties that detained at least 10 youths, the highest RRIs for Black youth were seen in Stanly (5.9; 8 of 11 youths detained); Henderson (4.7; 4 of 12 youths detained) and Lenoir (4.6; 16 of 17 youths detained). Of counties that detained at least 50 youths, the highest RRIs for Black youth were seen in Mecklenburg (3.42; 392 of 450 youths detained) and Wake counties (3.02; 113 of 137 youths detained). Durham, Forsyth, Gaston and Onslow had RRIs of less than 1 for Black youth detained. [7]

Of counties that detained at least 10 youths and at least five Latino youths, the highest RRIs for Latino youth were seen in Randolph (14.0; 7 of 11 youths detained), Union (4.7; 8 of 35 youths detained), and Alamance (3.5; 9 of 34 youths detained). Of counties that detained at

[7] As noted at the outset of this chapter, one of the weaknesses of the RRI calculation is that disparities in one stage can carry over into subsequent stages. Durham, for example, had one of the highest RRIs for complaints received for Black youth. Thus, while the secure detention rate for Black youth was in line with that of White youth relative to their respective rates for complaints received, 94.2% of youth placed in secure detention in Durham were minorities. The same was true in Forsyth (88.6%), although the disparities were not nearly as great in Gaston (51%) and Onslow (54.7%).

least 50 youths, the highest RRIs for Latino youth were seen in Mecklenburg (3.03; 40 of 450 youths detained) and Wake (2.82; 15 of 137 youths detained).

Of the 10 counties that placed 50 or more youths in secure detention, Cumberland, Durham, Forsyth, Gaston, and Onslow had RRIs of less than 1 for Latino youth.

Complaints Approved

There were 10 counties for which RRIs for complaints approved could not be calculated. In seven of these counties there were no complaints against Black youths approved. Most of these counties had very few Black youths residing in them (less than 2% of the youth population). Of the 29 counties that had minority youth populations greater than 5,000 in FY18, 28 had at least 50 complaints approved. Of these 28 counties, 21 (75%) had RRIs for minority youth of 1 or greater.

The overall minority RRI was 1.13. The RRI for Black youth was 1.15, while the RRI for Latino youth was 1.02. Of the 90 counties for which RRIs could be calculated, 60 (66.7%) had RRIs greater than 1 for Black youth, while 41 (45.6%) had RRIs greater than 1 for Latino youth.

Of counties with at least 50 complaints approved (and at least 5 complaints against Black youths approved), the highest RRIs for Black youth were seen in Franklin (2.7; 50 of 55 complaints approved) and Union (2.4; 381 of 507 complaints approved). Of the 27 counties with over 3,000 Black youths, 18 (66.7%) had RRIs for complaints approved for Black youth of at least 1. Of those 18, all but one (Union) had RRIs of 2.0 or lower.

Of counties with at least 50 complaints approved (and at least 5 complaints against Latino youths approved), the highest RRIs for Latino youth were seen in Durham (2.3; 44 of 361 complaints approved; Hoke (2.3; 24 of 102 complaints approved); and New Hanover (2.0; 10 of 205 complaints approved).

Cases Adjudicated

There were 17 counties for which RRIs for cases adjudicated could not be calculated. One county had no cases adjudicated, and six others had no Black youths adjudicated. Of the youths adjudicated: 5 of the 5 in Perquimans County were Black; 7 of the 7 in Northampton County were Black; 8 of the 8 in Washington County were Black; 8 of the 10 in Warren County were Black; and 38 of the 46 in Hoke County were Black.

The overall minority RRI was 0.82. The RRI for Black youth was 0.81, while the RRI for Latino youth was 0.85. Of the 83 counties for which RRIs could be calculated, 37 (44.6%) had RRIs greater than 1 for Black youth, while 33 (39.8%) had RRIs greater than 1 for Latino youth.

Of counties with at least 50 cases adjudicated (and 5 cases against Black youths adjudicated), the highest RRIs for Black youth were seen in Lincoln (2.8; 8 of 59 cases adjudicated), Forsyth (1.8; 160 of 255 cases adjudicated), Craven (1.7; 82 of 122 cases adjudicated) and Wilkes (1.7; 25 of 142 cases adjudicated). Of the 27 counties that had Black youth populations of over 3,000, 22 had at least 50 cases adjudicated. Of these, only six (22.2%) had RRIs greater than 1, and all but two (Forsyth and Rockingham) had RRIs less than 1.5.

Of counties with at least 50 cases adjudicated (and 5 cases against Latino youths adjudicated), the highest RRIs for Latino youth were seen in Pitt (2.2; 110 of 145 cases adjudicated), Gaston (1.8; 10 of 139 cases adjudicated), and Craven (1.7; 9 of 122 cases adjudicated). Of the 30 counties with Latino youth populations over 2,000, 23 had at least 50 cases adjudicated. Of these, 10 (43.5%) had RRIs of 1 or less, while the remaining counties had RRIs between 1.0 and 2.0 (except for Pitt, where the RRI was 2.2)

Cases Disposed

There were 19 counties for which RRIs for cases disposed could not be calculated. Ten of these counties had no cases of Black youths disposed. Of the youths disposed: 5 of the 5 in Perquimans County were Black, 8 of the 8 in both Northampton and Washington Counties were Black; 8 of the 9 in Warren county were Black; and 38 of the 47 in Hoke County were Black.

The overall minority RRI was 1.02. The RRI for Black youth was 1.01, while the RRI for Latino youth was 1.05. Of the 81 counties for which RRIs could be calculated, 29 (35.8%) had RRIs greater than 1 for Black youth, and 29 (35.8%) had RRIs greater than 1 for Latino youth.

Of counties with at least 50 cases disposed (and at least 5 cases against Black youths disposed), the highest RRIs for Black youth were seen in Cabarrus (1.6; 63 of 87 cases disposed); Robeson (1.4; 23 of 66 cases disposed); and Caldwell (1.4; 8 of 58 cases disposed). Of the 27 counties that had Black youth populations greater than 3,000 in FY18, 22 had at least 50 cases disposed. Of these 22 counties, 16 (72.7%) had RRIs for minority youth of 1 or less.

Of counties with at least 50 cases disposed (and at least 5 cases against Latino youths disposed), the highest RRIs for Latino youth were seen in Cabarrus (1.6; 9 of 87 cases disposed), Pitt (1.5; 6 of 144 cases disposed; and Guilford (1.4; 24 of 348 cases disposed). Of the 30 counties with Latino youth populations over 2,000, 23 had at least 50 cases disposed. Of these, 12 (52.2%) had RRIs of 1 or less and all had RRIs of 1.6 or less.

Youth Confined to YDCs

A total of 48 counties committed at least one youth to a YDC in FY18. Only five counties (Mecklenburg, Guilford, Cumberland, Pitt, and Forsyth, in order from greatest to least) committed 10 or more youths. These five counties combined accounted for 47.8% of all state commitments. Overall, 90.7% of the youths committed from these counties were Black. In

Mecklenburg County, which by itself accounted for about 20% of statewide commitments, 40 of the 41 juveniles confined to YDCs were Black.

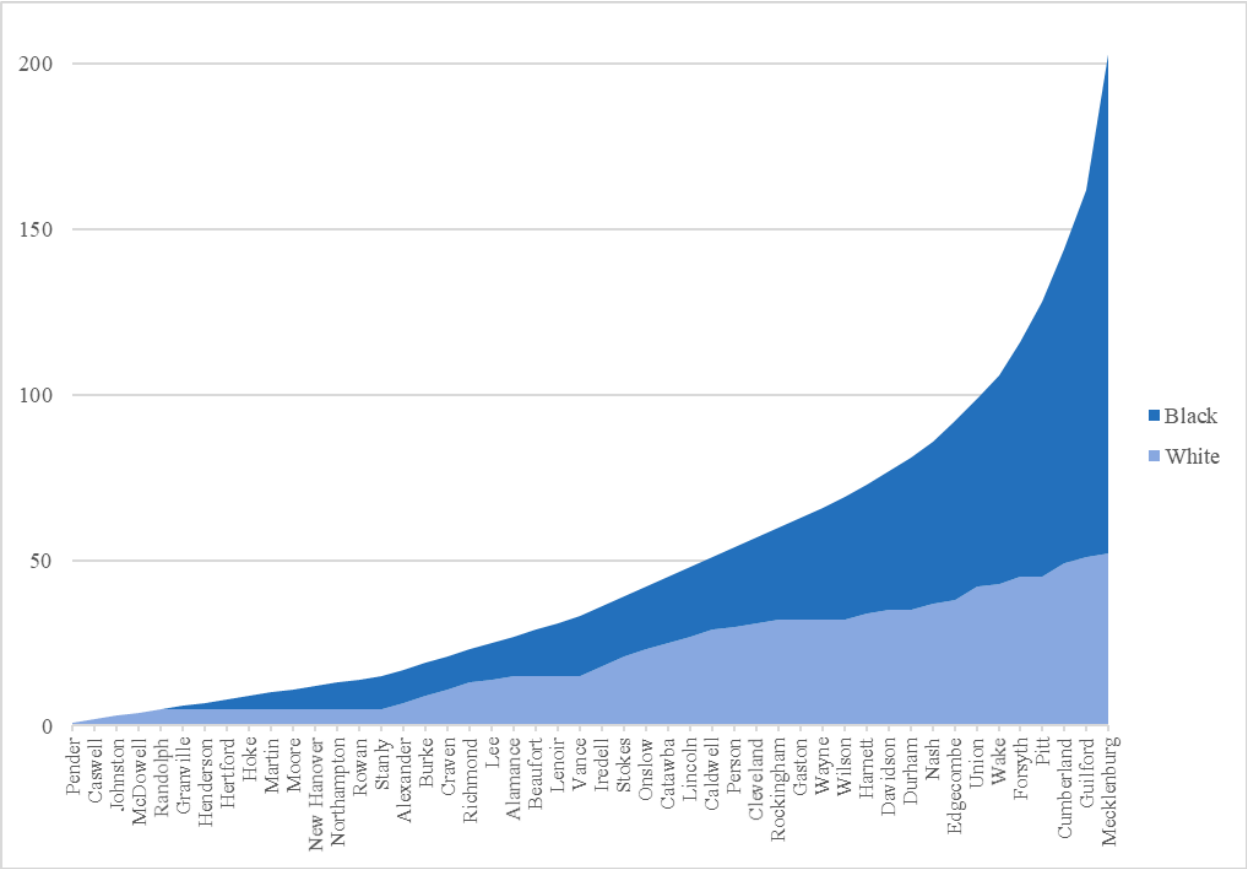
Of the 48 counties that confined at least one youth, there were 24 for which RRIs could not be calculated because no White youths were confined.

The overall minority RRI was 2.18. The RRI for Black youth was 2.44, while the RRI for Latino youth was 0.93.[8] Of the 24 counties for which RRIs could be calculated, 8 (33.3%) had RRIs greater than 1 for Black youth.

Figure 6 shows the cumulative totals of Black and White youth committed to YDCs for each county that committed at least one youth; counties are arrayed from left to right according to the number of youths they committed. The figure shows the disproportionality associated with commitments, with Blacks comprising almost 3 in every 4 youths committed to a YDC. The rapidly increasing slope of the curve for Black youth shows the contribution that the largest localities in the state made to the commitment disparity.

[8] Eight counties committed a total of 9 Latino youths to YDCs.

Figure 6. Cumulative Totals of Black and White Youth Committed to YDCs by County



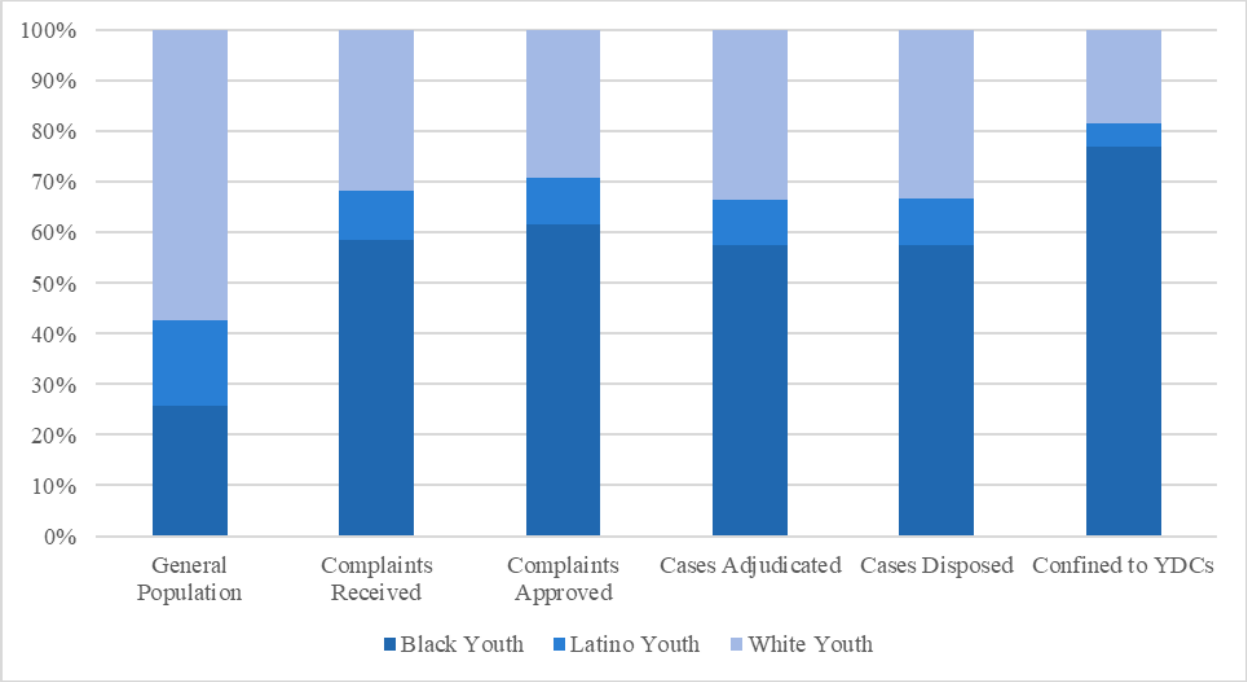
Summary

Figure 7 summarizes the findings of this portion of the RRI analysis. The figure shows the stages for which data are available (excluding secure detention), with the proportion of youths of each race shown for each component.[9] As the figure shows, Black and Latino youth are over-represented in the juvenile justice system compared with their proportion in the general state population. The disproportionality increases slightly from complaints received to complaints approved, decreases with cases adjudicated, increases very slightly with cases disposed, and increases substantially with commitments to YDCs. This disproportionality affects

[9] The reader is reminded of the caveat noted at the outset of this chapter: these data do not represent individual youths, and they do not track individual youths from one stage of the system to the next.

Black youth almost exclusively; Latinos are actually less likely to be involved in the system relative to their proportion in the population. Blacks, however, account for roughly 1 of 4 youths in the general population, but 3 of 4 youths confined to YDCs.

Figure 7. Summary of Black and Latino Youth in JJ System Stages

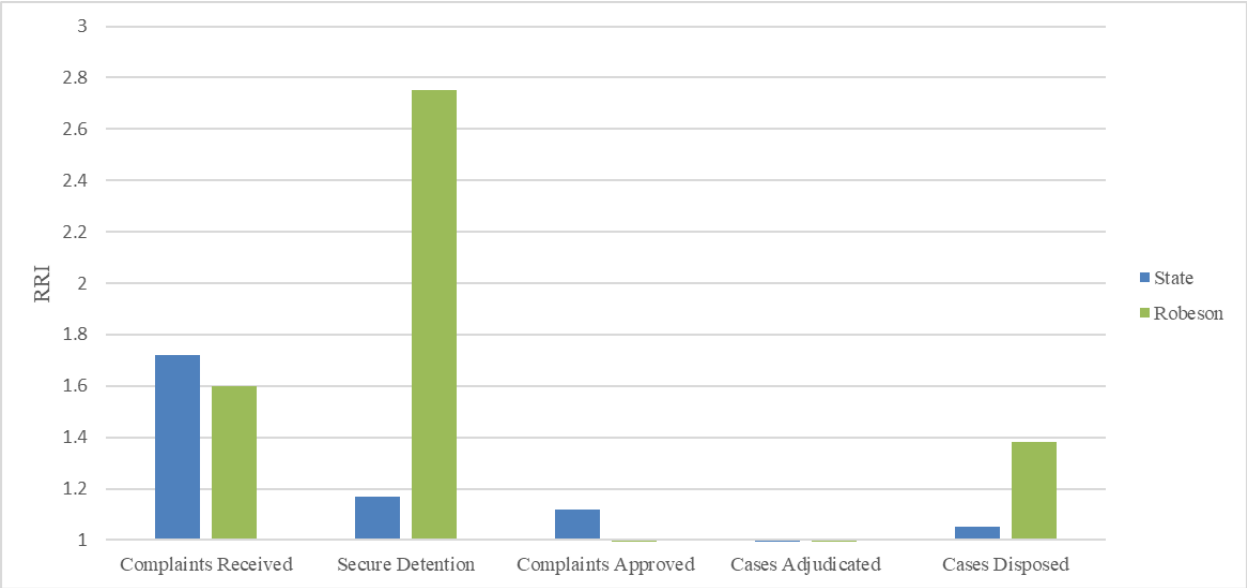


Native American Youth

Robeson County is home to the Lumbee Tribe of North Carolina. In FY18 Robeson County had almost 7,800 Native American youths, more than ten times any other county in the state. Figure 8 shows the RRIs for Native American youth for the state and for Robeson County. Statewide RRIs for Native American youth were above 1 for complaints received, and were slightly elevated for secure detention, complaints approved, and cases disposed. In Robeson County, the RRI for secure detention was much higher than for Native American youth in the rest of the state, and the RRI for cases disposed was slightly higher.[10]

[10] In Robeson county in FY18, 82% of the youth population was comprised of minority groups, 90% of complaints received were for minority youth, and 96% of youth placed in secure detention were minorities.

Figure 8. RRIs for Native American Youth: Statewide and Robeson County



RRI Trends

RRI data for five years (FY14-FY18) were analyzed to identify potential trends over time. Figure 9 shows a series of graphs depicting the RRIs for Black youth over this five-year time period for the six stages of the juvenile justice system for the state as a whole, as well as Wake and Mecklenburg Counties. Statewide, RRIs for complaints received remained stable from FY14-FY18, averaging around 4.0 over the five-year period. RRIs for Black youth in Wake County rose slightly from FY14-FY16, dipped in FY17, then increased again in FY18. In Mecklenburg County, after an increase in FY15, RRIs decreased through FY17, then increased again in FY18. In both counties, RRIs were slightly higher in FY18 than they were in FY14.

Figure 9. RRI Trends for Black Youth in Mecklenburg and Wake Counties and State: FY14-FY18

Statewide RRIs for secure detention for Black youth also remained stable over the five-year period, with RRIs slightly higher in FY18 than in FY14. In Wake County, RRIs more than doubled from FY15 to FY16, were lower in FY17, and increased again in FY18 to their highest level over the five-year period. RRIs in Mecklenburg County increased steadily from FY15-FY17 and dropped slightly in FY18.

RRIs for complaints approved for Black youth for the state as a whole remained fairly stable over the time period, increasing slightly from FY15-FY17 (note that the scale of this graph is much smaller, with RRIs over the five-year period ranging from 1.0 to 2.0 for the state and the two counties). RRIs for Black youth in Wake County increased from FY14 to FY17, then dropped in FY18. RRIs in Mecklenburg County dropped significantly from FY16 to FY18, leaving them at the lowest level in five years.

As noted previously, RRIs for cases adjudicated for Black youth were mostly at or below 1. While the graph shows some variation over time, these are small differences (note the scale on the graph, which ranges from 0.7 to 1.3).

Finally, the figure also depicts RRIs for Black youth confined in YDCs for the entire state. As noted previously, in FY18 many counties confined no youths to YDCs, and others confined no White youths to YDCs, making calculation of RRIs for these localities impossible. The graph of statewide RRIs shows a saw-toothed pattern, with RRIs up one year and down the next.

National Comparison

To put NC's RRI data into some perspective it is useful to compare them to RRIs for the country as a whole. The latter data were available from OJJDP's online National

Disproportionate Minority Contact Databook.[11] For these analyses, we averaged the most recent three years of RRIs (2014-2016). Multiple years were chosen in order provide more stable RRI estimates. It should be noted that national RRI data were provided for calendar years while NC data are for fiscal years, so there is not an exact equivalence between the two sets of data. In addition, the NC population data include youths ages 6-15, while the national population data include youths ages 10-15.[12]

Figures 10 and 11 show the RRIs for NC and the US for various juvenile justice system components for Black and Latino youth, respectively. For Black youth, RRIs for NC are higher than the US for complaints received and for youth confined. RRIs for secure detention are elevated for both NC and the US, but are almost the same, with NC's rate slightly higher. RRIs are just slightly greater than 1 for cases approved, with RRIs for the US higher than those for NC. Finally, RRIs for both NC and the US are below 1 for cases adjudicated and cases disposed.

RRIs for Latino youth are much lower than for Black youth for both the US and NC. For the state and the country as a whole, RRIs for Latino youth are highest for youth confined and for youth in secure detention. NC's RRI for Latino youth confined is just slightly higher than the US RRI, while the state's RRI for Latino youth in secure detention is lower than the country as a whole. Cases approved, adjudicated, and disposed were all near or below 1 for both NC and the US.

[11] Puzzanchera, C. and Hockenberry, S. (2018). *National Disproportionate Minority Contact Databook*. Developed by the National Center for Juvenile Justice for the Office of Juvenile Justice and Delinquency Prevention. Note: between the time national data were obtained and the time this report was finalized the Databook was discontinued.
[12] This will result in lower rates for complaints received for NC relative to the US since the youth population serves as the denominator for the rate calculation for this stage. Since the RRI is the ratio of the minority rate to the White youth rate, RRIs would only be affected if the proportion of youth ages 6-9 (who are included in the NC rates) is different for Minority youth than for White youth.

Figure 10. RRIs for the US and NC for Black Youth

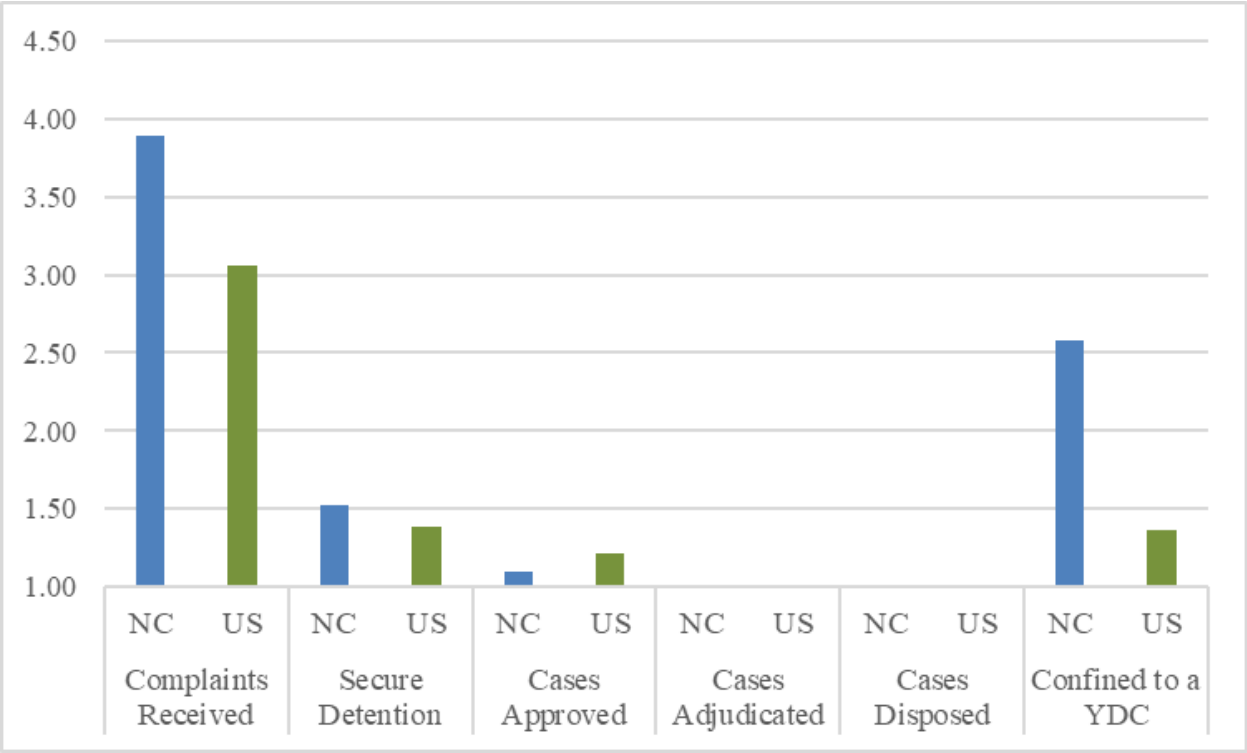
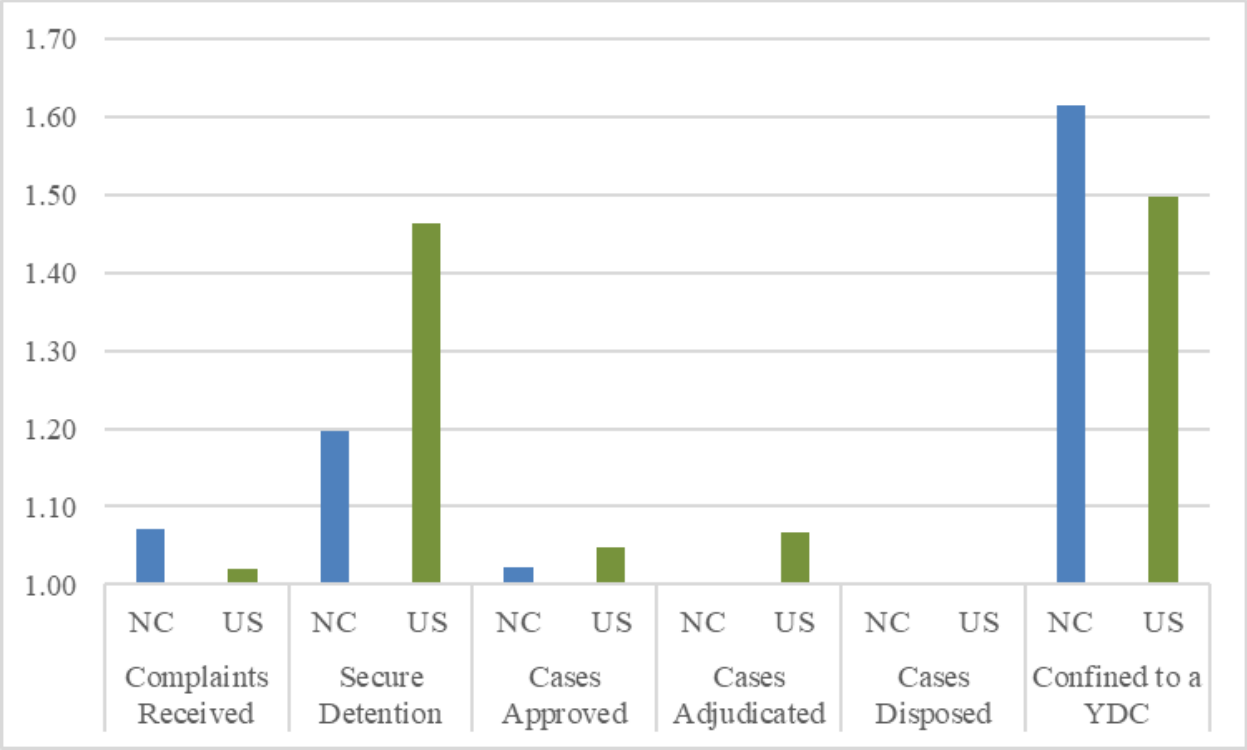


Figure 11. RRIs for the US and NC for Latino Youth



Summary

The RRI analyses presented here suggest that DMC was a problem at the state level in FY18, particularly for complaints received and confinement in YDCs for Black youth and, to a lesser degree, for Black youth confined in secure detention. Disproportionality was much higher for complaints received and secure detention of Black youth in the state's two largest counties, Wake and Mecklenburg, than it was in the state as a whole (this was also true for Latino youth, but to a much lesser extent). There was little to no disproportionality at the state level, as indicated by RRIs, for complaints approved, cases adjudicated, and cases disposed.

There was wide variation among counties in the amount of disproportionality. Most counties for which RRIs could be calculated had RRIs of greater than 1 for Black youth for complaints received and complaints approved, and almost half of counties had RRIs of greater than 1 for secure detention for Black youth. For all stages, fewer than half of the counties had RRIs greater than 1 for Latino youth.

In the county with the largest number of Native American youth, Robeson County, RRIs for complaints for Native American youth were lower than in the rest of the state, but RRIs for use of secure detention were much higher for Native American youth in Robeson County than for the rest of the state.

There was no evidence that disproportionality decreased over time, at least for Black youth at the state level and in the two largest counties. Trends in RRIs for Black youth over the last five years showed that state-level RRIs were relatively stable over this time period. RRIs for Wake and Mecklenburg Counties showed much more variation over time. Except for cases approved in Mecklenburg County and cases adjudicated for the entire state, RRIs for Black

youth in FY18 were higher than they had been in FY14 (although they may have been lower in FY18 than in previous years).

Finally, comparison of North Carolina's RRIs with national data showed that for Black youth disproportionality was greater in North Carolina than the nation as a whole for complaints received and youth confined to YDCs. RRIs for the other stages were roughly the same in NC and the US. For Latino youth, disproportionality in NC and the nation was similar across stages, with RRIs being slightly lower in NC for use of secure detention and slightly higher for confinement.

The results summarized above should be interpreted within the context of the cautions and limitations inherent in the use of RRIs discussed at the outset of this chapter. In addition, while examining RRIs may show racial and ethnic disproportionality, it does not allow us to determine whether this disproportionality is due to race and ethnicity per se, or to other factors, such as offense history or seriousness. To do that, we must analyze each juvenile justice system stage to identify the relative influences of a variety of factors, including race and ethnicity, on decision-making at that stage. The next chapter describes the methods and findings of these analyses.

Chapter 4: Statewide Analysis of Case Processing Data

This chapter presents the findings of the analyses of the predictors of case processing outcomes in North Carolina's juvenile justice system, with a focus on the extent to which the race/ethnicity of a youth influences decision-making. The chapter begins with an overview of the data source and data preparation process, followed by a discussion of the sample characteristics. We then describe how the independent and dependent variables were operationalized and provide a discussion of the analytical strategy. Finally, the results of the statewide analyses for the decision points of interest are presented.

Data Source

The case processing data for this study were obtained from NC-JOIN, which is managed by the Department of Public Safety's Division of Adult Correction and Juvenile Justice (DACJJ). When an offense is filed with the state, a complaint record is started in NC-JOIN. If the juvenile has not already come to the attention of juvenile justice a juvenile record is also started. Any subsequent interaction with juvenile justice involves creating new records for that same juvenile. All complaint (offenses charged), court experiences, supervision, detention and youth development center commitments are stored in the database.

Information on delinquent and undisciplined juveniles is entered into NC-JOIN by intake counselors (juvenile court counselors). This includes the juveniles' demographic and social history, current offense(s) and various case outcomes. The juvenile court counselors also obtain and enter information gathered by law enforcement (i.e., before the intake) into the database. Information on follow-up involvement with the juvenile justice system is also kept.

The researchers worked with DACJJ staff to fashion an information request for the NC-JOIN data. The request covered data from fiscal years 2011-2016 and supervisory data from

FY17. It included data on juvenile demographics, offense type and severity, decisions made on cases prior to and during court, risk and needs profiles of the juveniles in the cohort, detention events and YDC commitments. The data were selected and provided based on cohort for each fiscal year; for example, all complaints received during FY17.

A signed Memorandum of Agreement (MOA) governed the sharing of the data. The data were transferred to flash drives and mailed to the researchers.

Data Preparation

The combined dataset was created by merging several data files including complaints, detention, YDC, risk assessments, needs assessments, prior complaints, supervision, and demographics. The NC-JOIN dataset for the five-year time frame (FY12-FY16) and all supervision data on the FY17 disposed cohort consisted of 187,778 complaints. We eliminated duplicate complaints, defined as complaints with the same complaint ID or complaints that occurred within a seven-day period for the same youth. We then ranked duplicate complaints by offense seriousness and kept the complaint with the most serious offense that also had a case outcome. Therefore, only one offense per juvenile (i.e., eliminating duplicate complaints) per referral was counted.

Prior to cleaning, the duplicate complaints were counted and are represented by the variable “number of charges.” North Carolina's juvenile justice system jurisdiction extends to youths ages 6-17 charged with status/undisciplined offenses and juveniles ages 6-15 charged with misdemeanors and felonies. Youths ages 16 and older charged with misdemeanors or felonies are prosecuted in adult courts. Thus, youths 16 years or older at the time of the delinquent offense were omitted, as were status offenders (e.g., truancy, runaway, ungovernable, or found in places unlawful for a juvenile), leaving just juveniles who were referred for

delinquent offenses. Referrals with an undecided/incomplete decision outcome (i.e., received or referred) were dropped from the sample.

The use of the above-stated criteria for preparing the data for analysis allowed for the tracking of a youth for each referral and a case outcome as he/she moved through North Carolina's juvenile justice system. The data preparation process resulted in a total sample for analysis of 97,489 cases over the six-year time frame.

Description of Variables

This section describes the characteristics of the variables used in the analyses, and how these variables were coded for the analyses. Table A1 in Appendix A summarizes the frequencies for each variable for the entire state.

Independent Variables

Race/Ethnicity. Black youth include those who indicated a single race of African American/Black, and any individual who selected "two or more races," where one of the selected races was African American/Black. All other "two or more races" juveniles that were not recoded as African American/Black were recoded selecting their non-White race. For instance, Asian and White was recoded as Asian. "Hispanic" is defined as a race in the NC-JOIN system and not as an ethnicity.

White youth comprised 35% percent of the sample, Black youth made up 53% of the sample, and Latino youth comprised 9%. The remaining sample consisted of 2% Native Americans and 1% Asian. In the analyses race was a considered a dummy variable, with White youth as the reference group (given a value of 0); that is, each racial/ethnic group was compared with White youth.

Gender. The sample was comprised of 73% males (value of 1 in the analyses) and 27% females (value of 0 in the analyses).

Age. This variable refers to the age of the juvenile at the time of the offense. Since North Carolina considers delinquent offenders aged 16 and older to be adults, individuals older than 15 at the time of the offense were eliminated from the analyses. Age was calculated by subtracting the birth date of the juvenile from the offense date. The mean age of the sample was 13.6 years.

Type of offense. Each complaint was categorized as a person, property, drug, weapon(s) possession, or other offense. Offense type was coded as a series of dummy variables in the analyses, with "other offenses" serving as the reference group. The sample consisted of 15% person offenses, 20% property offenses, 6% drug offenses, 4% weapons offenses, and 55% "other" offenses.

Severity Score. For purposes of the analyses, the most severe "charged class," class "A" felony, was assigned a value of 15; "B1" was assigned a value of 14; "B2" was assigned a value of 13; and so on. Therefore, a violent crime such as murder (class "A") was assigned a value of 15, a property crime such as first-degree burglary (class "D") was assigned a value of 11, and so forth. The mean severity score for the sample was 6.6.

Number of charges. The number of charges represents the number of complaints for a referral. The mean number of charges was 1.7.

Prior Referrals. This variable refers to the total number of prior referrals against a juvenile. It captures only information on priors during the time frame of the study (2012-2017). Thus, the number of prior of referrals may be underestimating the true number of past contacts with the juvenile court. The average number of prior referrals for the sample was 1.9.

Risk Score. The risk score is a composite of a range of information intended to assess the

risk of the juvenile re-offending. The risk score includes information about the age of the first delinquent offense, prior intake referrals, most serious prior offense, prior assaults, runaway attempts, alcohol or drug use in the past 12 months, peer relationships, and parental supervision. Risk scores can range from 0 to 30, with risk scores of 13 or more consider the highest risk category. The mean risk score for the sample was 6.6. A total of 15,398 cases (15.8%) were missing risk scores.

Needs Score. During intake, counselors may solicit information from multiple sources to complete the needs assessment. The information gathered relates to the specific needs of each juvenile, including information about their peer associations and their behavior in school, including academics, physical health, and mental health. The designated intake counselor also contacts parents as well as the school to supplement the information she receives firsthand from the juvenile. Taken together, this information is used to create a "needs score."

The needs score includes information about gang membership and association, school behavior and academic functioning, sexual behavior, and mental health. Several items in the composite score examine family background, including conflict in the home, parental status, supervision, parental disabilities, household substance use, and family criminality. Needs scores can range from 0 to 51, with scores over 22 considered "high need." The mean needs score for the sample was 10.5. A total of 18,535 cases (19%) were missing needs scores.

School Related. This variable captures whether the complaint was school related (coded as a '1') or not (coded as a '0'). Fifty-five percent of the complaints in the sample were school-related.

County. Separate analyses were carried out for the five most populous counties in the state: Mecklenburg (Charlotte); Wake (Raleigh); Guilford (Greensboro); Forsyth (Winston-

Salem) and Cumberland (Fayetteville). For state analyses, region (Central, Eastern, Piedmont, and Western) was used as the location variable. Twenty-seven percent of the sample was from the Central region; 20% from the Eastern; 37% from the Piedmont; and 16% from the Western region. Region was treated as a series of dummy variables in the analyses, with Piedmont as the reference group.

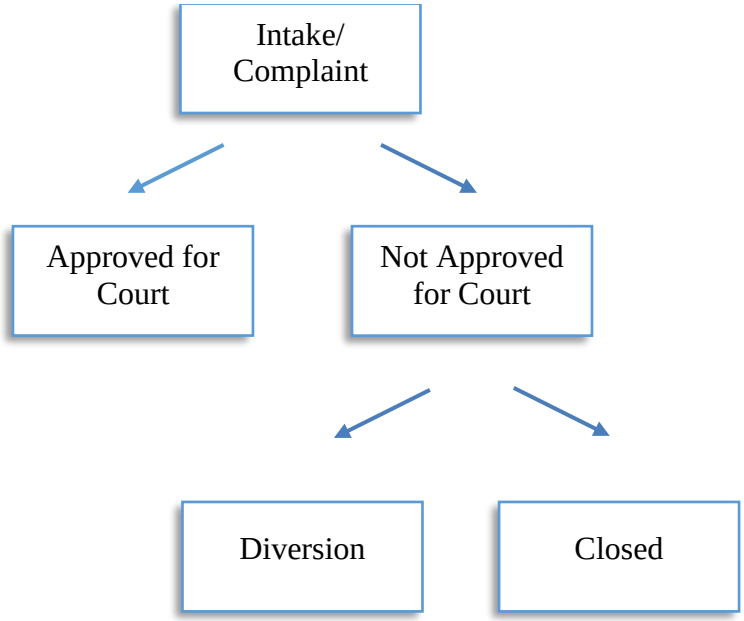
Dependent Variables

As discussed previously, decision points that typically occur in the North Carolina juvenile justice system include: (1) whether or not a complaint is approved; (2) if the complaint is not approved, whether the case is diverted or closed; (3) if the complaint is approved, whether or not the youth is adjudicated delinquent; (4) if adjudicated, how the case is disposed, which involves a judge deciding which of the supervision alternatives is the best fit for the juvenile and the state (e.g., protective supervision, probation, commitment, etc.). In the analyses presented here, these decision points were represented by the three dependent variables described below.

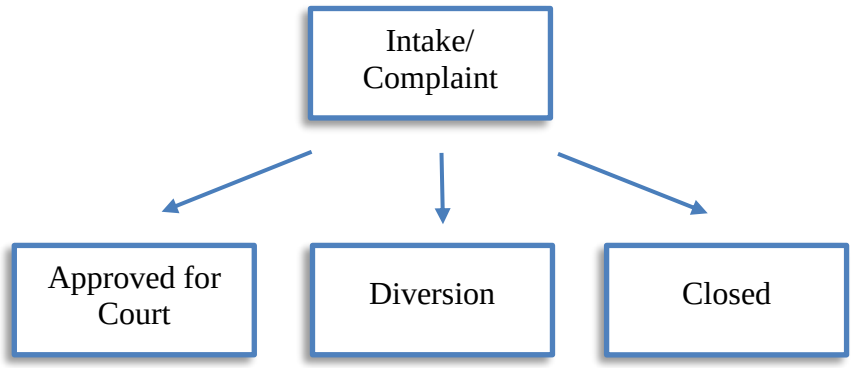
Intake. In North Carolina, the intake evaluation process involves one of three possible outcomes: approved for court, diversion (court counselor monitors plan or contract), or closed. There are two possible conceptualizations of how this complaint evaluation process might work; these are shown in Figure 12.

Figure 12. Conceptualizations of the Complaint Evaluation Process

Sequential Decision-Making Model



Simultaneous Decision-Making Model



In the "sequential" conceptualization, decision-making occurs in two stages: first, approved vs. not approved; and second, for cases not approved, diversion or closed. In the "simultaneous" conceptualization process, the intake decision is made among the three alternatives, which are considered at the same time. The statewide and county-specific analyses presented in this chapter and the next employed both approaches. In the first ("sequential") approach, the outcome (dependent) variable was "not approved" (coded as 0) vs. "approved" (coded as 1), with "not approved" combining diversion and closed cases. In the second ("simultaneous") conceptualization, the dependent variable was closed (or released, coded as 0), diverted (coded as 1) or approved (or petitioned, coded as 2). This second approach involved three comparisons: closed vs. approved; closed vs. diverted; and diverted vs. approved. Both sets of analyses are included in the discussion of the results. Fifty-two percent of the complaints in the sample were approved, while 48% were not approved (28% diverted and 20% closed).

Adjudication. This dependent variable represents youth who were approved or petitioned and reached the adjudication stage, where they may have been either non-adjudicated (0) or adjudicated delinquent (1). Forty-four percent of the approved cases were adjudicated delinquent.

Judicial Disposition. This dependent variable captures youth who received an adjudication of delinquency and a judge determined a disposition or outcome. Judicial disposition was differentiated by some form of supervision or probation in the community (0), or out of home placement (1; either commitment to a YDC or secure detention). Thirteen percent of the adjudicated cases received an out of home placement.

Secure detention as a separate outcome at the approval/non-approval stage and at adjudication was not included in the analyses. The number of youths detained at these stages was too small to conduct analyses involving race/ethnicity comparisons and case outcomes.

Analysis Plan/Procedures

As noted previously, the RRI provides a snapshot or a description of the youth in the juvenile justice system during a specified timeframe and at stages in the system. While valuable, RRIs can only provide insight on the level of DMC at stages or decision points and cannot tell us *why* DMC is occurring. Instead, multivariate statistical analysis in the form of logistic regression permits such an inquiry and is commonly used in assessment studies (e.g., Bishop & Frazier, 1988; Leiber et al., 2011; Maggard, 2013; Rodriguez, 2010).

Logistic regression is a statistical technique that takes into consideration a variety of factors to predict the likelihood of a case outcome. The analysis attempts to identify what legal (e.g., crime severity, prior record) and extra-legal (e.g., race, gender) considerations are used by decision-makers to arrive at an outcome. Legal factors, and to some extent extra-legal factors, are often relied upon to determine a juvenile justice outcome due to the system's *parens patriae* foundation. Race and gender, however, should not be predictive of a stage outcome once all legal and other extra-legal factors are considered. If race and/or gender are statistically significant indicators in the analysis, then something else in addition to legal and other extra-legal factors (such as race and/or gender bias) accounts for DMC.

Multinomial logistic regression was be used to examine intake decision-making, comparing the three outcomes of approved, closed and diverted. Logistic regression was used to model decision-making at adjudication and judicial disposition. These forms of multivariate statistical techniques allow us to identify the predictors (independent variables) of each decision

point (dependent variable). The first step of the analyses was to examine the direct or main or additive impact of each independent variable (race/ethnicity, crime type, etc.) on the dependent variable (intake, adjudication, judicial disposition). Next, models were estimated for each racial/ethnic group (White, Black, Latino, Native American, Asian/Pacific Islander) separately to examine the predictors of case outcomes and assess if relationships differed or were comparable across racial/ethnic categories. This process of partitioning by each racial/ethnic group allowed us to test for the existence of possible interactions between race/ethnicity and the independent variables for each of the case outcomes. For example, a test for such a relationship may produce a finding that a youth being Black and male may influence a case outcome differently than others once all other factors are taken into account. Testing for race/ethnic interaction relationships and other factors within decision points provides a more thorough examination of the effects of race/ethnicity on decision-making than simply estimating direct or main effects (Bishop & Frazier, 1988; Leiber et al., 2009).

As stated previously, the analyses begin with an assessment of DMC at the state level, provided below. Chapter 5 presents the separate analyses for each of the five largest counties in the state.

Results

The discussion of the statewide results begins with an examination of the zero-order correlations among the variables to be included in the analyses. This allows for the assessment of possible relationships among the independent variables, such as race/ethnicity with the variable severity score. Next, we present the results from the regression analyses. A summary of the findings concludes the chapter. The tables presenting the results of the statewide analyses are provided in Appendix A. Note that Table A3 provides results for the approved vs. not approved

decision for both the state and the five counties. We will refer to Table A3 when the results for each county are discussed in Chapter 5.

Bivariate Comparisons Among Independent Variables

Table A2 provides the correlations among the independent variables. A correlation is a measure of an association or relationship between two variables. The correlation coefficient can range from 0 to 1 and can be positive or negative; the closer the correlation is to 1.0 (or -1.0), the stronger the relationship between the two variables. A test can be used to assess the statistical significance of the relationship, which is indicated by a probability ("p") value. Since the formula for testing the statistical significance of a correlation depends in part on the sample size, and because there are a large number of cases in the current sample, many of the correlations shown in Table A2 are statistically significant, even when the magnitude of the correlation coefficient is small.

Of particular interest here were the relationships between each race/ethnic group and the other independent variables, such as age, the seriousness of the offense, prior referrals, etc. Looking at the relationships involving White youth (column 1), we found the following: positive associations with age (older), drugs, weapon, other offenses and the referral being school related. Inverse or negative associations existed with property, person, severity score (less severe) the number of charges (fewer), prior referrals (fewer) and risk score (lower).

For Black youth (column 2), positive correlations existed with person offenses, severity score (more serious), the number of charges (more), prior referrals (more), and both the risk and needs scores (higher). Negative relationships were evident with gender (female), age (younger), property offenses, drugs, weapon and other offenses and not being school related.

For Latino youth (column 3), positive associations existed with gender (male), age (older), drugs and weapon offenses. Inverse effects existed with person and other offenses, severity score (less severe), the number of charges (fewer), prior referrals (fewer) and the risk and needs score (lower).

For Native Americans (column 4), positive correlations emerged with gender (male), other offenses, and the referral being school related. Native American youth were less likely to be charged with property offenses, score lower on the seriousness of the offense, have fewer charges, and score lower on the risk assessment. Lastly, Asian/Pacific Islander youth (column 5) scored higher on the needs indicator, were younger, and were less likely to be involved with a property offense.

Although no clear patterns emerged, there were some differences among the racial/ethnic groups in relation to the other independent variables. White youth were more likely to have complaints for drugs and weapons offenses, and their referrals were more likely to be school related. Black youth were more likely to have been referred for person offenses, to have more severe offenses, more charges, and more prior referrals, and to score higher on the risk and needs measures. Latino youth were more likely to be male and older, and to have been involved in drug and weapon offenses. Native Americans were more likely to be male, to be charged with "other" offenses, and to have school related offenses. Asian/Pacific Islander youth scored higher on needs.

Multivariate Regression Results

The correlations describe above provide information about associations or relationships between pairs of variables. Multivariate regression analyses were used to assess the effects of

these correlations on decision-making outcomes once all variables are taken into consideration or controlled.

Intake. Table A3 in Appendix A shows the logistic regression results for the approved vs. not approved decision. Column 1 of the table shows the statewide results. Of the four racial/ethnic groups, being Native American was significantly related to the approved-not approved decision. The odds of receiving an approval for a Native American youth were 67% higher than for a White youth. Youth in other racial/ethnic categories were no more likely than White youth to have their cases approved.

Several other variables were related to the approval decision. Males, older youths, youths who committed weapons offenses, youths with higher offense severity scores, more charges, and more prior offenses, and youths with higher risk and needs assessment scores were all more likely to have their cases approved. Youths who committed drug offenses and youths who committed school-related offenses were less likely to have their cases approved. Differences in intake decision-making by region were also evident. Compared to the Piedmont region, the reference group, each of the regions was more likely to approve or petition cases.

Since many of the cases were missing data on the risk and needs indicators, the logistic regression analyses were repeated dropping these two variables from the models. These results (not shown here) parallel those discussed above with two exceptions. With the risk and needs variables omitted, the odds of Black youth having their cases approved were slightly (5% increase) but statistically significantly ($p=.002$) higher relative to White youth. In addition, the effect involving Asian/Pacific/Islander youth reversed from negative to positive but remained non-significant. The result regarding Black youth suggests that they score higher on the risk and

needs indicators, which in turn may explain differences in intake outcome decision-making related to race (see also zero-order correlations).

The results of the multinomial regression analysis, which considers all three intake outcomes (approved, diverted, closed) simultaneously, are presented in Table A4. As shown in column 1 of Table A4, of the four racial/ethnic groups, being Black or Latino was significantly related to whether the case was closed vs. approved. The odds of Black and Latino youth having their cases approved vs. closed relative to White youth *decreased* by 18% and 17%, respectively, once legal and extralegal factors were controlled or taken into consideration. When the outcome comparison was released/closed relative to diversion, these two effects remained, and a statistically significant effect emerged involving Native Americans (column 2). The odds of receiving diversion vs. having their cases closed were 29% lower for Blacks, 16% lower for Latinos, and 52% lower for Native Americans compared to similar White youth. When the outcome comparison involved diversion vs. approval (column 3), the racial/ethnicity effects remained for all three groups but the relationships were positive rather than negative, meaning that Blacks (by 15%), Latinos (by 10%) and Native Americans (by a little over 200%) were more likely to receive an approval outcome than a diversion outcome relative to White youth.

A look at the effects involving the other independent variables across the models showed relationships that would be expected. For example, offenses against persons increased the chances of having the case approved relative to being released/closed (column 1) and being diverted (column 3). Scoring higher on the needs variable increased the likelihood of a case outcome involving approval (column 1, column 3) and diversion (column 2). Regional differences were once again apparent: compared to the Piedmont region, each of the regions was

more likely to approve than close, the Central and Western regions were more likely to approve than divert, and the Western and Eastern regions were more likely to divert than close.

Next, the analysis differentiated the predictors of intake decision-making by race/ethnicity by estimating separate models for each group. These results are presented in Tables A5-A7 in Appendix A. For the purposes of clarity and brevity, only those relationships that suggest possible interaction effects are discussed. The assessment of possible interaction effects was based on the presence of statistically significant effects and whether the comparable relationships had opposite effects; for example, one being positive while the other was negative.

In all three sets of comparisons shown in the tables, the region variable showed significant possible interaction effects. Looking at the comparison of the outcomes of released/closed versus diversion (Table A5) we saw inverse relationships for Whites, Native Americans, and Asians/Pacific Islanders (columns 1, 4, and 5) in the Central region (relative to the Piedmont region), while for Blacks the effect was positive (column 2). In the Central region Black youth were more likely to have their cases diverted than closed, while White, Native American, and Asian/Pacific Islander youth were more likely to have their cases closed than diverted. A similar pattern of relationships existed in the Western region relative to the Piedmont region, but here both Black and Latino youth were more likely to have their cases diverted than closed, while White and Native American youth (but not Asian/Pacific Islander youth) were less likely to have their cases diverted than closed. Relative to the Piedmont region, being White in the Eastern region had no effect, but an increased likelihood of diversion rather than released/closed was present for Blacks, Latinos and Asians/Pacific Islanders. No statistically significant effect was seen for Native Americans in the Eastern compared to the Piedmont region.

Regarding the released/closed versus approved/petition decision, the results presented in Table A6 show that in the Central region, relative to the Piedmont, Black and Latino youth were more likely to have their cases approved than closed, while White and Native American youth were more likely to have their cases closed. The effect was similar in the Eastern region, except that only Native American (and not White) youth were significantly more likely to have their cases closed.

Regarding the diversion vs. approval decision (Table A7), Black and Latino youth in the Central region were more likely to have their cases approved than diverted, while for White youth the opposite was the case. In the Eastern region, Latino youth were more likely to have their cases approved than diverted, but Black youth and Asian/Pacific Islander youth were *less* likely to have their cases approved than diverted. A clearer understanding of these observed regional differences may emerge from the analyses examining decision-making by individual counties.

Two other variables showed potential interaction effects in the diversion vs. approval comparison. White youth who committed person offenses were *less* likely to have their cases approved than diverted, while Native American youth who committed person offenses were *more* likely to have their cases approved. The second variable to show interaction effects was number of prior referrals: Black youth who had more prior referrals were *less* likely to have their cases approved than diverted, while having more prior referrals was *more* likely to lead to having cases approved for youth in the other racial/ethnic categories.

Adjudication. Table A8 details first the logistic regression results for the determinants of adjudication decision-making (column 1). Next, separate models for each race/ethnic group are presented.

As can be seen, each race/ethnic group had a statistically significant effect on the dependent variable relative to Whites even after controlling for the other independent variables (column 1). All the effects were inverse; that is, relative to Whites, being Black, Latino, Native American, or Asian/Pacific Islander *decreased* the odds of being adjudicated delinquent by 20%, 9%, 25% and 13%, respectively. Once again, the other independent variables, such as severity score and the risk and needs variables, predicted adjudication outcomes in the expected direction. However, some of the relationships were not in the predicted direction, such as prior referrals being inversely related to the likelihood of adjudication. Other factors that might be expected to be statistically significant predictors of adjudication outcomes, such as person offenses, were not. In addition, a few regional differences in the adjudication process were evident. Relative to the Piedmont region, youth in both the Western and Eastern regions had increased odds of being adjudicated (by 14% and 23%, respectively).

Differentiating the models by race/ethnicity and looking at possible interactions with the other independent variables showed that there were no instances of statistically significant race/ethnic group effects in opposite directions (columns 2-6). Thus, the regional differences seen for the intake decision were not apparent at the adjudication stage.

Judicial Disposition. The logistic regression results for modeling judicial disposition are presented in Table A9. The table shows the results of analyses representing the main effects and those differentiated by each racial/ethnic group. However, because of too few cases, separate models for Native American and Asian/Pacific Islander youth were not calculated.

As Column 1 of Table A9 shows, being Black increased the chances of receiving an out-of-home placement by 39% relative to White youth. No statistically significant effects were found involving Latinos, Native Americans or Asians/Pacific Islanders.

The severity of the offense, the number of charges, and risk and needs scores all showed positive relationships with dispositional outcomes. The only regional difference appeared to involve the Eastern region relative to the Piedmont region, with Eastern region youth having a 49% greater chance of receiving an out-of-home placement compared to youth in the Piedmont region.

An examination of possible race/ethnic interactions with the dependent variable (columns 2-4) once again showed more similarities than differences. The only significant difference among the race/ethnic group-specific models occurred for the drug offense variable. White youths (column 2) involved in a drug offense had a *decreased* likelihood of receiving an out-of-home placement (43%) whereas Black youths (column 3) had an *increased* likelihood of receiving this outcome (55%).

Summary

When the approved vs. not approved decision is considered, the only racial/ethnic effects observed were for Native American youth, who were more likely to have their cases approved. When comparing cases closed vs. cases approved, Black and Latino youth fared better than their White counterparts, being less likely to have their cases approved. When the comparison was closed vs. diversion, Black, Latino, and Native American youth all were more likely to have their cases closed than diverted. When the decision was diversion vs. approval, Blacks, Latinos and Native Americans fared more poorly, being more likely to receive an approval outcome than a diversion outcome relative to White youth.

All minority youth were less likely to be adjudicated than their White counterparts. Black youth were more likely to receive an out of home placement than White youth. Committing a

drug offense increased the odds of receiving an out of home placement for Black youth, while committing the same offense decreased the odds of an out of home placement for White youth.

A complex set of regional interactions emerged from the analyses. In the Central, Eastern, and Western regions, relative to the Piedmont, Black youth were more likely to have their cases diverted or approved than closed. This was also true of Latinos, but in only two of the three regional comparisons. Latino youth were more likely to have their cases approved than diverted in all three regions, and this was true of Black youth in two of the three regions.

At various stages legal factors, such as the severity of the offense, risk and needs assessments, explained, for the most part, decision-making at intake, adjudication and judicial disposition.

Chapter 5: County-Specific Analyses of Case Processing Data

This chapter presents the findings of the analyses of the predictors of case processing and outcomes in North Carolina's five largest counties (in terms of juvenile population): Wake, Mecklenburg, Guilford, Forsyth, and Cumberland. These five counties accounted for 34.7% of the juvenile population of the state in 2017 and 32.4% of the cases in the sample.

The presentation of the analytical findings for each county corresponds to that of the statewide findings in the previous chapter. First, we present the distributions of the variables, followed by the zero-order correlations among the variables. Next, we present the results from the regression analyses. A summary of the findings concludes each section. Tables presenting findings for each county are provided in Appendices B–F. A table summarizing the race/ethnicity findings for the five counties (and the state) is provided at the end of the chapter.

Wake County

The youth population in Wake County aged 6 to 15 in 2017 was 148,723. Whites comprised 54% of the total population, Blacks, 22%, Latinos, 15%, Asians 8% and Native Americans 1%. There were 5,736 cases in the sample for Wake County.

Distributions of Variables

Table B1 in Appendix B shows that the 5,736 cases in the sample were comprised of 18% White youth, 69% Black youth, and 13% Latino youth. There were too few Native American (n=1) and other minority youth (n=94) to conduct separate analyses for these groups. These 95 "other" youths were combined with Latino youths, where they comprised 1.5% of the cases in that group. Seventy-five percent of the sample was male. The mean age of the youths in the sample was almost 14 years old.

Twenty-nine percent of offenses were for property crimes, 17% for person, 8% for drug and 2% for weapons-related crimes. “Other” delinquencies (e.g., driving without a license) comprised 45% of the offenses. The average offense severity score was 3.0. The youths in the sample averaged 1.75 charges, and 1.3 prior referrals. The mean score on the risk variable was 6.4, while the average needs score was 10. Forty-one percent of the referrals were related to a school incident.

In terms of the decision-making stage or the dependent variables, 57% of the referrals resulted in an approval or petition, 21% produced a diversion outcome and 22% involved a release/closed outcome. Of the 3,285 youths approved or petitioned, 39% were adjudicated delinquent. Of those adjudicated, 11% received an out-of-home placement; the remaining 89% of youths with a judicial disposition received supervised release or probation.

Bivariate Comparisons Among Independent Variables

Table B2 provides the correlations among the independent variables. Looking at the relationships involving White youth (column 1), we found positive associations with age (older) and drugs. Inverse or negative associations existed with property offenses, prior referrals (fewer) and the risk and needs scores (lower). For Black youth (column 2), positive correlations existed with property and person offenses, severity of the offense (more severe), prior referrals (more), ranking higher on the risk and needs variables, and the referral being school related. Negative relationships were evident with gender, age, drugs and weapon offenses. For Latino youth (column 3), the table shows a positive association with age (older) and inverse effects with gender and the referral being school related.

Multivariate Regression Results

Intake. Column 2 of Table A3 presents the logistic regression results for the intake decision operationalized as approved vs. not approved. As the table shows, Black and Latino youths were significantly more likely (26% and 63% greater odds, respectively) than comparable White youths to have received an approval outcome.

Table B3 presents the multinomial regression results for the examination of the determinants of intake decision-making operationalized as released/closed, diverted, and approved or petitioned. As can be seen in column 1, Black youth were significantly more likely to have their cases approved vs. released/closed relative to White youth. When the outcome comparison is released/closed vs. diversion (column 2), there were no differences for Black youth relative to White youth. However, being Latino reduced the likelihood of receiving diversion by 39% compared to being White. As shown in column 3, when the outcome comparison involved diversion vs. approval, both Blacks and Latinos had an increased likelihood of approval relative to Whites.

A look at the effects involving the other independent variables across the models shows, for the most part, relationships that would be expected. For example, scoring higher on the offense severity scale increased the chances of having the case approved relative to being released/closed (column 1) or diverted (column 3). Being male increased the odds of the referral being approved (column 1, column 3) when compared to being released/closed or diverted.

Next, the analyses differentiate the predictors of the three intake decision-making comparisons by race/ethnicity by estimating separate models for each racial/ethnic group. These results are presented in Tables B4–B6. Recall that we are looking for potential interaction effects

by identifying variables that are statistically significant, but in opposite directions, for different racial/ethnic groups.

A review of the results presented in Tables B4–B6 shows no potential interaction effects with race. For the released/closed vs. diverted decision (Table B4), being charged with a person offense and scoring higher on the needs assessment scale increased the odds of being diverted for both White and Black youth. Having a larger number of prior referrals decreased the odds of being diverted for both Black and Latino youth.

For the released/closed vs. approved/petitioned decision (Table B5), scoring higher on the offense severity scale increased the odds of being approved for all youth, while having a school-related offense decreased the odds of being approved for all youth. Having a greater number of charges increased the odds of being approved for White and Black youth, while having a higher needs score increased the odds of being approved for Black and Latino youth.

For the diversion vs. approved/petitioned comparison (Table B6), higher offense severity scale scores and more prior referrals increased the odds of being approved for all racial/ethnic groups, while having a school-related offense decreased the odds for all groups. Having more charges and higher risk scores increased the odds of approval for White and Black youth, while having higher needs scores increased the odds of approval for Black and Latino youth.

Adjudication. Table B7 details the logistic regression results for the determinants of adjudication decision-making (column 1), along with the results of separate models for White, Black, and Latino youth (columns 2–4).

Race and ethnicity were significantly related to the adjudication decision, with Black and Latino youth being 22% and 32% (respectively) *less* likely to be adjudicated delinquent than White youth.

Youth petitioned for drug offenses and those with higher offense severity scores were more likely to be adjudicated. Having more charges and a greater number of past referrals decreased the odds of being adjudicated.

Differentiating the models by race and looking at possible interactions with the other independent variables revealed no clear pattern reflective of differences in the impact of the variables across the models (columns 2–4). Offense severity score, number of charges, and number of prior referrals showed similar relationships with adjudication across racial/ethnic groups.

Judicial Disposition. The logistic regression results for modeling judicial disposition are presented in Table B8. Due to small sample sizes, we could not run analyses for Latino youth, nor could we run separate models for racial/ethnic groups. Interaction terms with each independent variable were calculated for Black youth (not shown here) and failed to yield evidence of statistically significant relationships with the disposition decision.

Table B8 shows that being Black was not significantly related to the judicial disposition outcome once all factors were taken into consideration. A higher offense severity score, more charges and a higher risk score increased the odds of receiving an out-of-home placement relative to a community-based outcome at judicial disposition. Committing a property or drug offense decreased the odds of receiving an out-of-home placement.

Summary

For the most part, at the various decision-making stages legal factors, such as the severity of the offense and risk and needs assessment scores, explained intake, adjudication and judicial disposition outcomes. Race and ethnicity were found to be related to intake outcomes in Wake County. When the intake decision was operationalized as approved vs. not approved, Black and

Latino youth were significantly more likely than White youth to have their cases approved. Relative to the release/closed outcome at intake and diversion, Blacks were found to have an increased likelihood of having their cases approved/petitioned than comparable Whites. Latinos were also more likely than Whites to have their cases closed relative to diversion, and to have their cases approved/petitioned relative to diversion. At adjudication both Black and Latino youth were less likely to receive an adjudication than White youth. No race effects were discovered at judicial disposition, and very few Latino youth received an out-of-home placement as an outcome at judicial disposition.

Mecklenburg County

The youth population in Mecklenburg County aged 6 to 15 in 2017 was 142,434. Whites comprised 38% of the total population, Blacks, 35%, Latinos, 20%, and Asians 6%. There were 11,035 cases in the sample for Mecklenburg County.

Distributions of Variables

Table C1 in Appendix C shows that the 11,035 cases in the sample were comprised of 12% White youth, 76% Black youth, and 12% Latino youth. Seventy-six percent of the sample was male. The mean age of the youth in the sample was 13.6 years.

Twenty-two percent of offenses were for property crimes, 17% for person, 7% for drug and 8% for weapons-related crimes. “Other” delinquencies comprised 46% of the offenses. The average offense severity score was 6.6. The youth in the sample averaged 2 charges and 1.6 prior referrals. The mean score on the risk variable was 7.1, while the average needs score was 10.1. Thirty-eight percent of the referrals were related to a school incident.

In terms of the decision-making stage or the dependent variables, 44% of the referrals resulted in an approval or petition, 35% produced a diversion outcome and 21% involved a

release/closed outcome. Of the 4,904 youths approved or petitioned, 75% were adjudicated delinquent. Of those adjudicated, 26% received an out-of-home placement; the remaining 74% of youth with a judicial disposition received supervised release or probation.

Bivariate Comparisons Among Independent Variables

Table C2 provides the correlations among the independent variables. Looking at the relationships involving White youth (column 1), we found positive associations with age (older), drugs, weapon, and other offenses. Inverse or negative associations existed with gender (female), property, person, the number of charges (fewer), severity score (less severe), prior referrals (fewer), the risk and needs scores (lower), and school related (not). For Black youth (column 2), positive correlations existed with property offenses, person offenses, and other offenses, severity score (more serious), prior referrals (more), and both the risk and needs scores (higher) and school related (yes). Negative relationships were evident with drugs and weapon offenses. For Latino youth (column 3), the table shows positive associations with gender (male) and weapon offenses, and inverse relationships with other offenses, severity score (less severe), prior referrals (less) and the risk and needs scores (lower).

Multivariate Regression Results

Intake. Column 3 of Table A3 presents the logistic regression results for the intake decision operationalized as approved vs. not approved. As the table shows, Black youth were significantly more likely (39% greater odds) than White youth to receive an approval outcome.

Table C3 presents the multinomial regression results for the examination of the determinants of intake decision-making operationalized as released/closed, diverted, and approved or petitioned. As can be seen in column 1, both Black and Latino youth were significantly more likely to have their cases approved vs. released/closed relative to White youth.

When the outcome comparison was released/closed vs. diversion (column 2), Latino youth were more likely to have their cases diverted than closed, and there were no differences for Black youth relative to White youth. As shown in column 3, when the outcome comparison involved diversion vs. approval, Black youth had an increased likelihood of approval relative to White youth.

A look at the effects involving the other independent variables across the models shows, for the most part, relationships that would be expected. For example, offenses involving a weapon increased the chances of having the case approved relative to being released/closed (column 1) and being diverted (column 3). Scoring higher on the needs scale increased the likelihood of a case outcome involving approval (column 1, column 3) and diversion when compared to being released/closed (column 2). Note that being male increased the odds of the referral being approved (column 1) and diverted (column 2) when compared to being released/closed. When compared to the diversion outcomes, males were more likely than females to have had their cases approved or petitioned (column 3).

Tables C4-C6 present the results of the three intake decision-making comparisons obtained by estimating separate models for each racial/ethnic group. A review of the results presented in Table C4 shows no potential interaction effects with race. For the released/closed vs. diverted decision (Table C4), being charged with a property offense or a school-related offense increased the odds of being diverted for both White and Black youth. Having more charges and a higher needs score increased the odds of being diverted for all racial/ethnic groups, while a larger number of prior referrals decreased the odds of being diverted for all youth.

For the released/closed vs. approved/petitioned decision (Table C5), a statistically significant difference can be seen involving person offenses for Black (column 2) and Latino

youth (column 3). Being Black and charged with a person offense *increased* the odds of having the case approved by 31%, while being Latino and charged with a person offense *decreased* the odds of receiving this outcome by 50%.

For the diversion vs. approved/petitioned comparison (Table C6), no statistically significant interactions involving racial/ethnic groups were found. Higher offense severity scale scores, more charges and more prior referrals increased the odds of being approved for all racial/ethnic groups, while having a school-related offense decreased the odds for all groups. Having higher risk and needs scores increased the odds of approval for Black and Latino youth.

Adjudication. Table C7 details the logistic regression results for the determinants of adjudication decision-making (column 1), along with separate models for Whites, Blacks, and Latino youth (columns 2–4).

Black youth were 26% *less* likely to be adjudicated delinquent than White youth. Being petitioned for a weapons charge increased the likelihood of being adjudicated delinquent, while males, youth petitioned for drug offenses, and youth having a higher number of charges or a higher number of prior referrals were all less likely to be adjudicated delinquent.

Differentiating the models by race and looking at possible interaction with the other independent variables reveals no clear pattern reflective of differences in the impact of the variables across the models (columns 2–4). Being charged with a weapons offense increased the odds of being adjudicated for Black and Latino youth, while having more charges decreased their odds of being adjudicated.

Judicial Disposition. The logistic regression results for modeling judicial disposition are presented in Table C8. Due to small sample sizes, we could not run analyses for Latino youth, nor could we run separate models for racial/ethnic groups. Interaction terms with each

independent variable were calculated for Black youth (not shown here) and failed to yield evidence of statistically significant relationships with the disposition decision.

Table C8 shows that being Black was not significantly related to the judicial disposition outcome once all factors were taken into consideration. Being petitioned for a property or drug offense, having a higher offense severity score, more charges and a higher risk score increased the odds of receiving an out-of-home placement relative to a community-based outcome at judicial disposition. Committing a school-related offense decreased the odds of receiving an out-of-home placement.

Summary

Race and ethnicity were found to be related to intake outcomes in Mecklenburg County. When the intake decision was operationalized as approved vs. not approved, Black youth were significantly more likely than White youth to have their cases approved. Relative to the release/closed outcome at intake and diversion, both Blacks and Latinos were found to have an increased likelihood of having their cases approved/petitioned than comparable Whites. Latino youth were also more likely to receive diversion than Whites when compared to the release/closed outcome. Black youth were more likely than White youth to receive an approval than diversion. For the released/closed vs. approved/petitioned decision, Black youth charged with a person offense were more likely to have their cases approved, while Latino youth charged with a person offense were more likely to have their cases closed. Black youth were less likely to be adjudicated than White youth, while no differences were observed for case disposition.

Guilford County

The youth population in Guilford County aged 6 to 15 in 2017 was 66,401. Whites comprised 41% of the total population, Blacks, 38%, Latinos, 14%, and Asians 6%. There were 5,668 cases in the sample for Guilford County.

Distributions of Variables

Table D1 in Appendix D shows that the 5,668 cases in the sample were comprised of 16% White youth, 73% Black youth, and 6% Latino youth. Seventy-two percent of the sample was male. The mean age of the youth in the sample was 13 years.

Twenty-three percent of offenses were for property crimes, 13% for person, 6% for drug and 2% for weapons-related crimes. "Other" delinquencies comprised 56% of the offenses. The average of the severity of the offense was 2.6. The youth in the sample averaged 1.6 charges, and 1 prior referral. The mean score on the risk variable was 6.3, while the average needs score was 9.5. Forty-eight percent of the referrals were related to a school incident.

In terms of the decision-making stage or the dependent variables, 59% of the referrals resulted in an approval or petition, 27% produced a diversion outcome and 14% involved a release/closed outcome. Of the 3,316 youths approved or petitioned, 40% were adjudicated delinquent. Of those adjudicated, 13% received an out-of-home placement; the remaining 87% of youth with a judicial disposition received supervised release or probation.

Bivariate Comparisons Among Independent Variables

Table D2 provides the correlations among the independent variables. Looking at the relationships involving White youth (column 1), we found positive associations with age (older), drugs, and weapon offenses. Inverse or negative associations existed with other offenses, severity score (less severe), prior referrals (fewer) and the risk and needs scores (lower), and

school related (not). For Black youth (column 2), positive correlations existed with property, weapon, and other offenses, and severity score (more serious). Negative relationships were evident with age (younger), drug offenses, prior referrals (fewer), and the offense being school related. For Latino youth (column 3), the table shows positive associations with gender (male) and the offense being school related. Inverse effects existed with age (younger), and prior referrals (fewer).

Multivariate Regression Results

Intake. Column 4 of Table A3 presents the logistic regression results for the intake decision operationalized as approved vs. not approved. As the table shows, Black youths were significantly more likely (26% greater odds) than White youths to receive an approval outcome.

Table D3 presents the multinomial regression results for the examination of the determinants of intake decision-making operationalized as released/closed, diverted, and approved or petitioned. As can be seen in column 1, both Black and Latino youth were significantly more likely to their cases approved vs. released/closed relative to White youth. When the outcome comparison was released/closed vs. diversion (column 2), Latino youth were more likely to have their cases diverted than closed, and there were no differences for Black youth relative to White youth. As shown in column 3, when the outcome comparison involved diversion vs. approval, Black youth had an increased likelihood of approval relative to comparable Whites.

A look at the effects involving the other independent variables across the models shows, for the most part, relationships that would be expected. For example, scoring higher on the severity offense score increased the chances of having the case approved relative to being released/closed (column 1) and being diverted (column 3). Note that being male increased the

odds of the referral being approved (column 1, column 3) when compared to being released/closed and diversion.

Tables D4–D6 present the results of the three intake decision-making comparisons obtained by estimating separate models for each racial/ethnic group. A review of the results presented in Table D4 shows no potential interaction effects with race. For the released/closed vs. diverted decision having a higher needs score increased the odds of being diverted for both White and Black youth, while a larger number of prior referrals decreased the odds of being diverted for both groups.

Table D5 shows no potential interaction effects with race. For the released/closed vs. approved/petitioned decision, having a higher needs score and a higher offense severity score increased the odds of being approved for all racial/ethnic groups. Having a higher number of charges increased the odds of being approved for White and Black, but not Latino, youth.

For the diversion vs. approved/petitioned comparison (Table D6), the school-related variable showed a potential race/ethnic group interaction. Having a school-related offense *decreased* the odds of being approved for Black youth but *increased* the odds of being approved for Latino youth. Higher offense severity scale scores, more charges and higher risk assessment scores increased the odds of being approved for all racial/ethnic groups. Being male, older and having a person or drug offense increased the odds of being approved vs. diverted for Black youth.

Adjudication. Table D7 details the logistic regression results for the determinants of adjudication decision-making (column 1), along with separate models for Whites (column 2) and Blacks (column 3). The number of Latino youths adjudicated was too small for a separate model to be run for these youth.

There was no significant race effect for Black youth in terms of adjudication. Being male and having a higher offense severity score increased the odds of being adjudicated delinquent, while having a higher number of charges and a higher number of prior referrals decreased the odds of being adjudicated delinquent.

The race-specific models showed no significant differences between White and Black youth. For both groups, having more charges was associated with lower odds of being adjudicated delinquent. For White youth, being male, having a drug offense, and having a higher needs score increased the odds of being adjudicated, while having a weapons offense decreased the odds. For Black youth, having a higher offense severity score and risk score increased the odds of being adjudicated, while having more prior referrals and a property offense decreased the odds.

Judicial Disposition. The logistic regression results for modeling judicial disposition are presented in Table D8. Due to small sample sizes, we could only run a single model for all racial/ethnic groups combined. Interaction terms with each independent variable were calculated for Black youth (not shown here) and failed to yield evidence of statistically significant relationships with the disposition decision.

Table D8 shows that being a minority youth was not significantly related to the judicial disposition outcome once all factors were taken into consideration. More charges and a higher risk score increased the odds of receiving an out-of-home placement relative to a community-based outcome at judicial disposition. Committing a school-related offense decreased the odds of receiving an out-of-home placement.

Summary

Race and ethnicity were found to be related to intake outcomes in Guilford County. When the intake decision was operationalized as approved vs. not approved, Black youth were significantly more likely than White youth to have their cases approved. Relative to the release/closed outcome at intake and diversion, both Blacks and Latinos were found to have an increased likelihood of having their cases approved/petitioned than comparable Whites. Latino youth were also more likely to receive diversion than Whites when compared to the release/closed outcome. Black youth were more likely than White youth to receive an approval rather than diversion. No race effects were evident at adjudication and judicial disposition.

Forsyth County

The youth population in Forsyth County aged 6 to 15 in 2017 was 49,611. Whites comprised 44% of the total population, Blacks, 28%, Latinos, 24%, Asians 3%, and Native Americans 1%. There were 4,330 cases in the sample for Forsyth County.

Distributions of Variables

Table E1 in Appendix E shows that the 4,330 cases in the sample were comprised of 15% White youth, 60% Black youth, and 25% Latino youth. There were too few cases for other ethnic groups (N=125) to conduct separate analyses for these groups. These "other" youths were combined with Latino youths, where they comprised 3% of the cases in that group. Seventy-two percent of the sample was male. The mean age of the youth in the sample was 13.7 years.

Twenty-four percent of offenses were for property crimes, 14% for person, 6% for drug and 1% for weapons-related crimes. "Other" delinquencies comprised 55% of the offenses. The average of the offense severity score was 2.6. The youth in the sample averaged 1.6 charges, and

1.2 prior referrals. The mean score on the risk variable was 8.3, while the average needs score was 12.2. Fifty-three percent of the referrals were related to a school incident.

In terms of the decision-making stage or the dependent variables, 41% of the referrals resulted in an approval or petition, 23% produced a diversion outcome and 36% involved a release/closed outcome. Of the 1,762 youths approved or petitioned, 45% were adjudicated delinquent. Of those adjudicated, 18% received an out-of-home placement; the remaining 82% of youth with a judicial disposition received supervised release or probation.

Bivariate Comparisons Among Independent Variables

Table E2 provides the correlations among the independent variables. Looking at the relationships involving White youth (column 1), we found positive associations with drugs and weapon offenses. Inverse or negative associations existed with person offenses, number of charges (fewer), prior referrals (fewer) and the risk and needs scores (lower). For Black youth (column 2), positive correlations existed with person offenses, severity of the offense (more severe), prior referrals (more), and the referral being school related. Negative relationships were evident with gender, drugs and the number of charges. For Latino youth (column 3), the table shows positive associations with gender (male), drugs, number of charges (more), and scoring higher on risk and needs assessments. Inverse effects existed with the referral being school related.

Multivariate Regression Results

Intake. Column 5 of Table A3 presents the logistic regression results for the intake decision operationalized as approved vs. not approved. As the table shows, being Black or Latino was not significantly related to the case approval decision.

Table E4 presents the multinomial regression results for the examination of the determinants of intake decision-making operationalized as released/closed, diverted, and approved or petitioned.[13] As can be seen in column 1, neither Black nor Latino youth were significantly more likely to have their cases approved vs. released/closed relative to White youth. When the outcome comparison was released/closed vs. diversion (column 2), Black youth were more likely to have their cases diverted than closed, and there were no differences for Latino youth relative to White youth. As shown in column 3, when the outcome comparison involved diversion vs. approval, again no race/ethnicity effects were apparent.

Examination of the other independent variables showed that higher scores on the offense severity scale increased the chances of having the case approved relative to being released/closed (column 1) and being diverted (column 3). Being male increased the odds of the referral being approved (column 1, column 3) when compared to being released/closed and diverted. An offense being related to a school incident decreased the odds of receiving an approval/petition (column 1, column 3).

Tables E4–E6 present the results of the three intake decision-making comparisons obtained by estimating separate models for each racial/ethnic group. The results presented in Tables E4–E6 show no potential interaction effects with race. For the released/closed vs. diverted decision (Table E4), having a higher needs score and committing a person offense increased the odds of being diverted for all race/ethnic groups. Having a greater number of charges increased the odds of being diverted for Black and Latino youth, while having more prior referrals decreased the odds of being diverted for both groups of youth.

[13] Youth who committed weapons offenses were dropped from the analyses due to their small number (n=32).

For the released/closed vs. approved/petitioned decision (Table E5), having a higher needs score and more charges increased the odds of being approved for all racial/ethnic groups. Being male increased the odds of being approved for Black and Latino youth, while having a school-related offense decreased the odds of being approved for these youth.

For the diversion vs. approved/petitioned comparison (Table E6), higher offense severity scale scores, more charges and higher risk assessment scores increased the odds of being approved for all racial/ethnic groups. Having more prior referrals increased the odds of approval for Black and Latino youth, while having a school-related offense decreased the odds for these groups. Being male increased the odds of having the complaint approved for Black youth.

Adjudication. Table E7 details the logistic regression results for the determinants of adjudication decision-making (column 1), along with separate models for Whites (column 2), Blacks (column 3), and Latino youth (column 4).

There were no significant race effects for Black or Latino youth in terms of the adjudication outcome. Being older and having a higher offense severity score and a higher risk assessment score increased the odds of being adjudicated delinquent.

The race-specific models showed no significant differences among the race/ethnicity groups. Having a higher offense severity score and a higher risk assessment score increased the odds of being adjudicated delinquent for all three groups.

Judicial Disposition. The logistic regression results for modeling judicial disposition are presented in Table E8. Due to the relatively small number of youth at this stage (n=453) and the small number who received an out-of-home placement (n=99) separate models for each race/ethnic group were not estimated. Interaction terms with each independent variable were

calculated for Black youth (not shown here) and failed to yield evidence of statistically significant relationships with the disposition decision.

Table E8 shows that being Black or Latino was not significantly related to the judicial disposition outcome. Being older, being adjudicated for a drug offense, having a higher offense severity score and a higher risk assessment score all increased the odds of receiving an out-of-home placement relative to a community-based outcome at judicial disposition.

Summary

Overall, race and ethnicity were not related to intake, adjudication and judicial disposition outcomes in Forsyth County. Being Black or Latino was not significantly related to whether the case was approved or not approved. The only race/ethnicity effect observed involved Black youth being more likely to receive diversion rather than the case being closed relative to White youth. There were no race/ethnicity differences in adjudication and dispositional outcomes.

Cumberland County

The youth population in Cumberland County aged 6 to 15 in 2017 was 43,637. Whites comprised 37% of the total population, Blacks, 43%, Latinos, 15%, Asians 3%, and Native Americans 2%. There were 4,833 cases in the sample for Cumberland County.

Distributions of Variables

Table F1 in Appendix F shows that the 4,833 cases in the sample were comprised of 19% White youth, 68% Black youth, and 13% “other” youth (consisting of Latinos, Native Americans, and Asian Americans). Seventy-two percent of the sample was male. The mean age of the youth in the sample was 13 years.

Seventeen percent of offenses were for property crimes, 16% for person, 8% for drug and 5% for weapons-related crimes. Other delinquencies comprised 54% of the offenses. The average of the severity of the offense was 2.5. The youth in the sample averaged 1.6 charges, and 1.5 prior referrals. The mean score on the risk variable was 5.7, while the average needs score was 8.7. Fifty-six percent of the referrals were related to a school incident.

In terms of the decision-making stage or the dependent variables, 48% of the referrals resulted in an approval or petition, 32% produced a diversion outcome and 20% involved a release/closed outcome. Of the 2,361 youths approved or petitioned, 48% were adjudicated delinquent. Of those adjudicated, 18% received an out-of-home placement; the remaining 82% of youth with a judicial disposition received supervised release or probation.

Bivariate Comparisons Among Independent Variables

Table F2 provides the correlations among the independent variables. Looking at the relationships involving White youth (column 1), we found positive associations with gender (male), drugs, and weapon offenses, while inverse or negative associations were seen with severity score (less severe), prior referrals (fewer) and the risk and needs scores (lower). For Black youth (column 2), positive correlations were seen with person and other offenses, prior referrals (more), and scoring higher on the risk variable; negative relationships were evident with drug and weapons offenses. For other minority youth (column 3), positive associations with age (older) and drug offenses were seen, while inverse effects existed with person offenses and the offense being school related.

Multivariate Regression Results

Intake. Column 6 of Table A3 presents the logistic regression results for the intake decision operationalized as approved vs. not approved. As the table shows, being Black increased the odds of case approval by 47% compared with White youth.

Table F3 presents the multinomial regression results for the examination of the determinants of intake decision-making operationalized as released/closed, diverted, and approved or petitioned. As can be seen in column 1, Black youth were significantly more likely to have their cases approved vs. released/closed relative to White youth. When the outcome comparison was released/closed vs. diversion (column 2), no significant race/ethnic effects were seen. As shown in column 3, when the outcome comparison involved diversion vs. approval, Black youth as well as all other minority youth were more likely than White youth to have their cases approved.

Examination of the other independent variables showed that scoring higher on the severity offense score increased the chances of having the case approved relative to being released/closed (column 1) or being diverted (column 3). Being male increased the odds of the referral being approved versus being released/closed or diverted and increased the odds of being diverted relative to closing the case (column 2).

Tables F4–F6 present the results of the three intake decision-making comparisons obtained by estimating separate models for each racial/ethnic group. The results presented in Tables F4–F6 show no potential interaction effects with race. For the released/closed vs. diverted decision (Table F4), having more prior referrals decreased the odds of being diverted for all three racial/ethnic groups. Older White and Black youth were more likely to have their cases diverted. For Black youth, having a higher needs score increased the odds of being diverted, while having

a higher risk score lowered the odds. Finally, having a school-related offense increased the odds of diversion for White youth.

For the released/closed vs. approved/petitioned decision (Table F5), having more charges and higher needs scores increased the odds of being approved for all racial/ethnic groups. Being older and having higher offense severity scores increased the odds of approval for White and Black youth, while having a school-related offense decreased the odds for these groups. Being male increased the odds of having the complaint approved for Black youth.

For the diversion vs. approved/petitioned comparison (Table F6), having more charges and higher needs scores again increased the odds of being approved for all racial/ethnic groups, while having a school-related offense decreased the odds of approval. Being older, having higher offense severity scores, and having higher risk scores increased the odds of approval for White and Black youth. Having more prior referrals increased the odds of being approved for Black and "other" minority youth. Finally, committing a person offense increased the likelihood of being approved for the "other" minority youth.

Adjudication. Table F7 details the logistic regression results for the determinants of adjudication decision-making (column 1), along with separate models for Whites (column 2), Blacks (column 3), and "other" minority youth (column 4).

There were no significant race effects for Black or other minority youth in terms of the adjudication outcome. Being older, charged with a drug offense and scoring higher on the needs assessment scale increased the odds of being adjudicated. Youth involved in property offenses and youth with more charges were less likely to be adjudicated.

The race-specific models showed no significant differences among the race/ethnicity groups. Committing a property crime decreased the odds of being adjudicated for all three

groups. Black youth who were older and had higher needs scores were more likely to be adjudicated.

Judicial Disposition. The logistic regression results for modeling judicial disposition are presented in Table F8. Due to the relatively small number of youth at this stage separate models for each race/ethnic group were not estimated. Interaction terms with each independent variable were calculated for Black youth (not shown here) and failed to yield evidence of statistically significant relationships with the disposition decision.

Table F8 shows no significant race/ethnic relationships with dispositional outcomes. Having a higher offense severity score, more charges, and a higher risk score all increased the odds of receiving an out-of-home placement relative to a community-based outcome at judicial disposition, while having a school-related offense decreased the odds of an out-of-home placement.

Summary

Race and ethnicity were found to be related to intake outcomes in Cumberland County. When the intake decision was operationalized as approved vs. not approved, Black youth were significantly more likely than White youth to have their cases approved. Black youth were significantly more likely to have their cases approved than closed or diverted relative to White youth. Other minority youth were more likely to have their cases approved than diverted.

Summary of Race/Ethnicity-Related Findings

Table 1 summarizes the findings presented in this chapter regarding race and ethnicity, as well as the statewide findings presented in the previous chapter. The table shows the various

Table 1. Summary of Statistically Significant Race/Ethnic Group Differences by Decision-Making Stage

JURISDICTION	DECISION COMPARISON					
	Not Approved v. Approved	Closed v. Diverted	Closed v. Approved	Diverted v. Approved	Not Adjudicated v. Adjudicated	Community v. Out-of-Home Placement
State	NA +	B, L, NA -	B, L -	B, L, NA+	B, L, NA, A/P -	B +
Wake	B, L +	L -	B +	B, L +	B, L -	
Mecklenburg	B +	L +	B, L +	B +	B -	
Guilford	B +	L +	B, L +	B +		
Forsyth		B +				
Cumberland	B +		B +	B, O +		

decision point comparisons across the column at the top; jurisdictions are shown in the rows. Each entry in the table consists of a letter indicating the racial/ethnic group ('B' for Blacks, 'L' for Latinos, and so on) and a plus or minus sign. A plus sign indicates that that racial/ethnic group was more likely to receive the second listed outcome, and a minus sign indicates the group was more likely to receive the first outcome. Looking at column 2, for example, the table shows that Latino youth in Wake County were more likely to have their cases closed than diverted, while Latino youth in Mecklenburg County were more likely to have their cases diverted than closed. Only statistically significant effects are shown in the table. A blank cell indicates no significant differences for any racial/ethnic groups for that county.

The table shows that minority youth were more likely to have their cases approved than not approved. This was true only for Native American youth at the state level. However, Black youth were more likely to have their cases approved in four of the five counties, and Latino youth were also more likely to have their cases approved in Wake County.

Of youth whose cases were approved, the next column shows those whose cases were closed vs. diverted. At the state level Black, Latino and Native American youth were more likely to have their cases closed than diverted, and this was also true for Latino youth in Wake County. However, in Mecklenburg and Guilford Counties, Latino youth were more likely to receive a diversion outcome vs. a closed outcome, and this was true of Black youth in Forsyth County as well.

At the state level, both Black and Latino youth were more likely to have their cases closed than approved. However, in four of the five counties, Black youth were more likely to have their cases approved, and this was true of Latino youth in Mecklenburg and Guilford Counties. Black youth were also more likely to have their cases approved vs. diverted in the

same four counties, and this was also true of Latino youth in Wake County and minority youth as a group in Cumberland County. Unlike in the closed vs. approved comparison, at the state level Black, Latino, and Native American youth were more likely to have their cases approved than diverted.

At the state level, all minority youth were less likely to be adjudicated delinquent, and this was also true of Black youth in Wake and Mecklenburg Counties and Latino youth in Wake County. At the state level, Black youth were more likely to receive out-of-home placements at disposition, but this was not the case in any of the five counties examined.

Table 1 also shows that for every comparison where statistically significant race/ethnicity effects were observed, these effects were in the same direction for all minority youth within the same jurisdiction. While there were many decision points that showed only one or two minority group differences, there was no instance where, in one jurisdiction, one minority group was more likely to receive one outcome while another minority group received the opposite outcome.

Chapter 6: Survey Results

In order to provide some context for the quantitative findings presented here, a survey was developed to assess views and opinions of stakeholders across North Carolina regarding DMC. The survey consisted of a relatively small number of closed and open-ended questions and was designed to be completed online in 15 minutes or less.

Content and Methods

The first set of survey questions asked about respondents' familiarity with the DMC issue, their assessment of the seriousness of the problem in their locality or region, and how they think their locality or region compares with others in the state with regard to DMC.

The next two survey questions proposed a set of system factors related to DMC and asked respondents to check the ones that they thought contributed to DMC in their locality or district. These factors, which were derived from previous studies of DMC, related to either system processing stages (arrest, diversion, detention) or to specific programming (such as receiving mental health services). A subsequent question asked whether respondents thought the factors they identified were related more to differences between minority and non-minority youth, bias, or a combination of the two. A follow-up open-ended question asked respondents to explain their answer.

The next question posed a series of initiatives or strategies that have been proposed in the literature to address DMC and asked respondents to rate how helpful they thought each would be in addressing DMC in their locality or district. An open-ended question invited respondents to provide the rationale for their ratings.

The final section of the survey asked a series of open-ended questions about initiatives or strategies that have affected, or could affect DMC, either positively or negatively, in the respondent's locality or district.

Ten groups were targeted to receive the survey: defense attorneys, district attorneys, Juvenile Crime Prevention Council (JCPC) Chairs, judges, juvenile court counselors, local program managers/service providers, police chiefs, school resource officers, sheriffs, and YDC/detention center directors. GCC/DPS staff provided email addresses for all groups except defense attorneys, judges, and local program managers/service providers. A link to a listserv was used to send the survey to judges. The North Carolina Office of the Juvenile Defender distributed the survey and reminders to defense attorneys via their listserv. Local program managers/service providers' email addresses were taken from an online "Active JCPC Program List" for FY18-19.

A letter of introduction from the GCC Executive Director was prepared and sent out prior to the survey link. Due to technical difficulties, not all groups received the letter prior to their receiving the email with the link to the survey form.[14]

The survey was developed using Google Forms. The survey and accompanying informed consent statement were reviewed and approved by an independent institutional review board prior to implementation. A link to the online survey was emailed to potential respondents on March 7, 2019. Follow-up reminders were emailed on March 22 and April 1. Copies of the survey, informed consent statement and introductory letter are provided in Appendix G.

[14] The introductory letter was included in the email with the link to the survey for some groups. An attempt was made to obtain a DPS email address to send the letter, survey link, and reminders in the belief that this would improve the response rate. Since this was not possible, all emails were sent from Cambiare Consulting's email address.

Response Rates and Respondents

Table 2 shows the number of surveys sent and completed for each job category.[15] The overall response rate for the survey was just under 12%, which is low. Response rates varied widely by job category, with juvenile court counselors having the highest response rate, followed by local program managers/service providers. Defense attorneys, school resource officers, and judges had very low response rates. In terms of numbers, only two YDC/detention center directors responded to the survey, and only eight district attorneys responded.

Table 2. Survey Sample Sizes and Response Rates by Job Title

Job Title	No. sent	No. returned	Response Rate
YDC/Detention Center Director	16	2	12.5%
Juvenile Court Counselor	31	15	48.4%
District Attorney	42	8	19.0%
JCPC Chair	94	16	17.0%
Sheriff	99	12	12.1%
Local Program Manager/Service Provider	217	54	24.9%
Judge	272	26	9.6%
Defense Attorney	276	17	6.2%
Police Chief	345	41	11.9%
School Resource Officer	456	29	6.4%
TOTAL	1,848	220	11.9%

A total of 216 of the 220 respondents reported either a county or district. Of these, 189 listed 65 counties, while an additional 27 respondents listed 17 districts. Table 3 shows the number of respondents for each county.[16] As the table shows, 28 counties had only a single respondent, and 9 additional counties had only two respondents.

[15] The "sent" numbers in the table include only those individuals for whom valid emails could be obtained. A number of emails were returned as invalid in the initial mailing and subsequent reminders. We tried to obtain correct email addresses via internet searches and phone calls. Individuals for whom we could not identify a correct email address and those who were no longer in their positions did not receive the survey.

[16] To preserve respondents' anonymity, districts reported are not listed in the table.

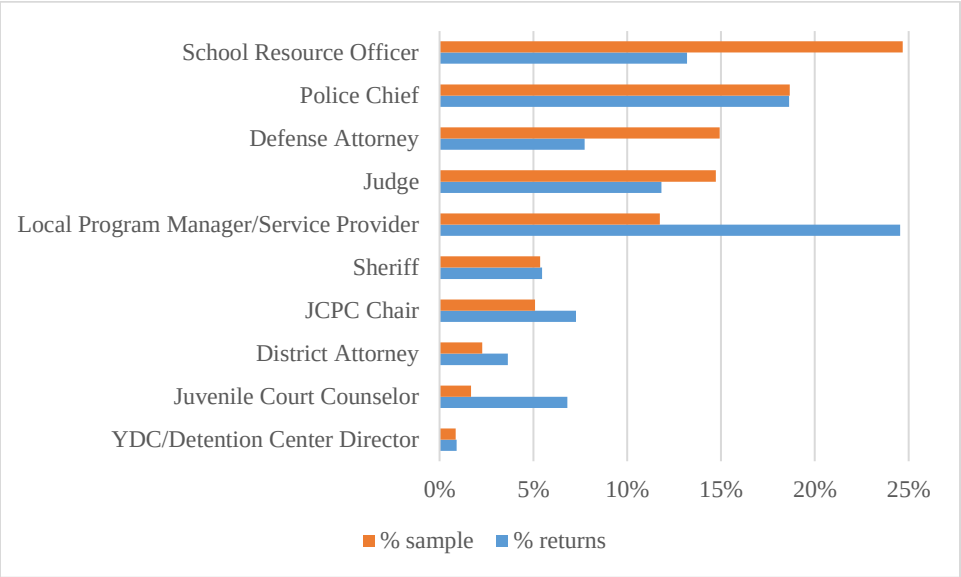
Table 3. Number of Respondents by County

No. of Respondents	Counties
14	Wake
13	Guilford
10	Buncombe
8	Forsyth
7	Mecklenburg
6	Durham
5	Craven, Orange, Robeson, Rowan
4	Cabarrus, Moore, New Hanover, Rutherford, Stanly
3	Alamance, Beaufort, Bladen, Brunswick, Cumberland, Halifax, Henderson, Johnson, Onslow, Randolph, Sampson, Surry, Union, Wayne, Watauga
2	Bertie, Burke, Chowan, Davidson, Franklin, Macon, Pender, Person, Wilson
1	Alexander, Anson, Avery, Camden, Carteret, Caswell, Cherokee, Cleveland, Columbus, Dare, Duplin, Granville, Greene, Haywood, Hertford, Hyde, Jackson, Lee, McDowell, Montgomery, Northampton, Pamlico, Pasquotank, Transylvania, Tyrrell, Warren, Washington, Yadkin

Figure 13 shows the comparison of who received the survey and who completed the survey by job title. The figure shows that school resource officers and defense attorneys were under-represented among survey respondents, while local program mangers/service providers, JCPC chairs, and juvenile court counselors were over-represented.

The low overall response rate for the survey, coupled with the percentages shown in Figure 12, suggest that results should be interpreted with caution. The respondent sample is too small to be representative of the key decision makers to whom the survey was sent, and the findings detailed below may have been different with a higher response rate. Any comparisons related to job categories should also be considered tentative, as there were very few respondents in some job categories. In short, the findings presented in this chapter should be considered suggestive and not definitive.

Figure 13. Comparison of Job Titles for Sample and Completed Surveys



Familiarity with DMC

Figure 14 shows respondents' ratings of their familiarity with the issue of DMC. About 29% of respondents indicated that they were "very familiar with" the issue of DMC, while only 5% indicated that they were "not at all familiar" with the issue. About 58% responded on the "familiar" end of the scale, while 24% responded on the "unfamiliar" end of the scale.

Figure 15 shows respondents' average level of familiarity with the issue of DMC by job category. Juvenile court counselors reported the highest levels of familiarity, followed by DAs, YDC and detention center directors, and defense attorneys. Police chiefs, sheriffs, and school resource officers reported the lowest levels of familiarity with the issue of DMC.

Figure 14. Respondents' Familiarity With DMC

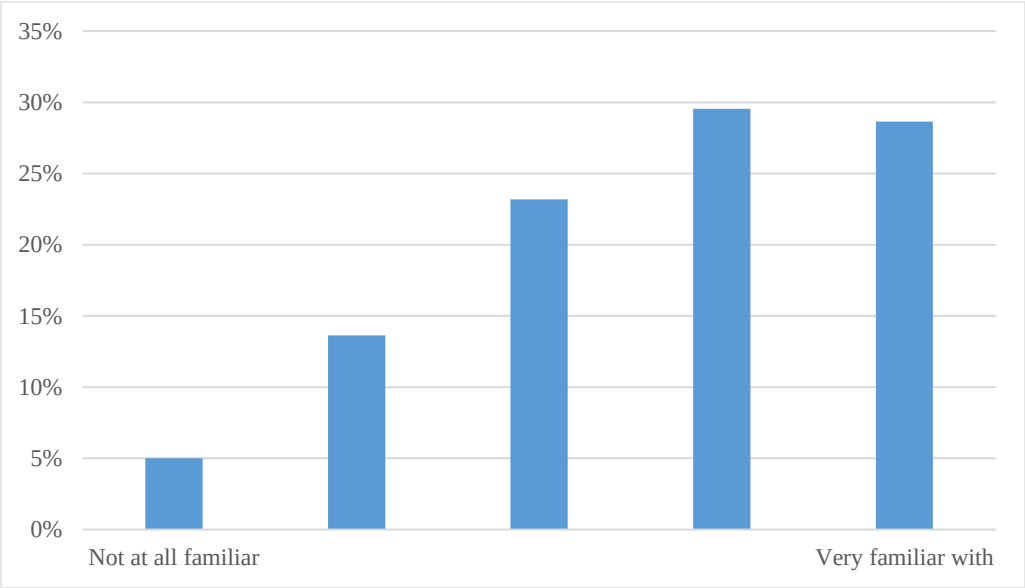
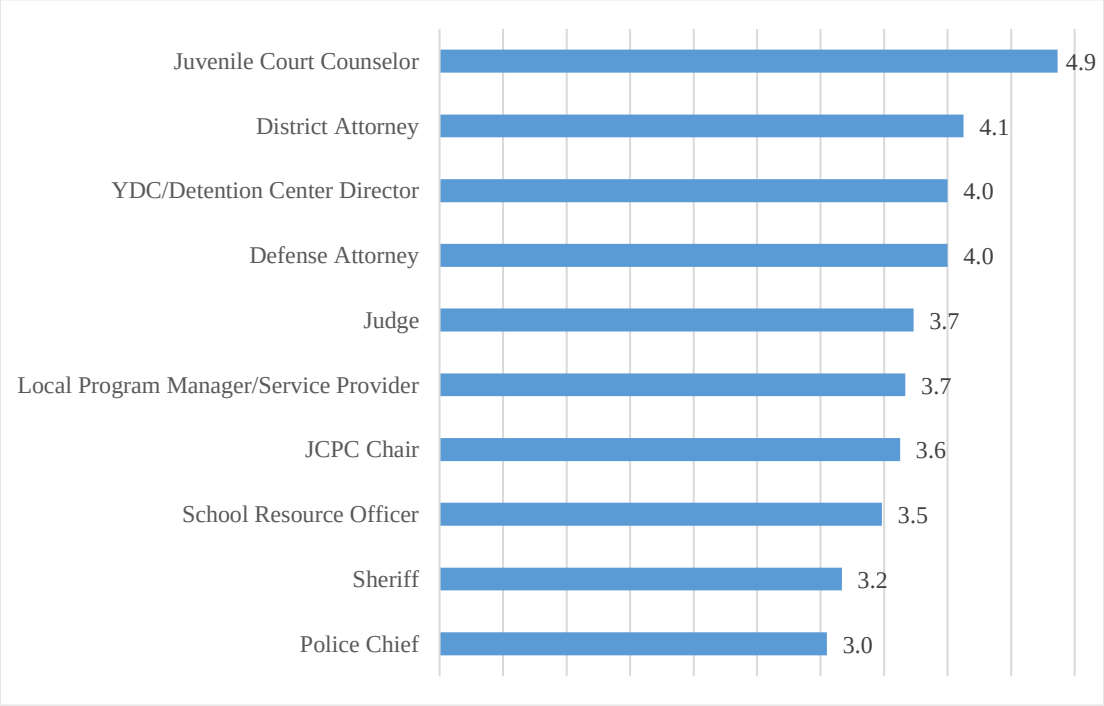


Figure 15. Familiarity with DMC by Job Category (Averages)



Seriousness of DMC Problem

Figure 16 shows responses to the question "how serious a problem is DMC in your county/district?" About 17% of respondents indicated that DMC was a "very serious problem" in

their county or district, while about 14% indicated that they it was “not a serious problem” in their locality. About 44% responded on the “serious problem” end of the scale, while 32% responded on the “not a serious problem” end of the scale.

Figure 16. Ratings of Seriousness of DMC Problem

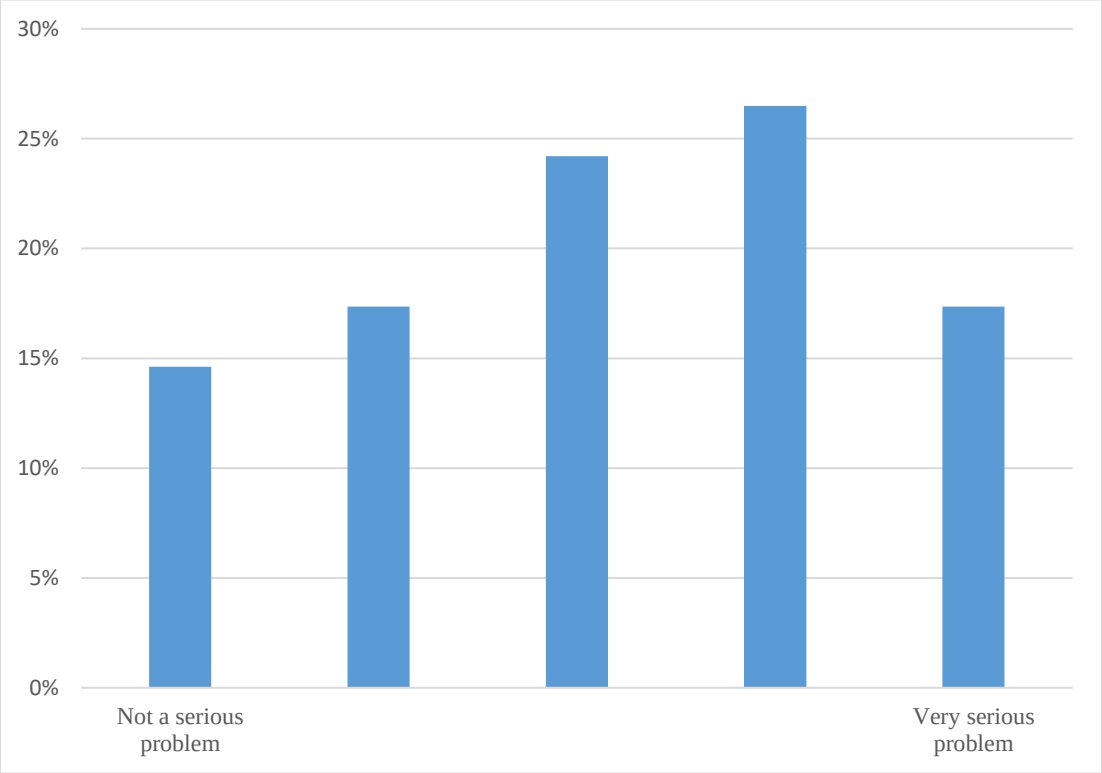


Figure 17 shows respondents’ ratings of the seriousness of the DMC problem in their localities/districts by job category. YDC/detention center directors, local program managers/service providers, defense attorneys and juvenile court counselors gave the highest ratings for the seriousness of the DMC problem. Police chiefs, school resource officers, and district attorneys were the groups that rated DMC as a less serious problem.

Figure 18 shows the average of respondents’ ratings of the seriousness of the DMC problem based on their ratings of their familiarity with the issue. Respondents who reported

being more familiar with the issue of DMC were more likely to rate it as a serious problem in their localities than those who reported being less familiar with the issue.

Figure 17. Ratings of Seriousness of DMC Problem by Job Category (Averages)

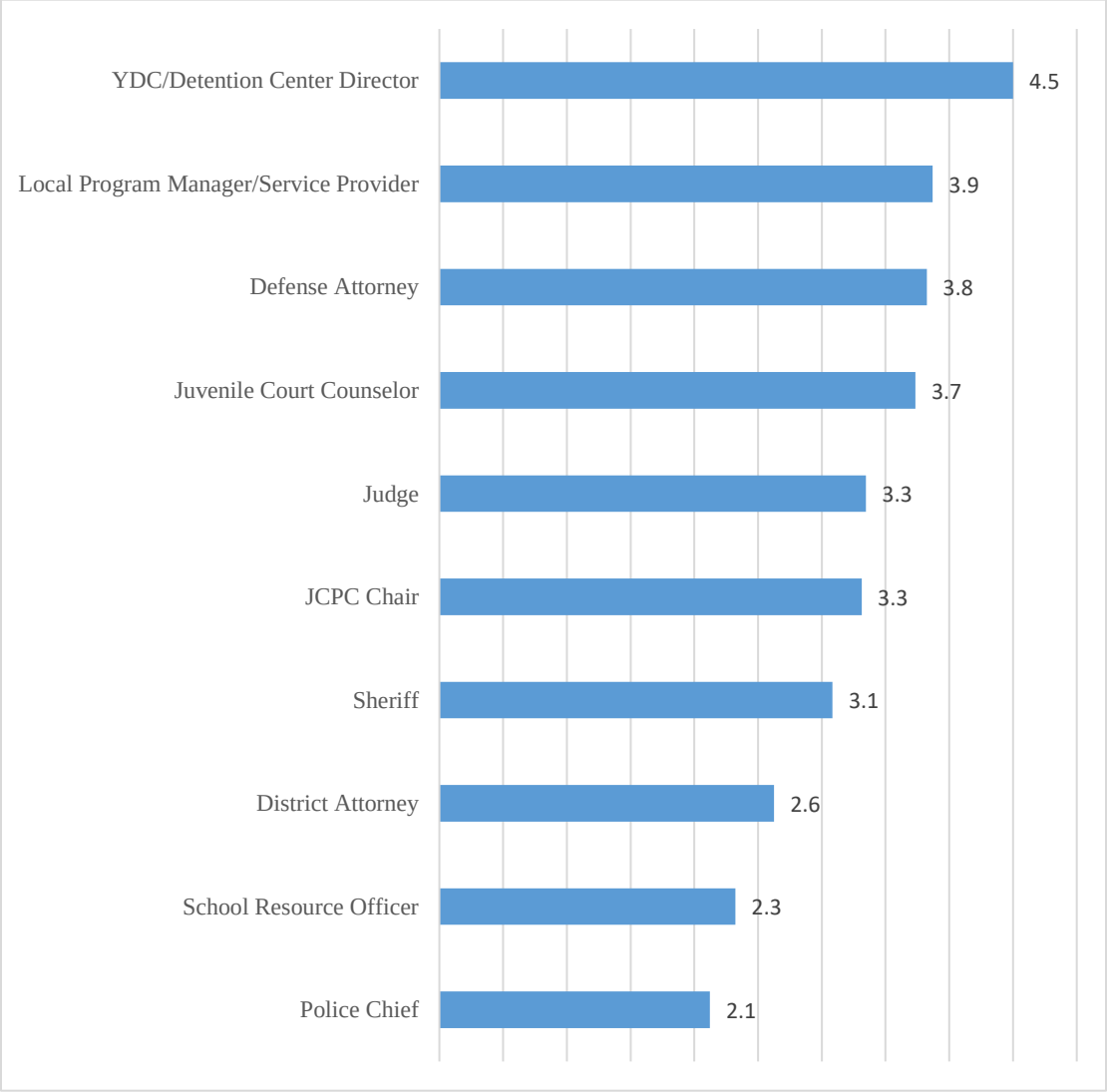


Figure 18. Average Ratings of Seriousness of
DMC Problem by Familiarity with DMC

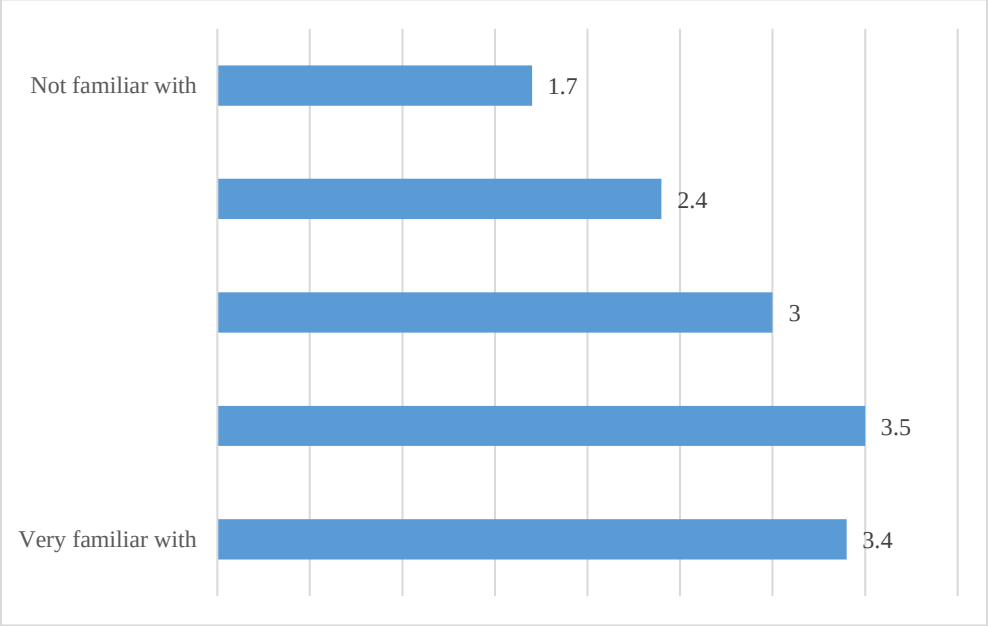
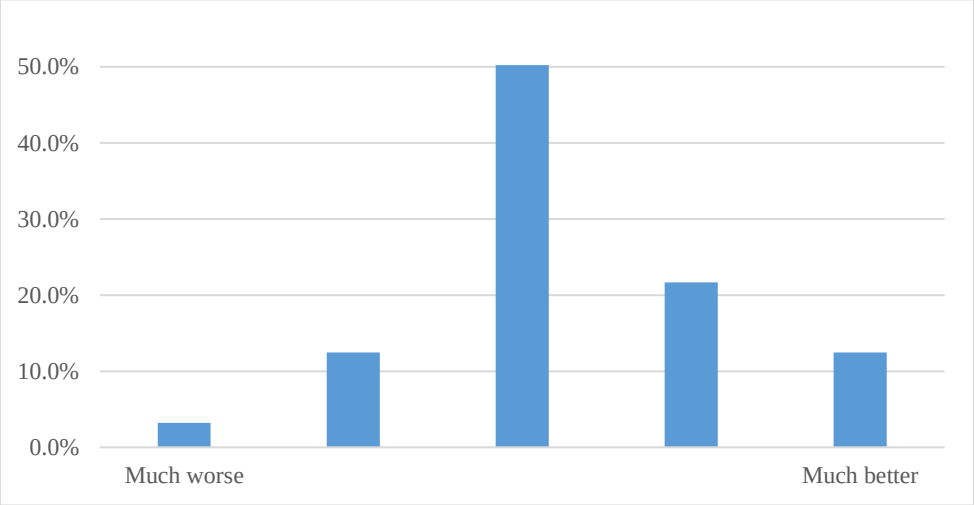


Figure 19 shows responses to the question "with regard to DMC, how would you say your locality/region compares with others in North Carolina?" As might be expected, half of respondents thought their jurisdiction was about the same as others in North Carolina. About 34% thought DMC their jurisdiction was better than in the rest of the state, while about 16% thought their jurisdiction was worse with regard to DMC.

Figure 19. Respondents' Ratings of DMC
in Their Locality/Region Compared with Others

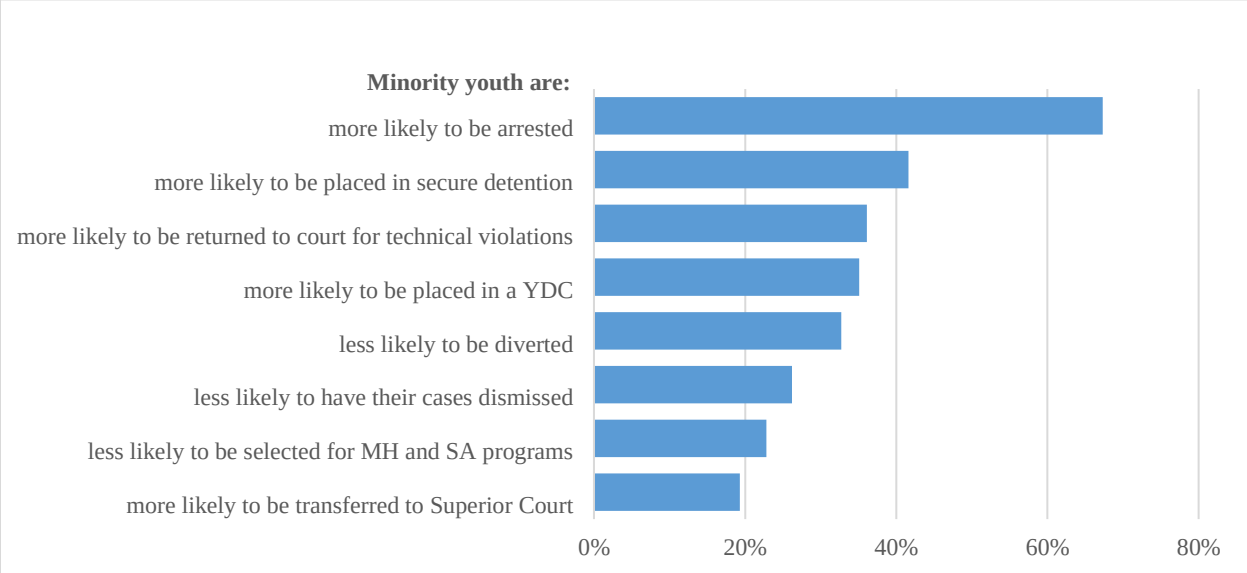


System Factors Contributing to DMC

We asked respondents to indicate which system factors they believe contribute to DMC in their localities/districts. Eight alternatives were offered, and respondents could choose as many as they thought applied. The responses to this question are shown in Figure 20. Only one factor, the belief that minority youth are more likely to be arrested, was endorsed by more than half (67%) of respondents. About 42% thought that minority youth were more likely to be placed in secure detention, and around one-third thought minority youth were more likely to be returned for technical violations, more likely to be placed in a YDC, and less likely to be diverted. Around 19% thought that minority youth were more likely to be transferred and around 23% thought that they were less likely to be selected for participation in mental health and substance abuse programs.

As a follow-up, respondents were asked whether the disproportionality associated with the system factors they identified in the previous question was mainly due to: (a) differences between minority and non-minority youth; (b) bias; or (c) a combination of the two. Of the 159

Figure 20. Respondents' Ratings of
System Factors that Contribute to DMC in Their Locality/Region



respondents who selected one of these choices, 21% selected differences, 22% selected biases, and the remaining 57% selected a combination of the two.

A total of 34 respondents checked the other category and filled in a response. Of these, the most common response, mentioned by eight individuals, was that DMC is not a problem in the respondent's locality. Eight respondents mentioned socioeconomic factors/poverty. Four respondents mentioned single parent households or lack of parental guidance. Three respondents mentioned the justice system as a whole or noted that a variety of factors were responsible. The remaining respondents offered various other explanations for DMC in their jurisdictions.

A follow-up question asked respondents to explain why they choose their answer to the previous question. A total of 95 individuals responded to this question with an explanation of the factors they thought were important in influencing DMC. Table 4 summarizes the responses to this question. Factors related to socio-economic status (more minority youth living in poverty)

were named by 23 of the respondents: seven who thought DMC was related to differences between minority and non-minority youth, five who thought it was related to bias, six who thought it was related to both, and five who provided some other answer. Respondents identified some of the ways that this factor adversely affects DMC/minority youths: cases are less likely to be diverted; lower socio-economic status youth don't have access to resources or don't know how to use resources; criminal conduct is common in lower socio-economic neighborhoods; fewer job opportunities; and greater childhood trauma.

Table 4. Explanations for Response of "Bias" vs. "Differences Between Minority and Non-Minority Youth"

General Area	**Types of Explanations Offered**
Socio-economic status	Fewer minority cases diverted; lack of access to resources
Race	Implicit bias; racial stereotypes
Family	Single parent families; less support and supervision
Schools	Higher referral rates for minority youth
Law Enforcement	Implicit bias; greater presence in minority communities

Twenty-one respondents mentioned race specifically in their responses: one who thought DMC was related to differences between minority and non-minority youth, seven who thought it was related to bias, seven who thought it was related to both, and six who provided some other answer. Of these 21 respondents, five thought that race makes no difference in how juveniles are handled in their jurisdictions. Seventeen respondents mentioned racial bias in some form as a contributing factor to DMC. This included: implicit bias against minorities; stereotyping of minority youth; underrepresentation of minorities in staff positions in the juvenile justice system; and biases in the juvenile justice system that mirror those that exist in society at large.

Sixteen respondents mentioned family-related issues: five who thought DMC was related to differences between minority and non-minority youth, none who thought it was related to bias, four who thought it was related to both, and seven who provided some other answer. These

respondents expressed the view that minority youth were more likely to come from single parent families, come from families that provided less support and supervision, and have a parent/parents who were less involved in the youth's life.

Fourteen respondents mentioned schools in their responses: none who thought DMC was related to differences between minority and non-minority youth, four who thought it was related to bias, seven who thought it was related to both, and three who provided some other answer. Most respondents referenced higher referral rates for minority youth from schools. Others mentioned bias on the part of school staff and that minorities were more likely to be suspended than non-minority youth.

Eleven respondents mentioned law enforcement in their responses: none who thought DMC was related to differences between minority and non-minority youth, five who thought it was related to bias, five who thought it was related to both, and one who provided some other answer. These respondents most frequently mentioned implicit bias on the part of law enforcement officers as contributing to DMC. A few respondents also suggested that law enforcement had a greater presence in minority communities, and a few noted the dearth of minority law enforcement officers.

Helpfulness of DMC Reduction Strategies

In the next series of questions respondents were presented with several possible strategies that have been identified in previous studies as having the potential to reduce DMC. Respondents were asked to rate the helpfulness of each of these in reducing DMC in their jurisdictions. Responses were provided on a 5-point scale ranging from "not helpful" to "very helpful;" the higher the rating the more helpful respondents believed the strategy would be.

Figure 21 shows the average rating given by respondents to each strategy. Respondents thought that the provision of more mental health and substance abuse treatment services for minority youth would be the most helpful approach, followed by increased emphasis on prevention efforts and providing services to families of system-involved youth. Strategies that received the lowest ratings included reducing referrals from school resource officers, decriminalizing offenses specific to youth (i.e., status offenses), and providing more juveniles with legal representation.

Figure 21. Respondents' Ratings
of Helpfulness of DMC Reduction Strategies (Averages)

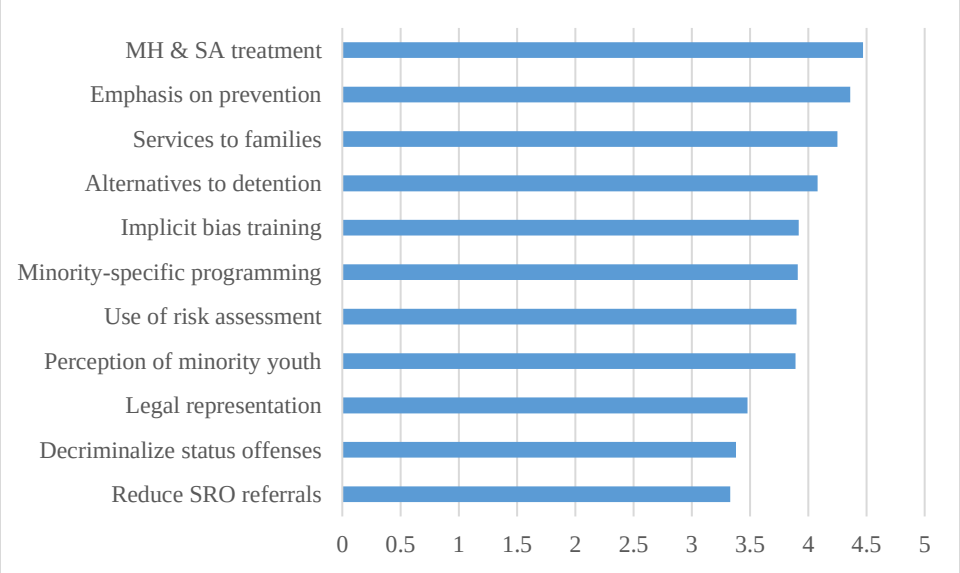
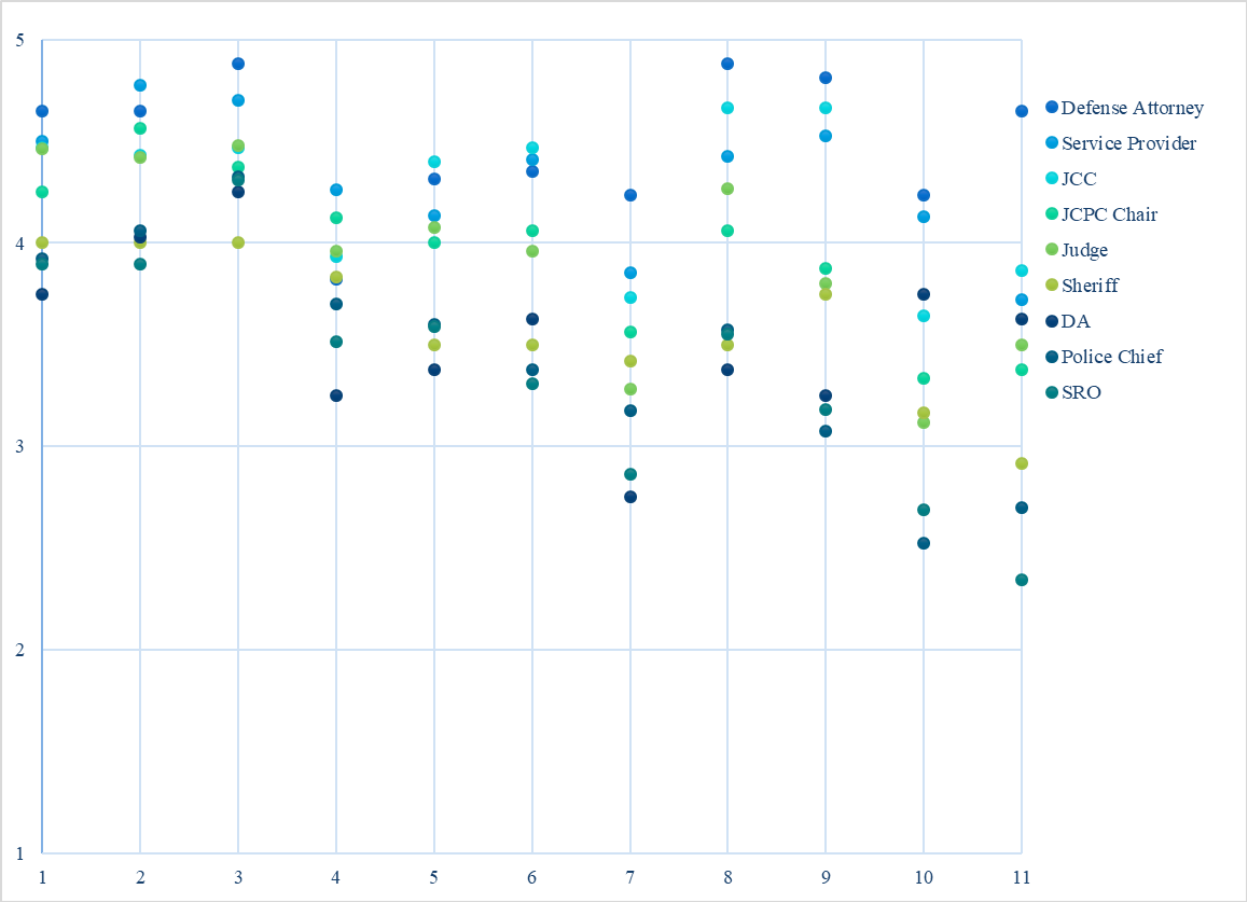


Figure 22 shows the average helpfulness ratings for each strategy by job title (excluding the two YDC/detention center directors). Each dot represents one of the job categories of respondents,[17] and each number on the horizontal axis represents a DMC reduction strategy, as indicated below the figure. The respondent job categories are ordered from highest to lowest

[17] Response averages that are the same or very close to one another will not be discernable in the figure.

rating averaged across all strategies. Defense attorneys gave the strategies the highest helpfulness ratings, followed by local service providers and juvenile court counselors. School resource officers, police chiefs, district attorneys and sheriffs gave the strategies the lowest ratings.

Figure 22. Average Ratings of Helpfulness of DMC Reduction Strategies by Job Title



1=Services to families; 2=Emphasis on prevention; 3=MH&SA treatment; 4=Use of risk assessment; 5=minority-specific programming; 6=implicit bias training; 7=legal representation; 8=alternatives to detention; 9=perception of minority youth; 10=decriminalize status offenses; 11=reduce SRO referrals

The strategies are depicted in Figure 22 from left to right from greatest agreement to least agreement, as can be seen by the spread of the dots representing each respondent job category. Respondents generally agreed on the three highest rated strategies: provision of services to families, an increased emphasis on prevention, and increased mental health and substance abuse treatment. The least agreement was seen on the two lowest rated strategies: reducing the number

of referrals from SROs and decriminalizing status offenses. Not surprisingly, SROs did not find the strategy of reducing SRO referrals to be helpful, while defense attorneys rated this strategy as quite helpful. Decriminalizing status offenses received high ratings from defense attorneys and local service providers but received low ratings from police chiefs and SROs.

The groupings of the points in Figure 21 indicate how similar the groups' ratings of helpfulness were. Police chiefs and SROs often gave similar ratings, as was the case with implicit bias training, decriminalizing status offenses, and reducing SRO referrals. In some cases, these two groups were joined by sheriffs (decriminalizing status offenses, reducing SRO referrals) and district attorneys (increasing alternatives to detention, changing perceptions of dangerousness of minority youth). In similar fashion, defense attorneys and service providers often provided similar ratings, as was the case with an increased emphasis on prevention, increased mental health and substance abuse treatment, providing legal counsel for juveniles, and decriminalizing status offenses. These two groups were sometimes joined by juvenile court counselors, as was the case with providing implicit bias training, increasing alternatives to detention, and changing perceptions of the dangerousness of minority youth.

Open-Ended Questions

Respondents were asked several open-ended questions regarding DMC reduction strategies. A total of 141 individuals provided a relevant response to the question "are there any policies, programs or initiatives in your county/district that have *reduced* DMC?" Of the 141 responses, 12 responded "yes" with no further explanation, 50 responded "no" or "not that I'm aware of" and 18 indicated that they did not know. The remaining 61 respondents named programs or initiatives in a variety of areas, which are summarized in Table 5.

Table 5. Local/District Initiatives that Have Been Implemented to Reduce DMC

General Area	**Types of Initiatives Mentioned**
Diversion	Teen court; youth/misdemeanor diversion; mediation
School	School-Justice partnerships; alternatives to suspensions
Training	SRO training
Race-specific	Racial equity; cultural diversity; fair and impartial policing

Diversion programs were mentioned most often, with 18 respondents naming such programs. The most common diversion initiative mentioned was the implementation of Teen Courts to divert school-based incidents. Other respondents mentioned youth diversion programs in general and misdemeanor diversion programs in particular.

Thirteen respondents mentioned school-related initiatives. The most common of these initiatives was School-Justice partnerships. Respondents also mentioned developing alternatives to school suspensions.

Training initiatives of various kinds were mentioned by nine respondents. These included implicit bias training for SROs as well as training in several other areas, including crisis intervention, cultural diversity, restorative justice, and parenting classes.

Eight respondents identified initiatives that specifically address race. These included racial equity/dismantling racism workshops, cultural diversity training, and fair and impartial policing classes for law enforcement. Other specific programs mentioned included Boys and Girls Clubs, Kids at Work and YouthBuild.

A total of 111 individuals provided a relevant response to the question “are there any policies, programs or initiatives in your county/district that have *increased* DMC?” Of the 111 responses, 5 responded “yes” with no further explanation, 69 responded “no” or “not that I’m aware of” and 19 indicated that they did not know. The most commonly cited issue, mentioned by five of the remaining 18 respondents, related to the increased number of SROs in schools or

the increase in referrals from SROs. Four additional respondents mentioned zero tolerance policies as factors that have increased DMC. The remaining respondents mentioned a variety of other factors, including school suspensions and reductions in mental health and substance abuse services.

A total of 103 individuals provided a relevant response to the question "what policies, programs, or initiatives could be implemented in your county/district to reduce DMC?" The responses to this question are summarized in Table 6.

Table 6. Local/District Initiatives that Could Be Implemented to Reduce DMC

General Area	**Types of Initiatives Mentioned**
School	Reducing school referrals; cultural diversity training
Training	Cultural diversity/implicit bias
Diversion	Teen court
Community	Greater community involvement; community-based prevention programs
Prevention	General; school-based

School-related programs were mentioned by 23 respondents. The most common responses included reducing the number of referrals from schools and implicit bias/cultural diversity training for SROs and other school staff. Other school-related initiatives mentioned included school-justice partnerships, vocational training, and after-school activities.

Training initiatives of various kinds were mentioned by 23 respondents. Sixteen respondents mentioned training in cultural diversity/competency or implicit bias. Several respondents mentioned training for all key stakeholders/decision-makers, while several others specifically mentioned training for SROs and school personnel. Several people also mentioned training for personnel in all systems that deal with youth including, for example, mental health.

Twelve respondents mentioned diversion programs. The most common diversion initiative mentioned was the implementation of Teen Courts to divert school-based incidents.

Other respondents mentioned youth diversion programs in general and misdemeanor and school-based diversion programs in particular.

Eleven respondents mentioned community-based initiatives. Some of these were general responses, such as increasing community involvement with youth or educating the community regarding DMC. Community prevention programs were suggested by several respondents.

Prevention programming was mentioned by eight respondents. Most mentioned prevention in general, although school-based and truancy prevention programs were mentioned by several respondents.

Sample Written Responses

As noted above, there were several questions that provided respondents with the opportunity to write comments and explanations for their answers, and other questions that required written responses. Although these responses have been summarized in the analyses presented above, we thought it would be useful to provide examples of the kinds of comments that were made by respondents.[18]

When considered as a whole, regardless of question, the written responses can be divided into two types: explanations for DMC ("causes") and possible responses to the issue ("solutions"). Examples of comments received in these two broad categories are provided below.

[18] A total of 164 respondents provided written responses or explanations for one or more survey questions. Responses were edited for clarity, to fix spelling and grammatical errors, and to maintain respondents' anonymity.

Explanations

Two general types of explanations emerged from the open-ended answers provided by respondents. The first set of factors relate to life circumstances, while the second set focus on system factors.[19]

Socioeconomic factors, such as poverty, were named by several respondents as explanations for DMC. Typical of these responses were these comments:

> *Minority youth are more likely living in poverty and to have experienced trauma as a child both of which carry over into involvement in criminal activity.* [Police Chief]

> *Minority youth are less likely to be diverted because they often suffer from poverty issues that prevent the youth from completing the requirements-lack of transportation, single parent can't take off work for meetings, etc.* [Judge]

Family/parenting issues were mentioned by several respondents. Examples of these responses are shown below.

> *I have had contact with juveniles of all races. The color doesn't matter, upbringing does. The ones that reoffend often come from single parent, less involved parent homes.* [School Resource Officer]

> *Minority youth are treated no differently than any other group. The problem is the parents or parent is not engaged with the youth. They re-offend due to lack of structure and lack of parental supervision.* [Police Chief]

> *If there is any disproportionality, it is most likely to occur with minority youth being most likely to be returned to court for technical violations of their probation. In my opinion from my observations, minority juveniles are more likely not to have the proper support system (including proper parental supervision) which is conducive to them adhering to the guidelines/restrictions put in place by probation.* [School Resource Officer]

> *A significant percentage of minority youth live in homes with others who have had encounters with the criminal justice system. Additionally, many of these children have*

[19] The survey questions provided several opportunities for respondents to address systemic issues, but purposely avoided asking about life circumstances or societal issues. Responses in this latter category were offered spontaneously to various survey questions.

special or mental health needs which are not being addressed professionally. These factors distinguish them from their peers. When these factors are not acknowledged as a contributor to bad conduct, it represents an inherent bias in the system against them. [Defense Attorney]

Several respondents indicated that DMC is a reflection of similar factors that are present in the justice system in general or in society at large. Others noted that a variety of factors were responsible for DMC.

[DMC] merely reflects the same biases that exist in school and in society, socioeconomic/poverty issues, that are reflected in our criminal justice system. [Judge]

Research suggests no single factor sufficiently explains disproportionate minority contact on its own, but there are a number of contributing factors that cumulatively result in the overrepresentation we see in the juvenile justice system. [JCPC Chair]

Among systemic factors, implicit bias was often mentioned as an explanation for DMC. The comments below are typical of those that mentioned this factor.

The issue of implicit bias is a serious one and it needs serious discussions, regardless of how uncomfortable they make people. [Local Service Provider]

I don't personally believe that youth violate the law at substantially different rates based on race. They are certainly placed in different socio-economic positions based on race and that may contribute to outcomes. But at the end of the day, implicit bias is at the base of all decisions made by individuals in the system. If you want to fix the system, we need to be working on implicit bias. [Police Chief]

I think there is an unconscious bias among both minority and majority decision makers. I also think Undoing Racism® training would be helpful in eliminating bias. [Local Service Provider]

Schools were also mentioned as an explanatory factor related to DMC. Typical comments included those below.

An alarming number of referrals come from the school resource officers. There are school matters that used to be handled by school personnel that are now being handled by school resource officers. [Local Service Provider]

[A] large percentage of complaints are generated in the District school system. SRO decisions to seek criminal charges are affected by lack of cultural diversity training and unconscious bias when the choice of charging is made between minority and non-minority youth. [Juvenile Court Counselor]

Judges need to stop putting a requirement for the juveniles to pass their coursework. By the time most of these kids come into the system, they are reading and/or writing on the 3rd grade level. [Defense Attorney]

This comment by an SRO offers a different perspective on this issue:

Many perceive that school resource officers charge minority youths disproportionately because of a bias, this could not be further from the truth. Mental health and other services are available to those who can pay for it. Minority children have no resources to get those services. If a child is in need of services and that child is charged, the court can order services for the child and they are provided at no cost to the families. This may seem a harsh way to provide for the needs of the child. However, not only is the child provided services, the parent(s) are ordered to engage in the treatment plans for their child.

Law enforcement was listed by several respondents as a factor that might help to explain DMC. Implicit bias, which was often mentioned in relation to law enforcement, has already been discussed. Other issues related to law enforcement are revealed in the comments below.

Law enforcement is everywhere in the neighborhoods where minorities reside as those neighborhoods have been targeted as high crime areas. In rural areas law enforcement presence is not as intense as in the inner city. There are incidents that occur in the rural areas that people do not report as people seem to know their neighbors and instead of calling Law Enforcement, they tend to call the parents of the juvenile. [Juvenile Court Counselor]

More youth of color are arrested or charged because their neighborhoods are more heavily policed; it's a vicious cycle–is it a "high crime neighborhood" in need of more police presence, or does the increased police presence, which in turn finds more crime, bootstrap it in to a "high crime neighborhood." [Judge]

Several respondents denied that DMC was a problem in their locality or district. Examples of these responses are shown below.

> *I do not see our county having this problem.* [School Resource Officer]

> *There is no issue of DMC in my county. All juvenile contacts are treated the same based on the severity of the crime and the person's previous criminal history.* [Sheriff]

> *I do not think either plays a part with our youth. I think youths are treated very fairly in our area regardless of race, sex or origin.* [Police Chief]

Several respondents also rejected the idea of DMC as being related to systemic issues, pointing instead to individual factors and differences. Examples of these responses are shown below.

> *Every person chooses to make good choices or bad choices.* [School Resource Officer]

> *Ethnic or racial backgrounds do not influence the decision to do our job. We are here to enforce the law. If they break the law, they are dealt with accordingly. We are not here to make excuses for their decision to break the law.* [School Resource Officer]

> *Everyone is looking for a way to say there is disproportionality caused by law enforcement when the only disproportionality is that the minority youth are the ones committing more crime.* [School Resource Officer]

Solutions

Implementing diversion programs and initiatives was one of the more commonly suggested strategies for decreasing DMC. Examples of respondents' comments related to diversion are shown below.

> *[Increase] funding for teen court or other diversionary programs.* [Juvenile Court Counselor]

Diverting youth that have undisciplined (status) offenses from the court system; diverting youth that have low level offenses in school from the court system. [Local Service Provider]

Felony drug offenses are not violent but are "non-divertible" per NC statute. Often drug sales are for economic gain and institutional racism has created a poverty gap that disproportionately affects minority youth. Being non-divertible eliminates the discretion to divert a case from court for minority youth. [Juvenile Court Counselor]

Prevention programming was also named as a strategy for reducing DMC. Examples of comments related to prevention include those shown below.

[We need more] gang prevention programs. [Judge]

We have tried to initiate a prevention program addressing truancy in elementary schools where the focus is on the parents and breaking that cycle. [Juvenile Court Counselor]

We need more preventive programs in the community. Instead of waiting until a juvenile gets expelled from school or commits an infraction, we need field staff to work with schools to identify juveniles and families who may be at risk and needing support systems. [Juvenile Court Counselor]

Prevention needs to start at the beginning. meaning the home level with proper parenting; raising children with a full sense of responsibility and accountability, along with a healthy respect for themselves and the idea of authority. Anything else is "just dealing with the symptom, and not the cause." [School Resource Officer]

A number of respondents mentioned the need for more training for a variety of different workers who deal with youth. Examples of comments related to training are provided below.

We need a more systematic approach to training for all systems which interact with young people. [Local Service Provider]

[We need] a cultural competency training requirement for all individuals involved in the juvenile justice system. [Juvenile Court Counselor]

Cultural sensitivity training needs to be comprehensive, on-going and have meaningful benchmarks, not a two-hour training, conducted annually so a box can be checked. [JCPC Chair]

Increase training for police with other options [instead of charging], increase training for school personnel of other options, provide specific teaching family model skill training for youth and an understanding framework of how youth learn for teachers and police officers. [Local Service Provider]

More direct exposure to mental health training designed to identify and address mental health issues within this population demographic. [Police Chief]

Require trainings on bias and racism, Hispanic history, Black history and civics and law training in schools for children to graduate in NC, don't wait until high school. History training in elementary, racism and bias training in middle and high school. [Judge]

Promotion of individual responsibility education. [District Attorney]

System wide/community trainings on the current research on DMC/RED would be helpful. [JCPC Chair]

I believe an untapped resource is our community colleges; all counties have one. If we had a juvenile justice/community college partnership that could provide training or education to court involved youth, as well as provide an example of kids who look like them engaged in education, possibly we could change some lives. So many kids have no idea what their own skills and talents are and have never been exposed to potential trade and career paths. [Judge]

Respondents provided a variety of other suggestions for reducing DMC in their responses to the various open-ended questions. A sampling of these responses is provided below.

Blind assessments for youth entering the system to decrease bias. [Local Service Provider]

Providing juvenile court services such as intake and screenings to youth and families outside regular business hours. [Judge]

Allowing court counselors to perform intake services in the youth's home rather than the youth & family having to arrange transportation to the courthouse. [Judge]

It might be helpful to encourage staff to learn the language. We also need better minority representation within staff who are offering intervention services. [Juvenile Court Counselor]

Access to a multi-purpose group home or residential program to reduce the number of youths placed in detention pending placement or adjudication. [Juvenile Court Counselor]

Schools should develop a "standard" questioning protocol before making decisions. They should stop giving lip-service to stopping bullying-- meanwhile ignoring it, until an offense is committed. [Local Service Provider]

I think if juvenile services monitored juvenile offenders more aggressively and offered family intervention programs that some of the issues we as law enforcement deal with would hopefully diminish. I feel also that officers have little time to interact with today's youth due to call volume. Reinvent police athletic associations within our communities to offer other options to today's troubled youth. Get kids outside and away from social media negativity. [Police Chief]

Local JCPCs need more funding. Our funding model has not changed in a decade. The new law for School-Justice partnerships is not detailed enough and does not go far enough to force communication and collaboration for the included groups. [Police Chief]

To reduce the number of juveniles being sent to YDC, we may need to look at changing the juvenile code. Three disposition levels are not enough when judges have the discretion to place juveniles on 1 or 2 and they automatically always put every juvenile at Level 2. These children are only a small step from Level 3. [Defense Attorney]

Finally, a few respondents took issue with the survey itself and/or the tone of specific questions. These comments are shown below.

This survey seems to be based on the premise that minority juveniles are treated unfairly because they are of a particular minority. That notion in and of itself is offensive. [Judge]

Some of your questions assume too much, you seem to be looking for the answers you want to hear, truly is an issue you are researching, but your survey questions are poorly worded with little alternate answers. [Police Chief]

The preconceived notion that this problem exists everywhere in all communities makes this survey invalid on its face. The community contact and enforcement data in our area proves there is not a problem here. Most contacted, charged, arrested and incarcerated in my area are middle age White males. Before assuming there is a problem in every

community, take a realistic look at the actual data of that community and be data driven, not emotionally driven. [Police Chief]

Summary

The survey results presented here show a variety of views regarding the issue of DMC in North Carolina. Most (but not a majority of) respondents thought that DMC was a serious problem in their localities. Respondents who were more familiar with the issue of DMC were more likely to view it as a serious problem in their jurisdiction.

Regarding system decision points where DMC might be apparent, respondents identified arrest and detention as the two points at which DMC was most likely to occur (although only arrest was identified by a majority, about 6 of every 10, of respondents). At the other end, only about 1 in 5 respondents believed that minority youth were more likely to be transferred and less likely to be selected for participation in substance abuse and treatment programs. Although the survey focused on systemic issues, the open-ended questions produced explanations for DMC such as socio-economic, family and parenting issues.

When asked about the helpfulness of potential DMC reduction strategies, respondents tended to endorse treatment, prevention and service delivery options. They were less enthusiastic about legal and law enforcement strategies, such as reducing SRO referrals and decriminalizing status offenses. When asked about the kinds of strategies that they believe have worked to reduce DMC in their own jurisdictions, respondents most often mentioned diversion programs, such as teen courts; school-related initiatives, such as school-justice partnerships; and training initiatives, such as implicit bias and cultural diversity training. Prevention programs were also mentioned as a possible strategy for reducing DMC.

On both close- and open-ended survey questions, responses tended to be similar based on the respondents' job categories. Specifically, law enforcement officers, including SROs, police

chiefs, and sheriffs, tended to express similar viewpoints regarding the seriousness of DMC (viewing it as less serious than other groups), and a lack of enthusiasm for law enforcement-related strategies to reducing DMC, such as reducing SRO referrals and decriminalizing status offenses. Law enforcement officers were more likely to express the belief that DMC was not a problem in their jurisdictions, and that the problem was more related to differences between minority and non-minority youth, such as parental involvement and socio-economic issues. Defense attorneys and local service providers were more likely to rate DMC as a more serious problem, to attribute it to bias, and to endorse DMC reduction strategies such as reducing SRO referrals and decriminalizing status offenses.

The results summarized above should be interpreted within the context of the cautions and limitations related to the survey response rate and non-representativeness issues discussed at the outset of this chapter.

Chapter 7: Discussion

This chapter summarizes and provides some perspective on the findings presented in the report and what they might mean for North Carolina's future efforts to reduce DMC. We consider areas of commonality among the findings and compare the results to the 2013 assessment study of DMC in the state.

Disproportionality and Disparity at Decision Stages

Both the RRI analyses and the multivariate results show the existence of disproportionality and the existence of race/ethnic effects on case outcomes in NC's juvenile justice system. At the state level and, for the most part, the five counties examined, both sets of analyses show greater disproportionality and race/ethnic disparities in the earlier stages of the system (intake, diversion) than in the later stages of the system (adjudication, disposition). This finding is consistent with recent studies of DMC in other states and localities (Bishop & Leiber, 2012; Gonzales et al., 2018; Leiber & Rodriguez, 2011).

Keeping in mind that the overall number of youths confined, including minority youths, is relatively low, our findings show that disproportionality is evident at confinement at the state level. Minority youth make up a larger proportion of youth confined than they do at any other stage in the system (see also Gonzales et al., 2018). Furthermore, the results of the multivariate analyses show that at the state level, Black youths are more likely than White youths to receive a disposition involving confinement. Again, this finding is consistent with some previous studies of DMC (Leiber, 2002; Leiber & Rodriguez, 2011).

The disproportionality at the last stage of the system (except for transfer, which was not examined here) reflects in part the impacts of decisions made at earlier stages. The largest contribution to the disproportionality in NC's juvenile justice system comes at the beginning, in

complaints received. The vast majority of counties in the state had RRIs of greater than 1 at this stage, and some counties had enormously high RRIs. Again, the disproportionality was more pronounced for Black youth than for other racial/ethnic minorities. Once again, this finding is consistent with previous DMC studies, which show the highest RRIs at referral (Bishop & Leiber, 2012; Gonzales et al., 2018). As noted in Chapter 3, NC's RRI for complaints received was higher than the national average for the three-year time period from 2014-2016.

One explanation for this finding is that law enforcement officers (and others) are disproportionately filing complaints against Black and other minority youth. The survey respondents endorsed this explanation for DMC more than any other offered: it was the only response that was supported by a majority of the respondents. The survey respondents also offered a variety of suggestions for why this might be the case, including implicit bias, over-referral on the part of SROs, and over-policing of neighborhoods. As noted in the literature review, all of these have been suggested as possible factors related to DMC.

We would note that the question of *why* disproportionality is higher for complaints received than for other stages of decision-making is different from the question of *whether* disproportionality is higher. As noted in Chapter 3, the issue of whether and to what degree DMC exists at this stage depends in part on what we are using as the denominator for the RRI calculation. Most often, RRI calculations are based on the proportion of minority youth in the population, rather than the more accurate proportion of all youth who commit offenses who are minorities.

Most scholars acknowledge that for both adults and juveniles, number of arrests (or complaints received) is a more accurate measure of police decision-making (at the individual and institutional level) than it is of actual criminal offending (see, for example, Huizinga et al., 2007;

Lauritsen, 2005). As noted in the literature review, some scholars allow for the possibility that, based on victims' reports of offenders' race and ethnicity, for some types of offenses the rates at which youth from various racial and ethnic subgroups are involved in delinquent activity may differ. In our study the zero-order correlations for the state show that Black youth are more likely to have higher offense severity scores, while White, Latino, and Native American youth are more likely to have lower scores. This issue is too complex for discussion here, but it does represent a potential issue for any assessment of DMC.

Finally, it should be noted that for every decision point examined in the multivariate analyses, legal variables, such as offense seriousness and number of prior offenses, predict the decision outcome. Thus, we do not want to imply that decisions are being made on the basis of race/ethnicity without regard to other factors. Although there is variation among localities, relationships among independent variables and outcomes in the anticipated direction are the norm (e.g., more serious offenses, greater risk and needs scores being associated with cases being approved).

Geographic Disproportionality and Disparity

The RRI analyses for the state show elevated RRIs for Black youth committed to YDCs. The multivariate analyses support this finding, showing that out-of-home placements are more likely for Black youth than White youth.

The RRI analyses also show that disproportionality is much higher for complaints received and secure detention of Black youth in the state's two largest counties, Wake and Mecklenburg, than in the state as a whole. The multivariate regression analyses of case processing data did not show statistically significant differences related to race/ethnicity in out-of-home placement dispositions in any of the five largest counties, including Wake and

Mecklenburg. In these two counties legal factors, including the nature and severity of the offense, number of charges, and risk score, predicted dispositional outcomes. It may be that race/ethnicity is related to these factors in these jurisdictions, accounting for the apparent discrepancy between the two sets of outcomes.

The multivariate analyses found that Native American youth were more likely to have complaints approved (when compared with closed and diverted combined) at the state level. This was not seen in the RRI analyses, although the RRI for complaints received for Native American youth was somewhat elevated. Differentiating by the five largest counties failed to find significant differences in complaints approved vs. not approved for Native American youth. The RRI for complaints approved for Native American youth in Robeson County, which has more Native American youths by far than any other locality in the state, was right at 1 and lower than the average for the state (although the RRI for secure detention for the county was more than double the average for the rest of the state).

It is not clear how to account for this finding regarding Native American youth, or the apparent discrepancy between the multivariate analysis and RRI results. A number of variables, including gender and age, are related to the approved vs. not approved decision. It is possible that some of these factors are also associated with being Native American, and this may account in part for the observed difference. It should be noted that Baffour et al.'s (2013) study of DMC in NC also found that Native American youth were more likely to have their cases approved than White youth. The authors did not offer an explanation for why this might be the case.

The RRI analysis found little disproportionality at the state level or in the state's two largest counties for complaints approved. However, the multivariate analyses showed that Black youth are more likely to have complaints approved in four of the five largest counties, including

Wake and Mecklenburg, and Latino youth in Wake are also more likely to have their cases approved. This is a significant finding, given that 40% of the state's Black youth population lives in these four counties.

The RRI analysis shows wide variation among counties in the amount of disproportionality. RRIs greater than 1 for Black youth were the norm for complaints received and complaints approved. Many of these apparent race/ethnicity effects are undoubtedly related to legal factors that were identified by the multivariate analyses.

Trends and National Comparison

There is no evidence in the RRI data that disproportionality in North Carolina has been decreasing over time, at least for Black youth at the state level and in the two largest counties. Except for cases approved in Mecklenburg County and cases adjudicated for the entire state, RRIs for Black youth in FY18 were higher than they had been in FY14 (although they may have been lower in FY18 than in previous years). These trends also hold at the national level, where RRIs for the various decision points remained relatively constant from 2005-2016.

Comparison of North Carolina's RRIs for Black youth with national data show that disproportionality is greater in North Carolina than the nation as a whole for complaints received and youth confined to YDCs. For Latino youth, disproportionality in NC and the nation are similar across stages, with RRIs being slightly lower in NC for use of secure detention and slightly higher for confinement. As noted in Chapter 3, these are rough comparisons, in part because the time periods do not line up (calendar vs. fiscal years). In addition, the national data obviously include a number of states that are quite different from NC in terms of size, age, and racial/ethnic composition of the juvenile justice population. The NC RRI data do mirror the

national data in terms of relative disproportionality at the various decision stages, which does suggest some confidence in the state-national comparisons.

Complaint Evaluation Process

As noted in Chapter 3, two different conceptualizations of the complaint evaluation process can be proffered. In one, the outcomes of interest are approved vs. not approved and, for cases not approved, closed vs. diverted. In the second conceptualization, the three outcomes are compared in all possible combinations: approved vs. closed, approved vs. diverted, and closed vs. diverted.

As shown in the summary table in Chapter 4, these two conceptualizations produce somewhat different results. At the state level, as discussed above, Native American youth are more likely to have their cases approved relative to White youth but, if not approved, more likely to have their cases closed than diverted. However, when comparing all outcomes, we see that Native American youth are actually less likely to have their cases diverted, and more likely to have their cases both approved and closed. This is also true of Black and Latino youth, although these two groups do not differ on the approved-not approved decision. This is a non-intuitive finding if we consider "approved" and "closed" to be opposite ends of the intake decision-making spectrum. While it is striking that all three racial/ethnic minority groups show this same pattern, it is possible that different mechanisms underlie the decision making for the three groups.

At the local level, the pattern described above holds only for Latino youth in Wake County. Black youth are more likely to be approved than diverted in four of the five largest counties, and Latino youth are more likely to be diverted than closed in Mecklenburg and

Guilford Counties, while Black youth are more likely to be diverted than closed in Forsyth County, the only significant race/ethnicity difference found in that county.

Interpreting the results presented above depends to some extent on how the diversion outcome is viewed relative to the other two. It would seem that diversion is a more desirable outcome than approval but a less desirable outcome than closure. Or perhaps, as suggested by an SRO who responded to our survey, diversion is the best method of ensuring that the youth receives and complies with services. Both interpretations find support in the data, even in the same county. For example, Table E4 shows that in Forsyth County, being petitioned for a person offense increases the odds of the case being diverted (vs. closed) for White, Black and Latino youth, suggesting a more punitive outcome for a more serious offense. However, higher needs scores also increase the odds of diversion for all three racial/ethnic groups, supporting the notion that diversion may be a way of ensuring that offenders obtain and comply with services.

Yet another interpretation is raised by some survey responses that suggest that minority youth may not have sufficient social supports to successfully meet the requirements imposed as part of a diversion outcome. A more careful examination of the content and outcome of diversion plans, along with the outcomes of referral to resources for both diverted and closed cases, might shed light on the mechanisms underlying the finding that minority youth are less likely to be diverted.

As discussed at the outset of this chapter, the evidence of race/ethnic disparities at referral and approval, especially when looking at the five largest counties, shows how decisions at one stage (approval) contribute to DMC at later stages (confinement/out-of-home placement). This process, often characterized as "cumulative disadvantage," has been discovered by other studies assessing DMC across the country (Leiber, 2013; Rodriguez, 2010).

Survey Responses

The qualitative data collected from 220 respondents across the state reveal some interesting relationships. Respondents who were more familiar with the issue of DMC were more likely to view it as a serious problem in their jurisdiction. This suggests that, not surprisingly, being aware and knowledgeable of the issue of DMC increases its salience to the individual and leads them to view the problem as more serious. It is also the case that respondents who are in law enforcement are less likely to be aware of DMC and less likely to think it is a problem. This suggests that increasing the awareness of sheriffs, police chiefs, and SROs regarding the issue of DMC might lead them to view the problem as more serious, which in turn might increase their efforts to address the issue.

Most respondents thought that DMC in their particular jurisdiction was comparable to the rest of the state, and very few respondents thought DMC was a more serious problem in their jurisdiction. Given the wide variability in RRIs across jurisdictions, and the fact that the largest counties in the state show higher disproportionality than the state average, it is likely that many of these respondents are incorrect about their assumptions regarding DMC in their jurisdictions. Providing more information about DMC in individual jurisdictions across the state might result in more realistic assessments of the problem on the part of system stakeholders, which again might lead to efforts to address the DMC issue.

Regarding system decision points where DMC might be apparent, respondents identified arrest and detention as the two points at which DMC was most likely to occur. According to our analyses the respondents are correct in their identification of these two decision points. However, only about a third of respondents thought that minority youth were more likely to be placed in a YDC and that minority youth were less likely to be diverted, both of which are findings that

emerge from our analyses. Once again, this suggests the need for a greater understanding on the part of system stakeholders of the mechanisms of DMC.

When asked about the helpfulness of potential DMC reduction strategies, respondents tended to endorse treatment, prevention and service delivery options. They were less enthusiastic about legal and law enforcement strategies, such as reducing SRO referrals and decriminalizing status offenses. As state and local decision-makers consider interventions to address DMC, they should keep in mind that some potential strategies may be more difficult to implement than others. This may be particularly true of law enforcement officials, who were reluctant to support legal and law enforcement strategies.

Many of the strategies to address DMC that were endorsed by respondents, such as training, diversion, and prevention, have been widely implemented by states across the country (Leiber & Rodriguez, 2011; Pope & Leiber, 2005; Spinney et al., 2014). However, relatively few attempts have been made to evaluate these strategies, and there is little evidence for their effectiveness (Carlton, Orchowsky & Iwama, 2017; Peck, 2018). In addition, some strategies, such as diversion, have been shown to reduce the number of youths in the system (e.g., detention) but not to reduce disproportionality (Leiber & Fix, 2019; Parsons-Pollard, 2017).

In their answers to open-ended questions, a number of respondents suggested that a large number of referrals from SROs contributed to DMC at this stage. This is a common concern in the literature on DMC, and one that has also been expressed by North Carolina policymakers (see, for example, North Carolina Commission on the Administration of Law & Justice, 2017). Our findings support the idea that SROs are producing a large of complaints: over half of referrals in the database were school-related. However, there is no evidence in our data that school-related referrals increase DMC; in fact, the statewide correlation table shows that Black

youth are less likely to have school-related referrals (although Native American youth are more likely to have such referrals). The multivariate analyses suggest that the impact of these referrals may be negated to some extent by the fact that cases that are school related are more likely to be closed or diverted than approved (statewide) and less likely to receive an out of home placement. On the other hand, at the state level youth who have school-related petitions are more likely to be adjudicated delinquent. Moreover, the fact that these juveniles now have a prior record as a result of a school-related (not approved) petition increases the odds of their next petition being approved. North Carolina's implementation of the School-Justice Partnership program is a recognition of the seriousness of the problem of school-related referrals and the disproportionality associated with school-based referrals.

Another suggestion in the open-ended comments was that minority youth have family and other social support issues that lead them to be more system involved and require more services than White youth. Our findings support this view with regard to Black youth, who are more likely to have higher risk and needs scores than both White and other minority youth.

Finally, the survey responses suggest a clear schism between the views expressed by law enforcement personnel and those expressed by service providers and defense attorneys. Law enforcement officers are more likely to express the belief that DMC is not a problem in their jurisdictions, and that the problem is more related to differences between minority and non-minority youth on factors such as parental involvement and socio-economic issues. Defense attorneys and local service providers are more likely to rate DMC as a more serious problem, to attribute it to bias, and to endorse DMC reduction strategies such as reducing SRO referrals and decriminalizing status offenses. This is not a surprising finding, but it again suggests the need for a common base of information and knowledge about DMC for all system stakeholders.

Comparison with 2013 Assessment Study

The results of the current assessment study are consistent with some of the findings from the Center for Community Safety's 2013 assessment study, though not their overall conclusions. Baffour et al. (2013) reported that for the decision to approve the youth for further court proceedings at the state level, the rate for Native American youth was higher than for comparable Whites. They also found that Latinos evidenced lower rates of approval than Whites, while for Black youth no significant difference existed compared to White youth. The current assessment also finds that Native American youth are more likely to be approved, when the approved cases are compared with closed and diverted cases combined. We did not find significantly lower rates for approval of Latino youth, but we too found no difference in approval of Black youth at the state level. However, our findings show that in four of the five largest counties in the state Black youth were more likely to have their cases approved than White youth.

When the intake outcome is examined more closely by taking into account all three options, additional race/ethnic effects are observed in the current assessment, as discussed above. Some of the effects observed at the state level seem to favor minority youth (Blacks and Latinos more likely to have their cases closed than approved), while others seem to be to the detriment of minority youth (Black, Latino, and Native American youth more likely to have their cases approved than diverted). Analyses in the five largest counties seem to negate the effects favoring minority youth; for example, in four of the five counties Black youth are more likely to have their cases approved than closed.

The authors of the previous assessment study conclude that for "Blacks and Latinos across the state of North Carolina as a whole, the DMC that exists was not a result of disproportionate treatment at the stage of approval" (Baffour et al., 2013, p. 34). While this

statement is supported by our findings involving the state analyses, the picture with regard to DMC at the complaint evaluation stage is more complicated than the statement suggests.

The previous assessment study found that Black and Latino youth were less likely to have their complaints adjudicated. Our findings are in agreement and show that this is also the case for Native American and Asian/Pacific Islander youth. Baffour and her colleagues also found that Black and Latino youth were less likely to receive a disposition of probation than White youth. We found this to be the case for Black (but not Latino) youth.

The qualitative findings are generally similar in both studies. Both studies find similar assessments on the part of stakeholders regarding the factors associated with DMC and the types of interventions that might be useful in addressing DMC. There are advantages and disadvantages to the survey (vs. focus group) approach employed in the current assessment. One of the advantages is that our sample size is large enough to reveal some interesting relationships between opinions regarding DMC and factors such as job category and familiarity with the DMC issue.

The previous study's authors offered the following conclusion based on their findings:

> American Indians are more likely than Whites to have their complaint approved to be heard in front of a judge. However, at other key decision points in the juvenile justice system statewide, including the approval and adjudication stages, racial minorities have lower rates than Whites or there is no significant difference between the rates of Whites and the rates of racial minorities. This clearly demonstrates that progress in reducing DMC is taking place.

While our findings are generally in line with those of the previous study (with the exceptions discussed above), we do not endorse the authors' conclusion that the findings "clearly demonstrate progress in reducing DMC." As noted throughout this discussion minority youth,

and particularly Black youth, appear to fare more poorly than their White counterparts at the complaint/intake evaluation phase (for four of the five largest counties) and the dispositional phase (at the state level) Moreover, examination of RRIs shows no change/improvement over the last five years at the state level, and somewhat higher rates for complaints received and youth confined in NC than those seen in the nation as a whole.

Summary

The findings of the current assessment study support the conclusion that in North Carolina DMC is not solely the result of legal factors; the race/ethnicity of youth matters, as does the measurement of intake decision-making. The multivariate analyses of the predictors of juvenile justice decision-making suggest that both legal factors, such as the severity of the offense and race/ethnicity, influence case outcomes. These findings, to some degree, are in line with results reported by the 2013 NC assessment study and assessment studies in other states (e.g., Leiber, 2002), as well as those in the general literature on the effects of race/ethnicity on juvenile justice decision-making (e.g., Leiber & Rodriguez, 2011; Rodriguez, 2013). Some of the race/ethnic relationships resulted in seemingly more severe outcomes–moving further into the system–while others were reflective of more lenient outcomes. These inconsistencies in the severity of outcomes have also been reported elsewhere (e.g. Leiber, 2003; Rodriguez, 2010).

Limitations of the Current Assessment Study

While the present research provided insights into the factors that explain juvenile court outcomes, the study is not without limitations. As noted in the report, there are issues related to the use of RRIs that suggest caution in interpreting these findings. We did not examine RRIs over time for individual localities, which may have revealed important differences regarding

where DMC has improved over time. Comparisons of RRIs in NC vs. the nation should be interpreted with caution, as discussed earlier in the report.

Any assessment study will necessarily be limited in scope, and the current study does not provide information about several potentially important decision points in the processing of juvenile justice cases. The present study has little to say about how police officers, SROs, and other complainants exercise their discretion, and how this might affect DMC.

The quantitative component of the research relied on secondary data provided by NC-JOIN, which was then merged and prepared for analyses by the researchers. Thus, the findings that emerged from the analyses assumed both processes were valid, in that the data and analyses were correct and accurately capture or represent the extent to which race/ethnicity, legal factors, and other considerations determine the treatment of youth in juvenile court.

Another possible shortcoming of the analyses was the omission of potentially important variables. For example, while prior record was included as a variable in the multivariate analyses, we did not look at use of temporary custody by law enforcement, compliance or non-compliance with diversion plans/contracts, court dismissals, probation violations, or recidivism. Assessments about the family, school adjustment, gang involvement, and detention status are all factors that have been found to influence DMC (e.g., Bishop & Leiber, 2011, Rodriguez, 2010) but were not included in the analyses. The risk and needs scores capture some of this information but aggregate measures of this type are of limited utility. Future assessment studies may want to take into consideration the individual domains that comprise the risk and needs assessments. In addition, future studies should also include individual-level variables such as legal representation and the kind of representation. These factors have been previously linked to race/ethnicity and juvenile court outcomes (e.g., Donnelly, 2017; Leiber, 2003).

While we examined court outcomes in four regions and five counties, this was done without taking into the consideration the historical, community, and organizational contexts of these areas and courts. These factors have been found to influence responses to youth in general and minorities in particular (Donnelly, 2017; Feld, 1991; Leiber, 2003; Pope & Leiber, 2005).

Our findings are limited to the time period and specific localities studied. Thus, the results are not necessarily generalizable to current case processing decisions or other jurisdictions in the state of North Carolina.

As was noted in Chapter 6, the response rate for the survey was low. As a result, some groups were over-represented in the sample while others were under-represented. While we believe we provided a fair depiction of the responses of all groups, and although the responses were consistent with those seen in other DMC studies, these results are not necessarily representative of all NC juvenile justice system stakeholders.

We found race/ethnic differences in case outcomes, especially at the front end of the system. While we used surveys to tap into stakeholders' views of DMC in general, there is a need for the use of strategies to assess *why* race/ethnicity continues to have an influence on sentencing outcomes even after taking into consideration relevant legal factors. One method for doing this is through observational research (e.g., Harris, 2007, 2009), in which case processing decisions are examined in real time. An additional direction for future assessment studies is to examine the actual attitudes and perceptions of decision-makers about juvenile offenders, race/ethnicity, and their perceptions of their role(s) in meeting the dual purposes (i.e., rehabilitation and punishment) of the juvenile justice system (Leiber, 2003; Ward & Kupchik, 2009).

Finally, the current effort did not explore the effects of current initiatives across the state designed to address DMC (aside from those reported by survey respondents). For example, we did not identify or examine statewide efforts funded by GCC or endorsed by the DMC committee to address DMC. It may therefore be the case that some of the recommendations, which we turn to in the next and final chapter of this report, may be similar to efforts that are already underway, or have been tried in the past, in the state.

Chapter 8: Recommendations

In this chapter we provide recommendations to DPS/GCC based on the findings of the current assessment study and the literature on DMC. The recommendations are organized into three categories, based on the intervention categories outlined in OJJDP's (decommissioned) DMC Technical Assistance Manual. The three categories are: (1) direct services, which involve efforts that deal with the causes of delinquent behavior in the form of prevention and intervention programs; (2) training and technical assistance, which focuses primarily on the needs of law enforcement and juvenile justice personnel; and (3) system change, which involves altering aspects of the juvenile justice system that may contribute to DMC (see also Pope & Leiber, 2005; Spinney et al., 2014).

We recognize that some of the recommendations that follow are similar to ones offered in the 2013 Center for Community Safety report. We also acknowledge that we did not collect detailed information on current DMC-related strategies and initiatives being undertaken by DPS, funded by GCC, or implemented in local jurisdictions. Moreover, implementation of "Raise the Age" may produce responses similar to those included in the recommendations. It may therefore be the case that some of our recommendations are already being put into practice in one form or another.

<u>Direct Services</u>

1. ***The Juvenile Justice Planning Committee's DMC subcommittee should conduct a "listening tour" around the state to obtain specific ideas and recommendations from the field on DMC reduction strategies in general, and on developing diversion/alternatives to detention in particular.***

One of the most common interventions for addressing DMC has been to develop diversion programs and alternatives to secure detention. We realize that DPS has already made

much progress in this area, and that the state and localities are working on expanding JCPC funds to provide community-based programming as part of the implementation of "Raise the Age." However, as with many of these efforts across the country, the degree to which they positively affect DMC is open to question. While reducing the number of minority youth in detention is a worthy accomplishment, it does not ensure a reduction in disproportionality between minority and White youth. Some of the DMC reduction ideas provided by respondents to the survey in the present study suggest that much good information would be generated by seeking input from local practitioners across the state.

2. ***DPS/GCC should conduct/fund an analysis of the use of diversion in key localities in the state.***

Our findings show that minority youth, and particularly Black youth, are less likely to be diverted than White youth. In some instances, minority youth are more likely to have their cases closed, while in other instances they are more likely to be approved. Additional research and analyses should be undertaken to determine exactly where and why this is occurring. These analyses should examine how diversion decisions are being made, what types of diversion contracts/plans are being implemented, and to what degree there is compliance with these plans. The study should also examine diversion outcomes, and how these vary among racial/ethnic minority youth. The analysis should focus on the five largest counties, in terms of youth population, in the state. The 2013 diversion analysis conducted by DPS (Howell & Bullock, 2013) provides a jumping off point for further and more detailed analyses focusing on race/ethnicity.

3. ***DPS/GCC should continue to develop, fund, and implement delinquency prevention programs*.**

Our findings and those of the 2013 assessment study show that legal factors predict much of the overrepresentation in the juvenile justice system. This is not surprising, since legal criteria should influence decision making, while race/ethnicity should not. The finding that legal factors explain decision making suggests that minority youth may be involved in the system in part because of their involvement in crime and/or the kinds of crimes that they are charged with. Therefore, to reduce the disproportionate number of minority youth coming into contact with the system, community resources and programs that focus on delinquency prevention need to be established and/or continued. It is important to implement outreach efforts to both parents and youth to connect them with activities that already exist in the community. Most important is that minority youth have access to, and the opportunity to participate in, these programs.

<u>Training and Technical Assistance</u>

4. ***The state should develop and implement a training curriculum for local law enforcement personnel who work with youth to raise awareness of the DMC issue and provide knowledge regarding the issue.***

Our findings suggest that law enforcement personnel (police chiefs, sheriffs, and SROs) are less likely to be aware of DMC, less likely to think it is a problem in their jurisdictions, and more likely to offer explanations for DMC related to juveniles' behavior and decision-making rather than systemic issues. We would therefore suggest the development, implementation, and assessment of a training curriculum that would provide information on DMC and juvenile decision-making.

Part of NC's 2017 Juvenile Justice Reinvestment Act (JJRA) required that both entry level and in-service training for law enforcement officers include information on best practices for incidents involving juveniles, adolescent development and psychology, and promoting

relationship building with youth as a key element of prevention. We would recommend adding a component on DMC, similar to the *Effective Police Interactions With Youth* curriculum discussed in the literature review chapter. This should include information on statewide and local DMC rates, the findings of this study and the 2013 assessment study, and information about implicit bias and how it can be addressed.

We assume that the training associated with the JJRA will be thoroughly evaluated. Any DMC training developed and implemented should be similarly evaluated to determine whether it in fact increased knowledge and attitudes regarding DMC. Ideally, there should be a follow-up assessment to determine whether any observed changes lasted beyond the end of the training, and whether the training affected on-the-job behavior.

5. ***The state should develop and implement a seminar on DMC for juvenile justice system stakeholders and related professionals who work with youth to raise awareness of the DMC issue and provide knowledge regarding the issue.***

Our findings regarding beliefs about DMC extend beyond law enforcement personnel to include other groups surveyed who interact with juveniles. The survey responses suggest other misconceptions regarding DMC that might be cleared up with information and data for specific jurisdictions. We would therefore suggest the development, implementation, and assessment of a training curriculum that would provide information on DMC on a local, district or regional level. The training would serve to increase knowledge and awareness of the issue. Data on DMC specific to the jurisdiction could form the basis for discussion of the nature of the problem, factors that may contribute to the problem, and potential strategies to address the problem as it manifests itself in the particular jurisdiction. The training should also contain information relevant to non-juvenile justice system stakeholders, such as data on minority referrals from schools.

6. DPS should develop a section of their website specifically related to DMC.

While not related to training and technical assistance per se, devoting a section of the DPS website to DMC has the potential to increase awareness of, and knowledge about, the issue. A number of states provide RRI information, copies of three-year plans (or at least the parts that address DMC) submitted to OJJDP as part of the requirements of the JJDP Act, and other DMC-related materials. For example, the Iowa Juvenile Justice Advisory Council (IJJAC), part of the Iowa Department of Human Rights, has a section of their website devoted to IJJAC's DMC subcommittee (*https://humanrights.iowa.gov/cjjp/disproportionate-minority-contact/dmc-subcommittee).* The website contains a variety of information related to DMC in the state, including: DMC matrices, showing RRI statistics for the state and the 10 largest counties for each decision point; detailed data reports that provide other relevant information, such as school suspensions, by race; a copy of the section of the state's three-year plan to OJJDP that addresses proposed DMC reduction initiatives as well as information from the annual update reports; minority population data by county; copies of DMC study reports conducted over the years; and other DMC-related materials. Something similar could be developed for the DPS website.

<u>System Change</u>

7. GCC should consider DMC-related requirements for juvenile justice grantees.

Several states have implemented the use of racial impact statements to uncover unintended racial disparities that might be produced by implementing specific legislative initiatives, usually related to sentencing (Mauer, 2009). In Iowa, state agencies are mandated to obtain Minority Impact Statements from all grant applicants. The impact statements require potential grantees to identify "any disproportionate or unique impact of proposed policies or

programs on minority persons in this state."[20] Applicants are required to list both positive and negative anticipated impacts, and to indicate the minority group(s) that are likely to be affected.

Our recommendation is that North Carolina consider implementing a minority impact statement, or something similar, for its juvenile justice grant applicants. This can be as simple as requiring that grant applicants include, as part of grant application process, a statement of how the proposed program/initiative will affect minority youth. A more rigorous approach would be to require a statement of how minority youth will be positively affected, or how the proposed initiative will contribute to a reduction in DMC. While such an approach is certainly not a panacea, it at least requires local stakeholders to begin to think about racial and ethnic disparities in their localities.

8. GCC should fund a comprehensive evaluation of the School-Justice Partnership program.

The School-Justice Partnership program, authorized as part of the 2017 JJRA, has the potential to address the issue of racial/ethnic disparity associated with referrals from schools. As the partnerships get implemented in counties across the state, it is imperative that they be the subject of a comprehensive evaluation that will identify reasons for success and failure at the local level. Such an evaluation should begin with a "process" or "formative" assessment, which will document how counties go about implementing the program. This information is critical for identifying obstacles to successful implementation and ways to overcome these impediments. Having this information allows expansion of the program to other localities to be accomplished smoothly and rapidly.

[20] *2008 Iowa Acts*, HF 2393, Iowa Code Section 8.11

A critical component of the process evaluation is the collection of accurate and reliable data on key implementation indicators, such as number and characteristics of youth, offenses committed, and outcomes. Having valid data also sets the stage for outcome evaluation, which can assess key indicators of success such as the number of school-based referrals to the juvenile justice system avoided. The evaluation process should maintain a focus on racial and ethnic disparities (as well as other types of disparities, such as physical and mental disabilities). It should also track juveniles who are referred to the justice system to determine how many end up in juvenile court, how many are adjudicated delinquent, and what dispositions they receive.

9. ***DPS/GCC should conduct/fund evaluations of all state-funded local DMC reduction efforts.***

It is critical that any and all DMC reduction efforts be evaluated to determine their impacts (Peck, 2018). This is the only way to determine whether to expand existing initiatives to other jurisdictions and to identify which programs/program components work for which minority groups. Evaluations must examine reductions in DMC as a key outcome (see Carlton et al., 2017). Whether initiatives that produce positive changes for both minority and White youth, but fail to actually reduce DMC, should be considered "successful" must be assessed within the larger context of other DMC reduction efforts in the particular jurisdiction.

Ideally, DMC reduction initiatives should not be "stand alone" or "one offs," but should be part of a larger strategy to reduce DMC at the county or district level. Initiatives should be evidence-based or knowledge-informed, and their implementation and assessment should be guided by the use of logic models that identify goals, objectives, and outcome measures (see Nellis, 2005).

10. ***DPS/GCC should create a Task Force to examine the question of how risk and need assessments are currently being used, and whether current instruments may be racially biased.***

The risk and needs scores are significant predictors of the approved-not approved decision at the state level and in all five of the largest counties. Our findings also show that Black youth are the only racial/ethnic group significantly more likely to score higher on both indicators. While this may speak to the impact of a variety of social and economic factors on Black youth, it may also be the case that the factors that comprise the indicators are themselves related to race.

We understand that the JJPC has recommended funding for the state to implement the Youth Assessment and Screening Instrument (YASI) at all stages of contact with court-involved youth. The YASI is a commonly used risk assessment tool in juvenile justice and is developed and sold by a private company (Orbis Partners, Inc.). While the YASI may in fact produce more useful information for those working with, and making decision about, juveniles in the state, we would note that it, like all risk assessment instruments, has limitations. Reliability issues in such instruments have been attributed to poorly defined items and inadequate staff training (Baird et al., 2013). In addition, Baird and his colleagues, in their comprehensive study of juvenile risk assessment instruments, note that despite the use of increasingly complex scoring algorithms, "risk scores are driven in large part by two simple factors: age at first adjudication and prior delinquency" (2013, p. 97).

In recent years, scholars have begun to question the "race neutrality" of risk assessment. Harcourt (2010), for example, argues that risk assessment instruments tend to focus on prior criminal history, which has become a proxy for race. Some scholars have argued that it is impossible to develop "race-neutral" risk assessment tools and that the use of risk assessment

serves to exacerbate racial disparities (Harcourt, 2010; Mayson, 2018). Given this perspective, it is not difficult to see the potential racial bias in risk assessment factors such as age at first adjudication and number of delinquent referrals.

An examination of how the risk and needs assessments are implemented, to what degree the various items that comprise the assessments contribute to the overall score, and how racial and ethnic minorities score on these various components would be a useful first step for a task force. Other issues include how the risk and needs scores are used in decision-making and to what degree various outcomes are associated with risk and needs scores. If the YASI is in fact implemented in NC, then the training and implementation process should be carefully monitored to ensure uniform assessments regardless of race, ethnicity and gender. The task force should also obtain opinions of how useful the instrument is in case management.

11. DPS/GCC should continue to encourage and fund coordination and collaboration efforts at the local level.

There should be a continued effort to build cross-system coalitions within each jurisdiction to address DMC reduction efforts. This can take the form of local DMC committees operating independently, or DMC reduction efforts that fall under the auspices of the JCPCs. This coalition should continue to learn about DMC and how to interpret data that define DMC, and pinpoint areas in which policies, practices, and procedures can be fine-tuned to address DMC.

Collaborations should also include law enforcement and possible coordination with other jurisdictions that have engaged in DMC reduction and other related efforts, such as the Juvenile Detention Alternatives Initiative (JDAI) and the Models for Change initiative. Such efforts should include communities of color in decision-making about local justice system policies and practices. Finally, efforts to reduce DMC should involve a multi-pronged strategy. Effective

strategies to reduce DMC will require changes to practice and policy, community engagement, program implementation, and training, as well as a long-term commitment to this goal (Spinney et al., 2014).

12. DPS/GCC should develop a statewide DMC reduction plan based on best practices identified in OJJDP's case study of nine jurisdictions.

As noted in the literature review, Spinney et al. (2014) identified common elements of successful DMC reduction strategies in nine jurisdictions (eight local and one state). A number of these elements center around implementing real systems change, which requires leadership and commitment. We would point in particular to the following elements from the OJJDP-funded case study: focusing intentionally on DMC reduction (and not just on general system improvement) while using a non-accusatory tone; making DMC reduction a long-term priority; leadership at the local level, the state level, or both; collaboration among state and local agencies, police, judges, and the community; and changing the institutional culture away from a punitive or procedural focus toward a focus on what is best for the youth and the community.

A DMC reduction strategy based on the elements cited above is not easy to even conceptualize, let alone implement. It might begin with a few localities where there is strong leadership that is willing to examine the data to identify problem areas, implement best practices, and rigorously assess and document outcomes. Their successes can be replicated, and their failures avoided, in other localities that are willing to take on this work. Regardless of the specific approach taken, however, the focus must be on reducing DMC, and the efforts that are implemented must be assessed, modified as needed, and sustained over time.

North Carolina has a unique opportunity to make an impact on DMC in the next several years. The 2017 JJRA, also known as the "Raise the Age" initiative, takes effect on December 1, 2019. Over the next several years, as the JJPC works to implement the initiative, there will be

much thought given to how to improve the state's juvenile justice system. As the DPS website notes, "the 'Raise the Age' initiative became law only through a strong, bipartisan coalition of support from all three branches of government, law enforcement and advocacy organizations, which continues today."[21] It is our recommendation that this coalition consider ways to address racial and ethnic disparities in North Carolina's juvenile justice system, and should identify, implement and assess knowledge-based strategies to reduce DMC in the state. It is our hope that this report has made a positive contribution toward this effort.

[21] *www.ncdps.gov/our-organization/juvenile-justice/key-initiatives/raise-age-nc#what-changes-to-legislation-related-to-raise-the-age-are-recommended-by-the-juvenile-jurisdiction-advisory-committee-(jjac)*

References

Baffour, T., Henderson, D., Hernandez, P., Moye, R. Greaux, L., Mendenhall, J. & Atkinson, A.L. (2013). *Disproportionate minority contact in the North Carolina juvenile justice system: Assessment report.* The Center for Community Safety, Winston-Salem State University.

Baird, C., Healy, T., Johnson, K., Bogie, A., Dankert, E.W., & Scharenbroch, C. (2014). *A comparison of risk assessment instruments in juvenile justice*. Washington, DC: National Council on Crime and Delinquency. Retrieved from: http://nccdglobal.org

Bishop, D. M. (2005). The role of race and ethnicity in juvenile justice processing. In D. Hawkins & K. Kempf-Leonard (Eds.), *Our children, their children: Confronting racial and ethnic differences in American juvenile justice*. Chicago, IL: University of Chicago Press.

Bishop, D., & Frazier, C. (1988). The influence of race in juvenile justice processing. *Journal of Research in Crime and Delinquency, 22,* 309-328.

Bishop, D., & Leiber, M. (2011). Race, ethnicity, and juvenile justice: Racial and ethnic differences in delinquency and justice system responses. In D. Bishop & B. Feld (Eds.), *Juvenile justice*. New York, NY: Oxford University Press.

Bridges, G. & Steen, S. (1998). Racial disparities in official assessments of juvenile offenders: Attributional stereotypes as mediating mechanisms. *American Sociological Review, 63,* 554-70.

Caliber Associates. (1996). Office of Juvenile Justice and Delinquency Prevention. *Evaluation of the disproportionate minority confinement (DMC) initiative: North Carolina final report*. Retrieved from: http://www.ncjrs.gov/pdffiles/dmc-nc.pdf

Carlton, M.P., Orchowsky, S., & Iwama, J. (2017). Assessing DMC initiatives: A case study of two states. In N. Parsons-Pollard (Ed.), *Disproportionate minority contact: Current issues and policies* (2nd Ed.). Durham, NC: Carolina Academic Press.

Cauffman, E., Piquero, A.R., Kimonis, E., Steinberg, L., Chassin, L., & Fagan, J. (2007). Legal, individual, and environmental predictors of court disposition in a sample of serious adolescent offenders. *Law and Human Behavior, 31*, 519-535.

Devine, P., Coolbaugh, K., & Jenkins, S. (1998). Office of Juvenile Justice and Delinquency Prevention. *Disproportionate minority confinement: Lessons learned from five states*. U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention. Retrieved from: http://www.ojp.usdoi.gov/ojjdp

Donnelly, E. (2017). The disproportionate minority contact mandate: An examination of its impacts on juvenile justice processing outcomes (1997-2011). *Criminal Justice Policy Review*, *28*, 347-369.

Donnelly, E. (2018). Do disproportionate minority contact (DMC) mandate reforms change decision-making? Decomposing disparities in the juvenile justice system. *Youth Violence and Juvenile Justice*, 1-21.

Feld, B. C. (1991). Justice by geography: Urban, suburban, and rural variations in juvenile justice administration. *The Journal of Criminal Law and Criminology, 82*, 156-210.

Feyerherm, W. H., Snyder, H., & Villarruel, F. (2009). Identification and monitoring. In *Disproportionate minority contact technical assistance manual* (4th Ed.). Washington, DC: U.S. Dept of Justice, Office of Juvenile Justice and Delinquency Prevention.

Frabutt, J. M. & Hefner, M. K. (2007). *Taking DMC to scale in North Carolina: A multi-site study*. Center for Youth, Family, and Community Partnerships, University of North

Carolina, Greensboro, NC.

Gonzales, S., Kane, K., Lopez-Howard, S., Devulapalli, H., Harper, J., & Fitts, K. (2018). *Disproportionate minority contact in Georgia's juvenile justice system.* Atlanta: Georgia Criminal Justice Coordinating Council.

Hamparian, D., & Leiber, M. (1997). *Disproportionate confinement of minority juveniles in secure facilities: 1996 national report*. Champaign, IL: Community Research Associates.

Harcourt, B.E. (2010). *Risk as a proxy for race*. University of Chicago Public Law & Legal Theory Working Paper No. 323. Retrieved from: https://chicagounbound.uchicago.edu

Harp, C. (2018). *OJJDP is simplifying Title II work to focus on DMC reduction, not process*. Retrieved from https://jjie.org/2018/06/29/ojjdp-is-simplifying-title-ii-work-to-focus-on-dmc-reduction-not-process/

Harris, A. (2007). Diverting and abdicating judicial discretion: Cultural, political, and procedural dynamics in California juvenile justice. *Law & Society Review, 41*, 387-428.

Harris, A. (2009). Attributions and institutional processing: How focal concerns guide decision-making in the juvenile court. *Race and Social Problems, 1*, 243–256.

Howell, M.Q., & Bullock, J. (2013). *Juvenile diversion in North Carolina*. Raleigh, NC: Department of Public Safety, Division of Juvenile Justice. Retrieved from: https://files.nc.gov/ncdps/DJJ-DiversionReport-final-web.pdf

Hsia, H. (1999). OJJDP formula grants program. *Juvenile Justice Bulletin*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Huizinga, D., Thornberry, T., Knight, K., Lovegrove, P., Loeber, R., & Farrington, D. (2007). *Disproportionate minority contact in the juvenile justice system: A study of differential*

minority arrest/referral to court in three cities. Washington, DC: US Department of Justice.

Juvenile Justice and Delinquency Prevention (JJDP) Act 1974. (Pub. L. No. 93-415, 42 U.S.C. § 5601 et seq.).

Juvenile Justice Delinquency Act of 2002, Public Law 93-415, 42 U.S.C 5631 § 221b-23 (1988)

Juvenile Justice Delinquency Act of 2002, Public Law 93-415, 42 U.S.C 5633 § 223a-22 (2002)

Lauritsen, J. L. (2005). Racial and ethnic differences in juvenile offending. In D. Hawkins & K. Kempf-Leonard (Eds.), *Our children, their children: Confronting racial and ethnic differences in American juvenile justice*. Chicago, IL: University of Chicago Press.

Leiber, M. (2002). Disproportionate minority confinement (DMC) of youth: An analysis of state and federal efforts to address the issue. *Crime & Delinquency*, *48*(1), 3-45.

Leiber, M. (2013). Race, pre- and post-adjudication detention, and juvenile justice decision making. *Crime & Delinquency*, 59: 369-395.

Leiber, M.J. (2003). *The contexts of juvenile justice decision making: When race matters.* Albany, NY: State University of New York Press.

Leiber, M., Bishop, D., & Chamlin, M. (2011). Juvenile justice decision-making before and after the implementation of the disproportionate minority contact (DMC) mandate. *Justice Quarterly*, 28, 460-492.

Leiber, M., & Fix, R. (2019). Reflections on the impact of race and ethnicity on juvenile court outcomes and efforts to enact change. *American Journal of Criminal Justice*, Advance online publication. doi: 10.1007/s12103-019-09479-3.

Leiber, M., Richetelli, D., & Feyerherm, W. (2009). Assessment. In *Disproportionate minority contact technical assistance manual* (4th Ed). Washington, DC: U.S. Dept of Justice,

Office of Juvenile Justice and Delinquency Prevention.

Leiber, M.J., & Rodriguez, N. (2011). The implementation of the disproportionate minority confinement/contact (DMC) mandate: A failure or success? *Race and Justice, 1*, 103-124.

Maggard, S. R. (2013). Assessing the impact of the juvenile detention alternatives initiative (JDAI): Predictors of secure detention and length of stay before and after JDAI. *Justice Quarterly, 32*, 571–597.

Marshall, R., Rovner, J., & Bryer, S. (2018). OJJDP Administrator's words on racial disparities shock us. *Juvenile Justice Information Exchange, July 6*. Retrieved from https://jjie.org/2018/07/06/ojjdp-administrators-words-on-racial-disparities-shock-statewide-advisory-group-community/.

Mayson, S.G. (2018). *Bias in, bias out*. University of Georgia School of Law Research Paper Series Paper No. 2018-35. Retrieved from: https://papers.ssrn.com

Mauer, M. (2009). Racial impact statements: Changing policies to reduce disparities. *Criminal Justice*, 23(4).

National Research Council (2013). *Reforming juvenile justice: A developmental approach*. Committee on Assessing Juvenile Justice Reform. Richard J. Bonnie, Robert L. Johnson, Betty M. Chemers, and Julie A. Schuck (Eds). Committee on Law and Justice, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

Nellis, A. (2005). *Seven steps to develop and evaluate strategies to reduce disproportionate minority contact*. Washington: Justice Research and Statistics Association. Retrieved from: www.jrsa.org/pubs/juv-justice

Nellis, A. & Richardson, B. (2010). Getting beyond failure: Promising approaches for reducing DMC. *Youth Violence and Juvenile Justice* 8(3) 266-276.

North Carolina Commission on the Administration of Law & Justice (2017). *Recommendations for strengthening the unified court system of North Carolina*. *Appendix A: Juvenile Reinvestment*. Raleigh, NC: Author. Retrieved from: https://nccalj.org

Parsons-Pollard, N. (2017). Disproportionate minority contact (DMC): A historical and contemporary perspective. In N. Parsons-Pollard (2nd Ed.) *Disproportionate minority contact*. Durham, NC: Carolina Academic Press.

Paternoster, R., Brame, R., Mazerolle, P., & Piquero, A. (1998). Using the correct statistical test for the equality of regression coefficients. *Criminology, 36*, 859-866.

Peck, J. (2018). The importance of evaluation and monitoring within the disproportionate minority contact (DMC) mandate: Future directions in juvenile justice research. *Race and Justice*, *8*(4), 305-329.

Pope, C. E., & Feyerherm, W. (1990). Office of Juvenile Justice and Delinquency Prevention. *Minorities and the juvenile justice system: Research summary*. Washington, DC: OJJDP.

Pope, C. E., & Feyerherm, W. (1993). *Minorities and the juvenile justice system*. Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Pope, C.E., & Leiber, M. J. (2005). Disproportionate minority confinement/contact: The federal initiative. In D. Hawkins & K. Kempf-Leonard (Eds.), *Our children, their children: confronting racial and ethnic differences in American juvenile justice*. Chicago, IL:

University of Chicago Press.

Pope, C. E., Lovell, R., & Hsia, H. M. (2002). *Disproportionate minority confinement: A review of the recent literature from 1989 through 2001*. Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Rodriguez, N. (2007). Juvenile court context and detention decisions: Reconsidering the role of race, ethnicity, and community characteristics in juvenile court processes. *Justice Quarterly*, 24, 629-656.

Rodriguez, N. (2010). The cumulative effect of race and ethnicity in juvenile court outcomes and why preadjudication detention matters. *Journal of Research in Crime and Delinquency, 47*, 391-413.

Sanderson, J. Kosutic, I. Griggs, J., & Anderson, S. (2008). *Effective police interactions with youth: Training evaluation*. Storrs, CT: Center for Applied Research in Human Development, University of Connecticut. Retrieved from The State of Connecticut Office of Policy and Management website: www.ct.gov/opm

Smith, M. (2018). Sessions' withdrawal of Justice Department manuals on DMC leaves states 'directionless'. *Juvenile Justice Information Exchange, July 11*. Retrieved from https://jjie.org/2018/07/11/sessions-withdrawal-of-justice-department-manuals-on-dmc-leaves-states-directionless/.

Spinney, E. Cohen, M., Feyerherm, W., Stephenson, R., Yeide, M. & Hopps, M. (2014). *Case studies of nine jurisdictions that reduced disproportionate minority contact in their juvenile justice systems* (Document No. 250301). Bethesda, MD: Development Services Group. Retrieved from The National Criminal Justice Reference Service website: www.ncjrs.gov

Steinhart, D. (2001). *Special detention cases: Strategies for handling difficult populations pathways to juvenile detention reform*. Baltimore: Annie E. Casey Foundation.

Tracy, P. (2005). Race, ethnicity, and juvenile justice. In D. F. Hawkins & K. Kempf-Leonard (Eds.), *Our children, their children: Confronting racial and ethnic differences in American juvenile justice* (pp. 245–269). Chicago: University of Chicago Press.

Ward, G., & Kupchik, A. (2009). Accountable to what? Professional orientations towards accountability-based juvenile justice. *Punishment & Society, 11*, 85–109.

Appendix A: Statewide Analysis Results

Table A1. Statewide Variable Frequencies (n=97,489)

Variable	Value	n	%
Independent Variables			
Race/ethnicity	White	34,041	35
	Black	51,729	53
	Latino	8,802	9
	Native American	2,021	2
	Asian/Pacific Islander	896	1
Gender	Female	25,561	26
	Male	71,928	73
Age	Younger to older	Mean = 13.6	
Type of crime			
Property	No	78,434	80
	Yes	19,055	20
Person	No	82,845	85
	Yes	14,644	15
Drug	No	91,178	94
	Yes	6,311	6
Weapon	No	93,341	96
	Yes	4,148	4
Other	No	44,158	45
	Yes	53,331	55
Severity score	Less severe to more severe	Mean = 6.6	
Number of charges	Fewer to greater charges	Mean = 1.7	
Prior referrals	Fewer to greater prior referrals	Mean = 1.9	
Risk score[a]	Low to higher risk	Mean = 6.6	
Needs score[b]	Low to higher needs	Mean = 10.5	
School related	No	44,403	45
	Yes	53,086	55
Region			
Central	Yes	26,000	27
Western	Yes	15,865	16
Eastern	Yes	19,606	20
Piedmont	Yes	36,018	37
Dependent Variables			
Intake	Released/closed	19,478	20
	Diverted	27,998	28
	Approved/petitioned	50,013	52
Adjudication[c]	No	28,111	56
	Yes	21,902	44
Judicial disposition	Community-based	14,595	86
	Out-of-home placement	2,262	13

[a]Risk score missing cases: n=15,398 or 15.8%.
[b]Needs score missing cases: n=18,535 or 19.0%.
[c]Cases do not add-up from those adjudicated to judicial disposition, missing 23% or 5,045 cases.

Table A2. Statewide Variable Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. White	1.00																	
2. Black	-	1.00																
3. Latino	-	-	1.00															
4. Native American	-	-	-	1.00														
5. Asian/PI	-	-	-	-	1.00													
6. Gender	0.01	-0.01**	0.03**	0.03**	-0.01	1.00												
7. Age	0.01*	-0.01**	0.02**	-0.01	-0.02**	-0.06**	1.00											
8. Property	-0.06**	-0.06**	0.04	-0.02**	-0.01*	0.05**	0.08**	1.00										
9. Person	-0.09**	0.02**	-0.02**	0.01	0.03	0.05**	0.01	-0.21**	1.00									
10. Drugs	0.06**	-0.08**	0.03**	0.02	-0.01	0.04**	0.05**	-0.13**	-0.11**	1.00								
11. Weapon	0.04**	-0.05**	0.02**	-0.01	0.01	0.04**	-0.13**	-0.10**	-0.09**	-0.06**	1.00							
12. Other	0.01**	-0.01**	-0.01**	0.02**	0.01	-0.12**	-0.01**	-0.54**	-0.46**	-0.29**	-0.23**	1.00						
13. Severity score	-0.05**	0.06**	-0.01**	-0.01**	0.01	0.09**	-0.03**	-0.01	0.38**	-0.04**	-0.03**	-0.24**	1.00					
14. # of charges	-0.02**	0.03**	-0.01	-0.01**	-0.01	0.08**	0.05**	0.10**	0.03**	-0.01*	-0.03**	0.01	0.04**	1.00				
15. Prior referrals	-0.12**	0.13**	-0.03**	0.01	0.01	0.11**	0.16**	0.06**	0.05**	-0.03**	-0.06**	-0.05**	0.07**	0.12**	1.00			
16. Risk score	-0.12**	0.13**	-0.01**	-0.01*	0.01	0.01	0.17**	0.07**	0.06**	0.02**	-0.06**	-0.08**	0.10**	0.19**	0.65**	1.00		
17. Needs score	-0.01	0.02**	-0.02**	0.01	0.02**	0.01	0.17**	0.05**	0.04**	0.03**	-0.05**	-0.05**	0.09**	0.17**	0.42**	0.78**	1.00	
18. School related	0.05**	-0.05**	0.01	0.02**	-0.01	-0.04**	-0.14**	-0.23**	-0.11**	0.08**	0.10**	0.18**	-0.11**	-0.20**	-0.14**	-0.13**	-0.11**	1.00

* p <.05, **p < .01.

Table A3. Logistic Regression Results: Approved vs. Not Approved

Variable	Not Approved (0) vs. Approved (1)					
	Statewide	Wake	Mecklenburg	Guilford	Forsyth	Cumberland
Race/ethnicity						
Black	0.04 (1.04)	0.23* (1.26)	0.33** (1.39)	0.23** (1.26)	0.02 (1.01)	0.39** (1.47)
Latino	0.02 (1.01)	0.49** (1.63)	0.12 (1.12)	0.11 (1.11)	0.07 (1.07)	NA NA
Native American	0.51** (1.67)					
Asian/ Pacific Islander	-0.02 (0.98)					
Other[a]						0.23 (1.26)
Gender	0.31** (1.36)	0.44** (1.56)	0.66** (1.94)	0.23** (1.26)	0.41** (1.51)	0.26** (1.30)
Age	0.12* (1.13)	0.03 (1.03)	0.16** (1.17)	0.04 (1.04)	0.02 (1.02)	0.15** (1.16)
Type of crime						
Property	0.13 (1.13)	0.06 (1.06)	0.39** (1.48)	0.02 (1.02)	0.12 (1.12)	0.12 (1.13)
Person	-0.03 (0.97)	-0.02 (0.99)	-0.04 (0.96)	-0.22 (0.80)	-0.05 (0.95)	0.18 (1.20)
Drug	-0.19** (0.82)	-0.35* (0.79)	-0.29** (0.75)	0.24 (1.27)	-0.08 (0.93)	-0.09 (0.92)
Weapon	0.10* (1.11)	0.59 (1.80)	0.53* (1.69)	0.83** (1.69)	-0.60 (0.55)	0.04 (1.04)
Severity score	0.11** (1.11)	0.11** (1.12)	0.13** (1.14)	0.08** (1.09)	0.12** (1.24)	0.05** (1.06)
Number of charges	0.42** (1.52)	0.36** (1.43)	0.69** (1.99)	0.41** (1.50)	0.50** (1.64)	0.47** (1.60)
Prior referrals	0.31** (1.36)	0.46** (1.58)	0.27** (1.30)	0.28** (1.32)	0.14** (1.15)	0.19** (1.21)
Risk score	0.10** (1.10)	0.10** (1.10)	0.11** (1.12)	0.15** (1.16)	0.08** (1.09)	0.12** (1.13)
Needs score	0.09** (1.11)	0.13** (1.13)	0.12** (1.13)	0.04** (1.04)	0.05** (1.05)	0.09** (1.09)

School related	-0.55** (0.58)	-0.53** (0.59)	-0.50** (0.06)	-0.18* (0.84)	-0.74** (0.48)	-0.74** (0.48)
Region						
Central	0.10** (1.10)					
Western	0.79** (2.18)					
Eastern	0.05* (1.05)					
-2 Log Likelihood	77,342.3	3,868.7	6,849.1	4,330.1	3,521.7	3,981.1
n	78,937	4,122	9,227	5,668	3,663	4,833

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. Region represented by dummy variables with Piedmont as reference group. To read, non-approved (0) versus approved/petitioned (1).

[a] "Other" applies to Cumberland only.

*p <.05; **p < .01.

Table A4. Statewide Multinomial Regression Intake Results

Variable	Released/closed v. Approved/petitioned (1)	Released/closed v. Diverted (2)	Diverted v. Approved/petitioned (3)
Race/ethnicity			
Black	-0.20** (0.82)	-0.35** (0.71)	0.14** (1.15)
Latino	-0.20** (0.83)	-0.30** (0.74)	0.09** (1.10)
Native American	0.05 (1.05)	-0.73** (0.48)	0.78** (2.19)
Asian/ Pacific Islander	-0.08 (0.92)	-0.07 (0.93)	-0.01 (0.99)
Gender	0.35** (1.41)	0.06** (1.06)	0.28** (1.33)
Age	0.15** (1.16)	0.05** (1.05)	0.10** (1.06)
Type of crime			
Property	0.27** (1.31)	0.22** (1.25)	0.05 (1.05)
Person	0.12** (1.25)	0.23** (1.25)	-0.11** (0.89)
Drug	-0.11* (0.89)	0.11** (1.12)	-0.22** (0.80)
Weapon	0.08 (1.08)	-0.03 (0.97)	0.11 (1.12)
Severity score	0.10** (1.10)	-0.01 (0.99)	0.11** (1.11)
Number of charges	0.53** (1.17)	0.16** (1.17)	0.37** (1.45)
Prior referrals	0.03* (1.03)	-0.54** (0.58)	0.57** (1.77)
Risk score	0.05** (1.06)	-0.06** (0.94)	0.11** (1.12)
Needs score	0.19** (1.21)	0.13** (1.14)	0.06** (1.06)
School related	-0.37** (0.69)	0.28** (1.32)	-0.64** (0.53)
Region			
Central	0.09** (0.69)	-0.02 (0.98)	0.10** (1.11)
Western	0.92** (2.51)	0.21** (1.24)	0.71** (2.03)
Eastern	0.40** (1.50)	0.51** (1.67)	-0.11** (0.90)

-2 Log Likelihood 117,196.1, n = 78,937.

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. Region represented by dummy variables with Piedmont as reference group. To read, released/closed (0) vs. approved/petitioned (1); released/closed (0) vs. diverted (1); diverted (0) vs. approved/petitioned (1).

*p <.05, **p < .01.

Table A5. Statewide Race-Specific Regression Intake Results: Released/Closed vs. Diverted

Variable	White (1)	Black (2)	Latino (3)	Native American (4)	Asian/Pacific Islander (5)
Gender	0.08* (1.09)	0.07* (1.07)	0.01 (1.01)	0.35 (1.43)	-0.20 (0.82)
Age	0.08** (1.08)	0.03** (1.03)	0.05* (1.04)	0.09 (1.09)	0.03 (1.03)
Type of crime					
Property	0.25** (1.28)	0.22** (1.17)	0.03 (1.02)	0.64 (1.89)	0.31 (1.36)
Person	0.34** (1.41)	0.17** (1.18)	0.14 (1.14)	-0.02 (0.98)	0.20 (1.22)
Drug	0.15* (1.17)	0.03 (1.03)	0.11 (1.11)	1.14** (3.12)	0.43 (1.54)
Weapon	-0.11 (0.90)	0.04 (1.05)	0.19 (1.21)	-0.13 (0.75)	-0.39 (0.67)
Severity score	-0.02 (0.98)	0.02 (1.02)	0.03* (1.03)	0.01 (1.01)	0.02 (1.02)
Number of charges	1.00** (1.10)	0.16** (1.18)	0.30** (1.35)	0.61** (1.84)	0.07 (1.07)
Prior referrals	-0.58** (0.56)	-0.49 (0.61)	-0.61** (0.55)	-0.45** (0.64)	-0.56** (0.57)
Risk score	-0.05** (0.95)	-0.06** (0.93)	-0.05** (0.98)	-0.07 (0.44)	-0.03 (0.97)
Needs score	1.37** (1.15)	0.13** (1.14)	0.13** (1.14)	0.17** (1.19)	0.11** (1.12)
School related	0.31** (1.37)	0.25** (1.29)	0.24** (1.27)	0.10 (1.10)	0.01 (1.01)
Region					
Central	-0.41** (0.66)	0.17** (1.18)	0.03 (1.03)	-1.67* (0.19)	-0.33* (0.72)
Western	-0.13** (0.87)	0.63** (1.82)	0.62** (1.87)	-1.84** (0.16)	-0.03 (0.98)
Eastern	0.34 (1.41)	0.62** (1.87)	0.28** (1.32)	-0.82 (0.44)	0.60** (1.83)
n	23,818	40,675	7,339	1,068	2,372

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. Region represented by dummy variables with Piedmont as reference group. To read, released/closed (0) versus diverted (1).
*p <.05, **p < .01.

Table A6. Statewide Race-Specific Regression Results: Released/Closed vs. Approved

Variable	White (1)	Black (2)	Latino (3)	Native American (4)	Asian/Pacific Islander (5)
Gender	0.44** (1.55)	0.32* (1.38)	0.50* (1.64)	0.24 (1.27)	-0.26 (0.77)
Age	0.17** (1.19)	0.15** (1.16)	0.11** (1.11)	0.17** (1.19)	0.17** (1.18)
Type of crime**					
Property	0.27** (1.31)	0.33** (1.39)	0.03 (1.03)	0.34 (1.40)	0.32 (1.37)
Person	0.16** (1.31)	0.12* (1.12)	0.04 (1.04)	1.09** (2.98)	0.47** (1.59)
Drug	-0.09 (0.92)	-0.09 (0.91)	-0.10 (0.90)	0.05 (1.05)	0.11 (1.10)
Weapon	0.10 (1.10)	0.16 (1.18)	0.09 (1.09)	-0.02 (0.98)	-0.14 (0.87)
Severity score	0.12** (1.12)	0.09** (1.10)	0.14** (1.16)	0.03 (1.03)	0.13** (1.38)
Number of charges	0.17** (1.87)	0.55** (1.73)	0.69** (1.99)	0.90** (2.46)	0.47** (1.59)
Prior referrals	0.11** (1.11)	0.02 (1.02)	-0.03 (0.97)	0.17 (1.18)	0.07* (1.07)
Risk score	0.06** (1.07)	0.06** (1.06)	0.04* (1.04)	0.09* (1.16)	0.08** (1.08)
Needs score	0.21** (1.24)	0.17** (1.18)	0.21** (1.20)	0.25** (1.29)	0.18** (1.19)
School related	-0.51** (0.61)	-0.27** (0.76)	-0.03 (0.97)	-1.15** (0.32)	-0.76** (0.47)
Region					
Central	-0.52** (0.59)	0.33** (1.39)	0.20* (1.22)	-1.23* (0.29)	-0.16 (0.85)
Western	0.57** (1.78)	1.24** (3.65)	1.53** (4.61)	-1.08 (0.34)	0.53** (1.70)
Eastern	0.27 (1.31)	0.45** (1.56)	0.66** (1.93)	-1.99* (0.14)	0.17 (1.19)
n	23,818	40,675	7,339	1,068	2,372

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. Region represented by dummy variables with Piedmont as reference group. To read, released/closed (0) versus approved (1).
*p <.05, **p < .01.

Table A7. Statewide Race-Specific Regression Results: Diverted vs. Approved

Variable	White (1)	Black (2)	Latino (3)	Native American (4)	Asian/Pacific Islander (5)
Gender	0.35** (1.42)	0.25** (1.29)	0.49** (1.31)	0.11 (0.89)	-0.07 (0.94)
Age	0.09** (1.10)	0.12** (1.12)	0.06** (1.06)	0.09 (1.09)	0.14** (1.15)
Type of crime**					
Property	0.02 (1.02)	0.11** (1.11)	0.01 (1.01)	-0.30 (0.74)	0.01 (1.01)
Person	-0.18** (0.84)	-0.12 (0.89)	-0.10 (0.90)	1.12* (3.05)	-0.05 (0.95)
Drug	-0.24** (0.79)	0.12 (1.12)	-0.21 (0.81)	-1.09** (0.34)	-0.33 (0.72)
Weapon	0.20** (1.23)	0.09** (1.10)	-0.10 (0.90)	0.11 (1.12)	0.26 (1.29)
Severity score	0.13** (1.38)	0.51** (1.67)	0.12** (1.33)	0.02 (1.02)	0.11** (1.12)
Number of charges	0.36** (1.43)	0.38** (1.47)	0.39** (1.48)	0.29** (1.34)	0.39** (1.48)
Prior referrals	0.68** (1.98)	-0.53** (0.59)	0.58** (1.79)	0.63** (1.87)	0.63** (1.88)
Risk score	0.11** (1.12)	0.12** (1.13)	0.07** (1.07)	0.16** (1.12)	0.10** (1.10)
Needs score	0.08** (1.08)	0.04** (1.04)	0.08** (1.08)	0.08** (1.08)	0.06** (1.07)
School related	-0.82** (0.44)	-0.53** (0.59)	-0.60** (0.55)	-1.25** (0.29)	-0.76** (0.47)
Region					
Central	-0.12** (0.89)	0.16** (1.17)	0.18* (1.19)	0.45 (1.56)	0.16 (1.18)
Western	0.71** (2.03)	0.62** (1.85)	0.91** (2.47)	0.75 (2.13)	0.55** (1.74)
Eastern	-0.07 (0.93)	-0.18** (0.84)	0.38** (1.47)	-1.16 (0.31)	-0.43** (0.65)
n	23,818	40,675	7,339	1,068	2,372

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. Region represented by dummy variables with Piedmont as reference group. To read, diverted (0) versus approved (1).
*p <.05, **p < .01.

Table A8. Statewide Logistic Regression Results: Adjudication

Variable	Main (1)	White (2)	Black (3)	Latino (4)	Native American (5)	Asian/Pacific Islander (6)
Race/ethnicity						
Black	-0.23** (0.80)					
Latino	-0.09* (0.91)					
Native American	-0.29** (0.75)					
Asian/ PI	-0.14* (0.87)					
Gender	-0.02 (0.98)	0.02 (1.02)	-0.04 (0.96)	-0.10 (0.90)	0.49 (1.63)	0.03 (1.03)
Age	0.04** (1.04)	0.03* (1.03)	0.05 (1.05)	0.05 (1.05)	0.08 (1.08)	0.04 (1.04)
Type of crime						
Property	-0.09** (0.92)	-0.01 (0.99)	-0.12 (0.89)	-0.08 (0.92)	-0.57* (0.57)	-0.08 (0.93)
Person	-0.06 (0.94)	-0.05 (0.96)	-0.10 (0.90)	-0.01 (0.99)	0.16 (1.18)	0.15 (1.17)
Drug	0.02 (1.02)	-0.01 (0.99)	0.04 (1.04)	0.02 (1.02)	-0.35 (0.70)	0.42 (1.51)
Weapon	0.18** (1.19)	0.34** (1.40)	0.03 (1.03)	0.28 (1.33)	0.50 (1.65)	0.12 (1.13)
Severity score	0.02** (1.02)	0.01 (1.01)	0.02 (1.02)	0.04** (1.04)	0.04 (1.04)	0.04* (1.04)
Number of charges	-0.25** (0.78)	-0.26** (0.77)	-0.25 (0.78)	-0.26** (0.77)	-0.13* (0.88)	-0.26** (0.77)
Prior referrals	-0.13** (0.88)	-0.17** (0.84)	-0.12 (0.89)	-0.13** (0.88)	-0.15* (0.86)	-0.08 (0.92)
Risk score	0.03** (1.03)	0.04** (1.04)	0.02 (1.02)	0.03** (1.03)	0.01 (1.01)	0.04 (1.04)
Needs score	0.01** (1.01)	0.01** (1.01)	0.01 (1.02)	0.02* (1.02)	0.00 (1.00)	-0.01 (0.99)
School related	0.17** (1.18)	0.03 (1.04)	0.25 (1.28)	0.12 (1.13)	0.19 (1.21)	0.17 (1.18)
Region						
Central	0.03 (1.03)	-0.22** (0.80)	0.13 (1.13)	0.01 (1.01)	-0.59 (0.55)	-0.04 (0.97)
Western	0.13** (1.14)	0.02 (1.02)	0.21 (1.23)	0.32** (1.37)	-0.83 (0.44)	0.05 (1.05)
Eastern	0.21** (1.23)	0.06 (1.06)	0.26 (1.29)	0.48** (1.61)	-1.08 (0.34)	0.18 (1.20)
-2 Log Likelihood	50,151.3	16,947.8	26,407.1	4,417.5	711.7	1,527.5
n	37,938	12,712	20,161	3,367	547	1,151

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. Region represented by dummy variables with Piedmont as reference group. To read, non-adjudicated (0) versus adjudicated (1).
*p <.05, **p < .01.

Table A9. Statewide Logistic Regression Results: Disposition

Variable	Main (1)	White (2)	Black (3)	Latino (4)
Race/ethnicity				
Black	0.33** (1.39)			
Latino	0.03 (1.03)			
Native American	0.27 (1.31)			
Asian/Pacific Islander	0.21 (1.23)			
Gender	0.12 (1.13)	-0.05 (0.95)	0.26** (1.29)	-0.24 (0.78)
Age	0.09** (1.10)	0.01 (1.01)	0.16** (1.17)	-0.08 (0.93)
Type of crime				
Property	-0.15 (0.87)	-0.46** (0.63)	0.02 (1.02)	-0.07 (0.93)
Person	0.01 (1.01)	0.06 (1.06)	0.08 (1.09)	-0.15 (0.86)
Drug	0.08 (1.09)	-0.56* (0.57)	0.44** (1.55)	0.02 (1.02)
Weapon	-0.16 (0.86)	-0.45 (0.64)	0.21 (1.23)	-1.32 (0.27)
Severity score	0.07** (1.08)	0.07** (1.07)	0.07** (1.08)	0.08** (1.09)
Number of charges	0.24** (1.27)	0.24** (1.27)	0.25** (1.28)	0.18** (1.20)
Prior referrals	0.05** (1.05)	-0.01 (0.99)	0.06** (1.06)	0.01 (1.01)
Risk score	0.14** (1.15)	0.18** (1.20)	0.13** (1.14)	0.14** (1.15)
Needs score	0.01 (1.01)	0.01 (1.01)	0.02* (1.02)	0.01 (1.01)
School related	-0.86** (0.43)	-1.01** (0.36)	-0.67** (0.51)	-1.34** (0.26)
Region				
Central	0.06 (1.06)	0.14 (1.15)	0.01 (1.01)	0.20 (1.22)
Western	0.15 (1.16)	0.22 (1.24)	0.21 (1.23)	0.27 (1.31)
Eastern	0.40** (1.49)	0.53** (1.70)	0.33** (1.39)	0.74** (2.10)
-2 Log Likelihood	8,251.5	2,450.1	4,696.0	677.4
n	14,106	5,334	6,870	1,262

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. Region represented by dummy variables with Piedmont as reference group. To read, community-based (0) versus out-of-home placement (1).
*p <.05, **p < .01.

Appendix B: Wake County Analysis Results

Table B1. Wake County Variable Distributions (n=5,736)

Variable	Value	n	%
Independent Variables			
Race/ethnicity	White	1,061	18
	Black	3,948	69
	Latino	727	13
Gender	Female	1,409	25
	Male	4,327	75
Age	Younger to older	Mean = 13.9	
Type of crime			
Property	No	4,061	71
	Yes	1,675	29
Person	No	4,778	83
	Yes	958	17
Drug	No	5,277	92
	Yes	459	8
Weapon	No	5,642	98
	Yes	94	2
Other	No	3,186	56
	Yes	2,550	45
Severity score	Less severe to more severe	Mean = 3.0	
Number of charges	Fewer to greater charges	Mean = 1.8	
Prior referrals	Fewer to greater prior referrals	Mean = 1.3	
Risk score[a]	Low to higher risk	Mean = 6.4	
Needs score[b]	Low to higher needs	Mean = 10.1	
School related	No	3,397	59
	Yes	2,339	41
Dependent Variables			
Intake	Released/closed	1,256	22
	Diverted	1,195	21
	Approved/petitioned	3,285	57
Adjudication[c]	No	1,992	61
	Yes	1,293	39
Judicial disposition	Community-based	842	89
	Out-of-home placement	108	11

Note. Native American (n=1) and other (n=94) for a total of 1.5% were coded as Latino.
[a]Risk score missing cases: n=1,358 or 24%.
[b]Needs score missing cases: n=1,614 or 28%.
[c]Cases do not add-up from those adjudicated to judicial disposition, missing 26% or 343 cases.

Table B2. Wake County Variable Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. White	1.00															
2. Black	-	1.00														
3. Latino	-	-	1.00													
4. Gender	.01	-.04**	-.04**	1.00												
5. Age	.03**	-.06**	.06**	-.02	1.00											
6. Property	-.05**	.05*	-.02	.06**	.06**	1.00										
7. Person	-.02	.03	.02	.07**	-.06**	-.29**	1.00									
8. Drugs	.11**	-.13**	.06	.08**	.07**	-.19**	-.13**	1.00								
9. Weapon	.02	-.03*	.02	.03*	-.04**	-.07**	-.06**	-.04**	1.00							
10. Other	-.01	.01	.01	-.15**	.02	-.08**	-.40**	-.26**	-0.12**	1.00						
11. Severity score	-.03	.03*	-.01	.11**	-.01	-.07**	.42**	-.04**	0.06**	-0.25**	1.00					
12. # of charges	-.01	.01	.09	-.02	.07**	.17**	-.02	-.06**	-0.01	-0.11**	0.04**	1.00				
13. Prior referrals	-.14**	.11**	-.02	.14**	.14**	.07**	.05**	-.04**	0.02	-0.08**	0.06**	0.11**	1.00			
14. Risk score	-.21**	.18**	.01	.16**	.18**	.06**	.07**	.01	0.02	-0.12**	0.05**	0.20**	0.62**	1.00		
15. Needs score	-.16**	.13**	.01	.11**	.18**	-.04**	.05**	.02	0.03	-0.10	0.13**	0.16**	0.40**	0.79**	1.00	
16. School related	-.02	.04**	-.03*	-.10**	-.10**	-.17**	-.09**	.09**	0.01	0.17**	-0.11**	-0.18**	-0.12**	-0.11**	-0.08	1.00

* p <.05, **p < .01.

Table B3. Wake County Multinomial Regression Intake Results

Variable	Released/closed v. Approved/petitioned (1)	Released/closed v. Diverted (2)	Diverted v. Approved/petitioned (3)
Race/ethnicity			
Black	0.25* (1.29)	0.04 (1.03)	0.21** (1.24)
Latino	0.20 (1.23)	-0.49** (0.61)	0.70** (2.01)
Gender	0.40** (1.49)	-0.07 (0.93)	0.47** (1.60)
Age	0.05 (1.05)	0.03 (1.03)	0.02 (1.01)
Type of crime			
Property	0.19 (1.21)	0.21 (1.23)	-0.02 (0.98)
Person	0.32* (1.38)	0.53** (1.69)	-0.21** (0.82)
Drug	-0.32 (0.72)	0.06 (1.07)	-0.39 (0.67)
Weapon	0.87** (2.39)	0.45 (1.57)	0.42 (1.52)
Severity score	0.11** (1.12)	0.02 (1.01)	0.11** (1.11)
Number of charges	0.38** (1.47)	0.04 (1.03)	0.35** (1.42)
Prior referrals	1.87** (1.21)	-0.53** (0.59)	0.71** (2.04)
Risk score	0.08** (1.08)	-0.03 (0.97)	0.11** (1.11)
Needs score	0.21** (1.23)	0.13** (1.13)	0.08** (1.08)
School related	-0.58** (0.56)	-0.09 (0.92)	-0.26** (0.77)

-2 Log Likelihood 6,097.3, n = 4,122.

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved/petitioned (1); released/closed (0) vs. diverted (1); diverted (0) vs. approved/petitioned (1).

*p <.05, **p < .01.

Table B4. Wake County Race-Specific Regression Intake Results: Released/Closed vs. Diverted

Variable	White (1)	Black (2)	Latino (3)
Gender	0.31 (1.36)	-0.19 (0.83)	-0.10 (0.91)
Age	0.09 (1.09)	0.01 (1.01)	0.21 (1.24)
Type of crime			
Property	0.72** (2.04)	0.08 (1.08)	-0.15 (0.86)
Person	0.66* (1.94)	0.51* (1.67)	0.75 (2.12)
Drug	0.16 (1.17)	0.23 (1.26)	-0.50 (0.61)
Weapon[a]	-0.03 (0.98)	0.78 (2.20)	
Severity score	0.01 (1.01)	0.01 (1.01)	0.02 (1.02)
Number of charges	0.11 (1.11)	0.03 (1.03)	-0.20 (0.82)
Prior referrals	-0.06 (0.94)	-0.60** (0.55)	-0.74* (0.94)
Risk score	-0.07 (0.93)	-0.01 (0.55)	-0.05 (0.95)
Needs score	0.15** (1.16)	0.13** (1.13)	0.08 (1.09)
School related	-0.15 (0.86)	-0.08 (0.92)	-0.06 (0.94)
n	817	2,789	446

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. differences. To read, released/closed (0) vs. diverted (1).

[a]Latino cases dropped from analysis due to too few cases.

*p <.05, **p < .01.

Table B5. Wake County Race-Specific Regression Results: Released/Closed vs. Approved

Variable	White (1)	Black (2)	Latino (3)
Gender	0.88**	0.23	0.63
	(2.41)	(1.25)	(1.87)
Age	0.02	0.07	-0.04
	(1.01)	(1.07)	(0.96)
Type of crime			
Property	0.06	0.31*	-0.10
	(1.06)	(1.37)	(0.90)
Person	0.21	0.50	-0.28
	(1.23)	(1.64)	(0.75)
Drug	-0.58	-0.07	-0.52
	(0.56)	(0.93)	(0.60)
Weapon[a]	-0.06	1.29	
	(0.94)	(1.66)	
Severity score	0.13**	0.10**	0.14**
	(1.13)	(1.11)	(1.15)
Number of charges	0.34**	0.44**	0.10
	(1.40)	(1.55)	(1.10)
Prior referrals	0.39	0.16	0.03
	(1.48)	(1.17)	(1.03)
Risk score	0.11	0.09**	0.06
	(1.11)	(1.10)	(1.06)
Needs score	0.19	0.21**	0.21**
	(1.21)	(1.23)	(1.22)
School related	-0.88**	-0.49**	-0.64*
	(0.42)	(0.61)	(0.53)
n	817	2,789	446

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved (1).

[a]Latino cases dropped from analysis due to too few cases.

*p <.05, **p < .01.

Table B6. Wake County Race-Specific Regression Results: Diverted vs. Approved

Variable	White (1)	Black (2)	Latino (3)
Gender	0.57**	0.42**	0.72
	(1.77)	(1.51)	(2.06)
Age	-0.07	0.06	-0.26*
	(0.96)	(1.07)	(0.77)
Type of crime			
Property	-0.65**	0.23	0.05
	(0.52)	(1.26)	(1.05)
Person	-0.45	-0.02	-1.03*
	(0.64)	(0.98)	(0.36)
Drug	-0.75**	-0.30	-0.01
	(0.62)	(0.74)	(0.99)
Weapon[a]	-0.04	0.51	
	(0.26)	(1.67)	
Severity score	0.12**	0.10**	0.12**
	(1.12)	(1.10)	(1.12)
Number of charges	0.23**	0.41**	0.30
	(1.26)	(1.50)	(1.35)
Prior referrals	0.46*	0.76**	0.76*
	(1.58)	(2.13)	(2.14)
Risk score	0.18**	0.10**	0.11
	(1.20)	(1.10)	(1.11)
Needs score	0.04	0.08**	0.12**
	(1.04)	(1.08)	(1.13)
School related	-0.73**	-0.41**	-0.57*
	(0.48)	(0.67)	(0.56)
n	817	2,789	446

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, diverted (0) vs. approved (1).

[a]Latino cases dropped from analysis due to too few cases.

*p <.05, **p < .01.

Table B7. Wake County Logistic Regression Results: Adjudication

Variable	Main (1)	White (2)	Black (3)	Latino (4)
Race/ethnicity				
Black	-0.25* (0.78)			
Latino	-0.39* (0.68)			
Gender	-0.03 (0.97)	-0.26 (0.77)	-0.06 (0.94)	0.57 (1.77)
Age	-0.04 (0.96)	-0.05 (0.95)	-0.06 (0.94)	0.14 (1.15)
Type of crime				
Property	0.13 (1.14)	0.36 (1.43)	0.01 (1.01)	0.43 (1.54)
Person	-0.18 (0.83)	-0.33 (0.72)	-0.28 (0.76)	0.67 (1.95)
Drug	0.48** (1.62)	0.59 (1.81)	0.43 (1.54)	0.18 (1.20)
Weapon[a]	0.07 (1.08)	0.05 (1.05)	0.15 (1.16)	
Severity score	0.04** (1.04)	0.08** (1.09)	0.03** (1.04)	-0.02 (0.98)
Number of charges	-0.25** (0.78)	-0.33** (0.72)	-0.22** (0.81)	-0.42** (0.66)
Prior referrals	-0.16** (0.85)	-0.36** (0.70)	-0.16** (0.86)	-0.12 (0.88)
Risk score	0.04 (1.04)	0.08 (1.08)	0.05** (1.05)	0.01 (1.01)
Needs score	-0.01 (0.99)	0.03 (1.03)	-0.03 (0.98)	0.05 (1.05)
School related	0.20 (1.22)	0.09 (1.10)	0.15 (1.16)	0.73** (2.08)
-2 Log Likelihood	2,930.0	419.5	2,098.8	330.5
n	2,266	339	1,619	269

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, non-adjudicated (0) vs. adjudicated (1).

[a]Latino cases dropped from analysis due to too few cases.

*p <.05, **p < .01.

Table B8. Wake County
Logistic Regression Results: Disposition

Variable	Main (1)
Race/ethnicity[a]	
Black	0.61
	(1.83)
Gender	0.71
	(2.02)
Age	0.03
	(1.03)
Type of crime	
Property	-1.06**
	(0.35)
Person	-0.93
	(0.39)
Drug	-1.99*
	(0.14)
Weapon	0.86
	(2.36)
Severity score	0.09**
	(1.10)
Number of charges	0.22**
	(1.25)
Prior referrals	0.06
	(1.06)
Risk score	0.08**
	(1.08)
Needs score	0.05
	(1.05)
School related	-0.59
	(0.56)
-2 Log Likelihood	376.6
n	714

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, community-based (0) vs. out-of-home placement (1).
[a]Latino cases dropped from analysis due to too few cases.
*p <.05, **p < .01.

Appendix C: Mecklenburg County Analysis Results

Table C1. Mecklenburg County Variable Frequencies (n=11,035)

Variable	Value	n	%
Independent Variables			
Race/ethnicity	White	1,268	12
	Black	8,361	76
	Latino	1,216	12
Gender	Female	2,613	24
	Male	8,422	76
Age	Younger to older	Mean = 13.6	
Type of crime			
Property	No	8,656	78
	Yes	2,379	22
Person	No	9,191	83
	Yes	1,844	17
Drug	No	10,218	93
	Yes	817	7
Weapon	No	10,140	92
	Yes	895	8
Other	No	5,935	54
	Yes	5,100	46
Severity score	Less severe to more severe	Mean = 2.6	
Number of charges	Fewer to greater charges	Mean = 2.0	
Prior referrals	Fewer to greater prior referrals	Mean = 1.6	
Risk score[a]	Low to higher risk	Mean = 7.1	
Needs score[b]	Low to higher needs	Mean = 10.1	
School related	No	6,929	62
	Yes	4,206	38
Dependent Variables			
Intake	Released/closed	3,827	35
	Diverted	2,304	21
	Approved/petitioned	4,904	44
Adjudication[c]	No	3,674	75
	Yes	1,230	25
Judicial disposition	Community-based	681	74
	Out-of-home placement	237	26

Note. Native Americans (n=8) and Asia/Pacific Islanders (n=182) for a total of 1.7% of cases collapsed into Latino.
[a]Risk score missing cases: n=1,684 or 14%.
[b]Needs score missing cases: n=1,803 or 14%.
[c]Cases do not add-up from those adjudicated to judicial disposition, missing 25% or 312 cases.

Table C2. Mecklenburg County Variable Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. White	1.00															
2. Black	-	1.00														
3. Latino	-	-	1.00													
4. Gender	-.05**	.02	.03**	1.00												
5. Age	.03**	-.01	-.01	-.07**	1.00											
6. Property	-.02*	.02*	-.01	.05**	.10**	1.00										
7. Person	-.03**	.03**	.01	.05**	-.01	-.24**	1.00									
8. Drugs	.02*	-.03**	.02	.04**	.07**	-.15**	.13**	1.00								
9. Weapon	.03**	-.08**	.07**	.08**	-.27**	-.16**	-.13**	-.08**	1.00							
10. Other	.01	.02*	-.04**	-.15**	.03**	-.49**	-.42**	-.26**	-.28**	1.00						
11. # of charges	-.02*	.02	.01	.09**	.08**	.03**	.02*	-.03**	-.03**	-.01	1.00					
12. Severity score	-.04**	.06**	-.03**	.08**	.01	.01	.40**	-.06**	-.03**	-.26**	.01	1.00				
13. Prior referrals	-.12**	.15**	-.06**	.15**	.20**	.07**	.06**	-.03**	-.11**	-.03**	.13**	.10**	1.00			
14. Risk score	-.13**	.16**	-.07**	.22**	.20**	.09**	.09**	-.01	-.11**	-.07**	.20**	.12**	.70**	1.00		
15. Needs score	-.10**	.13**	-.06**	.15**	.24**	.09**	.07**	.01	-.12**	-.06**	.21**	.11**	.51**	.82**	1.00	
16. School related	-.06**	.03**	.01	.05**	-.22**	-.17**	-.07**	.16**	.18**	.01	-.19**	-.09**	-.11**	-.12**	-.14**	1.00

* p <.05, **p < .01.

Table C3. Mecklenburg County Multinomial Regression Intake Results

Variable	Released/closed v. Approved/petitioned (1)	Released/closed v. Diverted (2)	Diverted v. Approved/petitioned (3)
Race/ethnicity			
Black	0.35**	0.04	0.31**
	(1.42)	(1.04)	(1.36)
Latino	0.32*	0.35**	-0.04
	(1.38)	(1.43)	(0.97)
Gender	0.75**	0.18**	0.57**
	(2.11)	(1.20)	(1.76)
Age	0.20**	0.09**	0.11**
	(1.23)	(1.10)	(1.12)
Type of crime			
Property	0.61**	0.39**	0.22**
	(1.85)	(1.48)	(1.25)
Person	0.10	0.25**	-0.14
	(1.11)	(1.28)	(0.87)
Drug	-0.34**	-0.06	-0.29*
	(0.71)	(0.95)	(0.75)
Weapon	0.71**	0.33**	0.38**
	(2.04)	(1.39)	(1.47)
Severity score	0.13**	-0.01	0.14**
	(1.14)	(0.99)	(1.14)
Number of charges	0.97**	0.46**	0.50**
	(2.63)	(1.59)	(1.65)
Prior referrals	0.06	-0.47**	0.53**
	(1.06)	(0.63)	(1.70)
Risk score	0.10**	-0.00	0.11**
	(1.11)	(1.00)	(1.11)
Needs score	0.21**	0.15**	0.06**
	(1.23)	(1.16)	(1.06)
School related	-0.35**	0.27**	-0.62**
	(0.71)	(1.32)	(0.54)

-2 Log Likelihood 12,762.0, n=9,227.

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved/petitioned (1); released/closed (0) vs. diverted (1); diverted (0) vs. approved/petitioned (1).

*p <.05, **p < .01.

Table C4. Mecklenburg County Race-Specific Regression Intake Results: Released/Closed vs. Diverted

Variable	White (1)	Black (2)	Latino (3)
Gender	0.08 (1.08)	0.17* (1.18)	0.45* (1.57)
Age	0.14** (1.15)	0.10** (1.10)	0.07 (1.08)
Type of crime			
Property	0.53** (1.69)	0.40** (1.50)	-0.03 (0.97)
Person	-0.05 (0.95)	0.37** (1.45)	-0.16 (0.85)
Drug	-0.02 (0.98)	-0.05 (0.95)	-0.30 (0.74)
Weapon	-0.24 (0.79)	0.58** (1.78)	-0.13 (0.87)
Severity score	-0.04 (0.96)	-0.01 (1.00)	-0.05 (0.95)
Number of charges	0.39** (1.48)	0.44** (1.56)	0.62** (1.86)
Prior referrals	-0.66** (0.52)	-0.42** (0.66)	-0.84** (0.43)
Risk score	-0.03 (0.97)	-0.01 (0.99)	0.08 (1.08)
Needs score	0.15** (1.16)	0.16** (1.17)	0.14** (1.15)
School related	0.62** (1.87)	0.28** (1.33)	0.02 (1.02)
-2 Log Likelihood	1,621.4	9,317.2	1,489.2
n	1,090	6,918	1,049

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. diverted (1).
*p <.05, **p < .01.

Table C5. Mecklenburg County Race-Specific Regression Results: Released/Closed vs. Approved

Variable	White (1)	Black (2)	Latino (3)
Gender	0.81**	0.67**	1.38**
	(2.25)	(1.96)	(3.98)
Age	0.13	0.20**	0.32**
	(1.14)	(1.22)	(1.38)
Type of crime			
Property	0.26	0.75**	-0.32
	(1.30)	(2.12)	(0.73)
Person[a]	-0.13	0.27*	-0.69*
	(0.88)	(1.31)	(0.50)
Drug	0.19	-0.36*	-0.91*
	(1.21)	(0.70)	(0.40)
Weapon	0.71	0.85**	-0.04
	(2.03)	(2.34)	(0.96)
Severity score	0.16**	0.12**	0.16**
	(1.17)	(1.12)	(1.17)
Number of charges	0.83**	0.97**	1.11**
	(2.30)	(2.63)	(3.04)
Prior referrals	0.02	0.08*	-0.14
	(1.02)	(1.08)	(0.87)
Risk score	0.11**	0.10**	0.20*
	(1.12)	(1.10)	(1.23)
Needs score	0.18	0.21**	0.20**
	(1.20)	(1.24)	(1.22)
School related	-0.32	-0.35**	-0.50*
	(0.73)	(0.71)	(0.61)
n	1,090	6,918	1,049

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved (1).

[a]Coefficient comparisons reveals statistically significant z score between person offense, Black, and Latino (zscore=2.64, p<.01).

*p <.05, **p < .01.

Table C6. Mecklenburg County Race-Specific Regression Results: Diverted vs. Approved

Variable	White (1)	Black (2)	Latino (3)
Gender	0.73**	0.51**	0.93**
	(2.08)	(1.66)	(2.55)
Age	-0.01	0.11**	0.25**
	(0.99)	(1.11)	(1.28)
Type of crime			
Property	-0.26	0.35**	-0.29
	(0.77)	(1.42)	(0.75)
Person	-0.08	-0.11	-0.54
	(0.92)	(0.90)	(0.59)
Drug	0.21	-0.32*	-0.62
	(1.24)	(0.73)	(0.54)
Weapon	0.95*	0.28	0.09
	(2.58)	(1.32)	(1.10)
Severity score	0.20**	0.12**	0.21**
	(1.22)	(1.13)	(1.24)
Number of charges	0.44**	0.52**	0.49**
	(1.55)	(1.68)	(1.63)
Prior referrals	0.69**	0.50**	0.70**
	(1.98)	(1.65)	(2.00)
Risk score	0.14	0.11**	0.13**
	(1.15)	(1.11)	(1.13)
Needs score	0.03	0.06**	0.06*
	(1.03)	(1.06)	(1.06)
School related	-0.94**	-0.63**	-0.52*
	(0.39)	(0.53)	(0.60)
n	1,090	6,918	1,049

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, diverted (0) vs. approved (1).
*p <.05, **p < .01.

Table C7. Mecklenburg County Logistic Regression Results: Adjudication

Variable	Main (1)	White (2)	Black (3)	Latino (4)
Race/ethnicity				
Black	-0.30**			
	(0.74)			
Latino	0.07			
	(1.07)			
Gender	-0.27**	0.59	-0.38**	-0.27
	(0.77)	(1.81)	(0.69)	(0.77)
Age	0.04	-0.10	0.06	-0.06
	(1.04)	(0.90)	(1.06)	(0.95)
Type of crime				
Property	0.01	0.49	0.06	-0.31
	(1.01)	(1.62)	(1.06)	(0.74)
Person	0.01	-0.24	0.08	-0.18
	(1.01)	(0.79)	(1.08)	(0.84)
Drug	-0.42*	-1.23*	-0.27	-0.42
	(0.66)	(0.29)	(0.77)	(0.66)
Weapon	0.45**	0.52	0.40*	1.08*
	(1.57)	(1.69)	(1.49)	(2.93)
Severity score	0.01	-0.03	0.02	-0.01
	(1.01)	(0.97)	(1.02)	(0.99)
Number of charges	-0.22**	-0.29**	-0.21**	-0.23**
	(0.81)	(0.75)	(0.81)	(0.80)
Prior referrals	-0.07**	-0.15	-0.09**	0.04
	(0.93)	(0.86)	(0.92)	(1.04)
Risk score	-0.01	0.04	-0.01	-0.03
	(0.99)	(1.04)	(0.99)	(0.97)
Needs score	0.03**	-0.02	0.04**	0.02
	(1.03)	(0.99)	(1.04)	(1.02)
School related	0.23**	0.42	0.23*	0.17
	(1.26)	(1.51)	(1.26)	(1.19)
-2 Log Likelihood	4,206.8	350.2	3,314.9	433.3
n	3,857	312	3,113	374

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, non-adjudicated (0) vs. adjudicated (1).
*p <.05, **p < .01.

Table C8. Mecklenburg County
Logistic Regression Results: Disposition

Variable	Main (1)
Race/ethnicity	
Black	-0.25 (0.78)
Latino	-0.05 (0.95)
Gender	0.57 (1.76)
Age	0.16 (1.18)
Type of crime	
Property	0.53* (1.70)
Person	-0.14 (0.87)
Drug	1.14** (3.13)
Weapon	-0.78 (0.46)
Severity score	0.15** (1.17)
Number of charges	0.31** (1.36)
Prior referrals	-0.01 (0.99)
Risk score	0.07** (1.07)
Needs score	0.03 (1.03)
School related	-0.49* (0.61)
-2 Log Likelihood	689.5
n	755

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, community-based (0) vs. out-of-home placement (1).
*p <.05, **p < .01.

Appendix D: Guilford County Analysis Results

Table D1. Guilford County Variable Frequencies (n=5,668)

Variable	Value	n	%
Independent Variables			
Race/ethnicity	White	940	16
	Black	4,160	73
	Latino	375	6
Gender	Female	1,577	28
	Male	4,091	72
Age	Younger to older	Mean = 13.7	
Type of crime			
Property	No	4,385	77
	Yes	1,283	23
Person	No	4,905	87
	Yes	763	13
Drug	No	5,336	94
	Yes	332	6
Weapon	No	5,566	98
	Yes	102	2
Other	No	2,480	44
	Yes	3,188	56
Severity score	Less severe to more severe	Mean = 2.6	
Number of charges	Fewer to greater charges	Mean = 1.6	
Prior referrals	Fewer to greater prior referrals	Mean = 1.0	
Risk score[a]	Low to higher risk	Mean = 6.3	
Needs score[b]	Low to higher needs	Mean = 9.5	
School related	No	2,966	52
	Yes	2,702	48
Dependent Variables			
Intake	Released/closed	798	14
	Diverted	1,554	27
	Approved/petitioned	3,316	59
Adjudication[c]	No	1,973	60
	Yes	1,343	40
Judicial disposition	Community-based	838	87
	Out-of-home placement	125	13

Note. Native American and Asian/Pacific Islander (n=193) for a total of 3% were coded as Latino.
[a]Risk score missing cases: n=1,462 or 26%.
[b]Needs score missing cases: n=1,627 or 29%.
[c]Cases do not add-up from those adjudicated to judicial disposition, missing 28% or 380 cases.

Table D2. Guilford County Variable Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. White	1.00															
2. Black	-	1.00														
3. Latino	-	-	1.00													
4. Gender	-.01	.01	.03**	1.00												
5. Age	.04**	-.03**	-.03**	-.04**	1.00											
6. Property	.02	.02*	-.01	.02	.06**	1.00										
7. Person	-.02	.01	.02	.04**	.01	-.21**	1.00									
8. Drugs	.08**	-.06**	-.01	.06**	.04**	-.14**	-.10**	1.00								
9. Weapon	.05	.05**	-.01	.05*	-.06**	-.07**	-.05**	-.03**	1.00							
10. Other	-.06**	.05**	.01	-.08**	-.08**	-.61**	-.48**	-.28**	-.15**	1.00						
11. Severity score	-.03**	.04*	-.01	.09**	-.03	-.06**	.34**	-.03*	.07**	-.19**	1.00					
12. # of charges	-.01	-.01	.02	.11**	.07**	.07**	.05**	-.02	.03**	-.09**	.08**	1.00				
13. Prior referrals	-.12**	-.03**	-.04**	.12**	.19**	.01	.07**	-.02	-.03*	-.03**	.06**	.11**	1.00			
14. Risk score	-.15**	-.02	-.01	.16**	.16**	-.05**	.13**	-.01	-.02	-.04**	.08**	.18**	.64**	1.00		
15. Needs score	-.11**	-.01	-.02	.11**	.11**	-.07**	.12**	-.01	-.01	-.03	.09**	.16**	.44**	.80**	1.00	
16. School related	-.08**	-.08**	.10**	.03*	-.09**	-.22**	-.07**	.08**	.02	.20**	-.08**	-.11**	.06	.04**	.02	1.00

* p <.05, **p < .01.

Table D3. Guilford County Multinomial Regression Intake Results

Variable	Released/closed v. Approved/petitioned (1)	Released/closed v. Diverted (2)	Diverted v. Approved/petitioned (3)
Race/ethnicity			
Black	0.31**	0.10	0.21**
	(1.36)	(1.03)	(1.23)
Latino	0.76**	0.84**	-0.07
	(2.15)	(2.31)	(0.93)
Gender	0.16*	-0.11	0.26**
	(1.17)	(0.90)	(1.30)
Age	0.03	-0.01	0.04
	(1.03)	(0.99)	(1.04)
Type of crime			
Property	0.42**	0.53**	-0.12
	(1.52)	(1.70)	(0.89)
Person	-0.22	0.01	-0.24**
	(0.80)	(1.01)	(0.79)
Drug	0.14	-0.14	0.28
	(1.15)	(0.86)	(1.33)
Weapon	0.82	-0.03	0.85**
	(2.23)	(0.97)	(2.35)
Severity score	0.07**	-0.01	0.09**
	(1.07)	(0.99)	(1.09)
Number of charges	0.36**	-0.07	0.43**
	(1.43)	(0.93)	(1.53)
Prior referrals	-0.05	-0.72**	0.67**
	(0.95)	(0.49)	(1.95)
Risk score	0.05*	-0.13**	0.18**
	(1.06)	(0.88)	(1.20)
Needs score	0.13**	0.12**	0.01
	(1.14)	(1.13)	(1.01)
School related	0.03	0.29**	-0.26**
	(1.03)	(1.33)	(0.77)

-2 Log Likelihood 5,977.8, n=4,041.

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved/petitioned (1); released/closed (0) vs. diverted (1); diverted (0) vs. approved/petitioned (1).

*p <.05, **p < .01.

Table D4. Guilford County Race-Specific Regression Results: Released/Closed vs. Diverted

Variable	White (1)	Black (2)	Latino (3)
Gender	0.01 (1.01)	-0.07* (0.93)	-0.21 (0.72)
Age	0.09** (1.09)	-0.02 (0.98)	-0.09 (0.92)
Type of crime			
Property	0.50 (1.64)	0.65** (1.92)	-0.20 (0.82)
Person	-0.08 (0.92)	0.11 (1.12)	-0.77 (0.46)
Drug	0.12 (1.13)	-0.39 (0.67)	-0.18 (0.45)
Weapon[a]	-0.71 (0.49)	0.78 (2.19)	
Severity score	-0.01 (0.98)	-0.02 (0.98)	0.08 (1.09)
Number of charges	0.29 (1.34)	-0.14 (0.87)	-0.58* (0.56)
Prior referrals	-0.97** (0.38)	-0.74** (0.45)	-0.60 (0.55)
Risk score	-0.03 (0.97)	-0.15** (0.86)	0.01 (1.01)
Needs score	1.11** (1.12)	0.13** (1.14)	0.10 (1.10)
School related	-0.16 (0.86)	0.41** (1.51)	0.46 (1.58)
n	699	2,906	283

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. diverted (1).

[a]Latino cases dropped from analysis due to too few cases.

*p <.05, **p < .01.

Table D5. Guilford County Race-Specific Regression Results: Released/Closed vs. Approved

Variable	White (1)	Black (2)	Latino (3)
Gender	0.45 (1.55)	0.17 (1.19)	-0.04 (0.96)
Age	0.04 (1.04)	0.05 (1.05)	-0.23 (0.80)
Type of crime			
Property	0.47 (1.60)	0.53** (1.70)	-0.45 (0.63)
Person	-0.10 (0.91)	-0.20 (0.82)	-0.11 (0.90)
Drug	-0.35 (0.71)	0.22 (1.24)	0.13 (1.14)
Weapon[a]	0.72 (2.06)	1.38 (3.97)	
Severity score	0.14** (1.15)	0.06** (1.06)	0.20* (1.22)
Number of charges	0.76** (2.13)	0.30** (1.35)	0.15 (1.16)
Prior referrals	-0.31 (0.73)	-0.02 (0.98)	-0.26 (0.78)
Risk score	0.19** (1.20)	0.03 (1.03)	0.19 (1.21)
Needs score	1.12 (1.12)	0.13** (1.13)	0.17** (1.19)
School related	-0.09 (0.73)	0.02 (1.02)	0.58 (1.79)
n	699	2,906	283

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved (1).

[a]Latino cases dropped from analysis due to too few cases.

*p <.05, **p < .01.

Table D6. Guilford County Race-Specific Regression Results: Diverted vs. Approved

Variable	White (1)	Black (2)	Latino (3)
Gender	0.44* (1.54)	0.25** (1.28)	0.16 (1.17)
Age	-0.05 (0.96)	0.07** (1.07)	-0.14 (0.87)
Type of crime			
Property	-0.03 (0.97)	-0.12 (0.88)	-0.26 (0.77)
Person	-0.02 (0.64)	-0.31* (0.73)	0.67 (1.95)
Drug	-0.47 (0.62)	0.62** (1.85)	0.92 (2.50)
Weapon[a]	1.43* (4.19)	0.60 (1.81)	
Severity score	0.14** (1.46)	0.08** (1.08)	0.12** (1.12)
Number of charges	0.46** (1.59)	0.44** (1.55)	0.73 (2.08)
Prior referrals	0.63* (1.94)	0.72 (2.05)	0.35 (1.42)
Risk score	0.22** (1.24)	0.18** (1.20)	0.18** (1.19)
Needs score	0.02 (1.01)	-0.01 (0.99)	0.07 (1.17)
School related	0.07 (1.07)	-0.39** (0.68)	0.13* (1.13)
n	699	2,906	283

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, diverted (0) vs. approved (1).

[a]Latino cases dropped from analysis due to too few cases.

*p <.05, **p < .01.

Table D7. Guilford County Logistic Regression Results: Adjudication

Variable	Main (1)	White (2)	Black (3)
Race/ethnicity[a]			
Black	-0.12		
	(1.13)		
Gender	0.22*	0.77*	0.15
	(1.25)	(2.13)	(1.16)
Age	0.01	0.03	-0.01
	(1.01)	(1.03)	(0.99)
Type of crime			
Property	-0.19	0.43	-0.30
	(0.83)	(1.54)	(0.74)
Person	0.01	0.28	-0.17
	(1.01)	(1.32)	(0.85)
Drug	0.13	1.01*	-0.20
	(1.14)	(2.75)	(0.82)
Weapon	-0.46	-0.41**	-0.62
	(0.64)	(0.66)	(0.54)
Severity score	0.03**	0.02	0.03**
	(1.03)	(1.02)	(1.03)
Number of charges	-0.19**	-0.21**	-0.17**
	(0.83)	(0.81)	(0.84)
Prior referrals	-0.16**	-0.23	-0.16**
	(0.86)	(0.80)	(0.85)
Risk score	0.03	-0.03	0.04*
	(1.03)	(0.97)	(1.03)
Needs score	0.01	0.08**	-0.01
	(1.01)	(1.08)	(0.99)
School related	0.11	0.19	0.15
	(1.11)	(1.21)	(1.05)
-2 Log Likelihood	2,866.0	329.0	2181.7
n	1,919	297	1,622

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, non-adjudicated (0) vs. adjudicated (1).

[a]Latino cases dropped from analysis due to too few cases.

*p <.05, **p < .01.

Table D8. Guilford County
Logistic Regression Results: Disposition

Variable	Main (1)
Race/ethnicity[a]	
Black	0.65
	(1.92)
Gender	0.11
	(1.12)
Age	0.05
	(1.05)
Type of crime	
Property	-1.14
	(0.86)
Person	0.56
	(1.75)
Drug	0.30
	(1.35)
Weapon	-0.38
	(0.69)
Severity score	0.03
	(1.03)
Number of charges	1.90**
	(1.21)
Prior referrals	0.04
	(1.04)
Risk score	0.16**
	(1.17)
Needs score	0.01
	(1.01)
School related	-0.59*
	(0.55)
-2 Log Likelihood	449.6
n	782

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, community-based (0) vs. out-of-home placement (1).
[a]Latino cases dropped from analysis due to too few cases.
*p <.05, **p < .01.

Appendix E: Forsyth County Analysis Results

Table E1. Forsyth County Variable Frequencies (n=4,330)

Variable	Value			n	%
Independent Variables					
Race/ethnicity	White			655	15
	Black			2,605	60
	Latino			1,070	25
Gender	Female			1,222	28
	Male			3,108	72
Age	Younger to older			Mean = 13.7	
Type of crime					
Property	No			3,285	76
	Yes			1,045	24
Person	No			3,742	86
	Yes			588	14
Drug	No			4,072	94
	Yes			258	6
Weapon	No			4,298	99
	Yes			32	1
Other	No			1,923	44
	Yes			2,407	56
Severity score	Less severe to more severe			Mean = 2.6	
Number of charges	Fewer to greater charges			Mean = 1.6	
Prior referrals	Fewer to greater prior referrals			Mean = 1.2	
Risk score[a]	Low to higher risk			Mean = 8.3	
Needs score[b]	Low to higher needs			Mean = 12.2	
School related	No			2,025	47
	Yes			2,305	53
Dependent Variables					
Intake	Released/closed			1,589	36
	Diverted			979	23
	Approved/petitioned			1,762	41
Adjudication[c]	No			974	55
	Yes			788	45
Judicial disposition	Community-based			453	82
	Out-of-home placement			99	18

[a]Risk score missing cases: n=600 or 14%.
[b]Needs score missing cases: n=667 or 15%.
[c]Cases do not add-up from those adjudicated to judicial disposition, missing 30% or 236 cases.

Table E2. Forsyth County Variable Correlations

Variable	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
1. White	1.00															
2. Black	-	1.00														
3. Latino	-	-	1.00													
4. Gender	-.02	-.10**	.13**	1.00												
5. Age	.03	-.02	-.01	-.01	1.00											
6. Property	-.01	.01	.01	.13**	.05**	1.00										
7. Person	-.04*	.04*	-.01	.08**	.05**	-.22**	1.00									
8. Drugs	.08**	-.09**	.03*	-.10**	.04*	-.14**	-.10**	1.00								
9. Weapon	.05**	-.02	-.01	.01	.01	-.05**	-.03*	-.02	1.00							
10. Other	-.01	.02	-.01	-.20**	-.05**	-.63**	-.44**	-.10**	-.10**	1.00						
11. Severity score	-.06**	.04**	.01	.13**	.02	.04*	.41**	-.07**	.03	-.29	1.00					
12. # of charges	-.03*	-.09**	.06**	.11**	.05**	.10**	.04**	.01	-.01	-.11**	.07**	1.00				
13. Prior referrals	-.10**	.07**	.01	.16**	.22**	.07**	.13**	-.03*	.03	-.14**	.13**	.14**	1.00			
14. Risk score	-.11**	.02	.08**	.19**	.24**	.09**	.13**	.01	-.03	-.17**	.20**	.66**	.66**	1.00		
15. Needs score	-.06**	.01	.05**	.14**	.23**	.09**	.10**	.01	.21	-.15**	.19**	.45**	.45**	.81**	1.00	
16. School related	-.01	.04*	-.04*	-.15**	-.08**	-.31**	-.14**	.02	-.02	.35**	-.20**	-.22**	-.22*	-.26**	-.23**	1.00

* p <.05, **p < .01.

Table E3. Forsyth County Multinomial Regression Intake Results

Variable	Released/closed v. Approved/petitioned (1)	Released/closed v. Diverted (2)	Diverted v. Approved/petitioned (3)
Race/ethnicity			
Black	0.24 (1.27)	0.29* (1.33)	-0.05 (0.95)
Latino	0.25 (1.28)	0.08 (1.08)	0.17 (1.19)
Gender	0.44** (1.55)	0.06 (1.24)	0.19* (1.21)
Age	0.22** (1.24)	0.10** (1.07)	0.38** (1.45)
Type of crime			
Property	0.32** (1.38)	0.41** (1.50)	-0.07 (0.92)
Person	0.34* (1.40)	0.82 (2.28)	-0.49 (0.62)
Drug	-0.11* (0.90)	-0.09 (0.92)	-0.02 (0.98)
Severity score	0.12** (1.13)	0.01 (1.01)	0.12** (1.13)
Number of charges	0.69** (2.00)	0.34** (1.41)	0.35** (1.42)
Prior referrals	-0.05* (0.95)	-0.77** (0.46)	0.72** (2.06)
Risk score	0.04** (1.04)	-0.06** (0.95)	0.10** (1.10)
Needs score	0.12** (1.13)	0.13** (1.14)	-0.01 (0.99)
School related	-0.74** (0.48)	0.01 (1.01)	-0.75** (0.47)

-2 Log Likelihood 5,951.3, n = 3,663.

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved/petitioned (1); released/closed (0) vs. diverted (1); diverted (0) vs. approved/petitioned (1).

*p <.05, **p < .01.

Table E4. Forsyth County Race-Specific Regression Intake Results: Released/Closed vs. Diverted

Variable	White (1)	Black (2)	Latino (3)
Gender	0.36 (1.44)	-0.06 (0.95)	0.14 (1.14)
Age	-0.01 (0.99)	-0.01 (0.99)	-0.02 (0.98)
Type of crime			
Property	0.04 (1.22)	0.57 (1.78)	0.28 (1.33)
Person	0.89* (2.43)	0.66** (1.94)	1.42** (4.14)
Drug	-0.56 (0.57)	0.16 (1.17)	0.11 (1.11)
Severity score	0.02 (0.57)	0.07 (1.01)	-0.02 (0.98)
Number of charges	0.20 (1.22)	0.35** (1.41)	0.46** (1.59)
Prior referrals	-0.11 (0.90)	-0.88** (0.42)	-0.82** (0.44)
Risk score	-0.09 (0.91)	-0.05 (0.96)	-0.07 (0.93)
Needs score	0.18** (1.19)	0.11** (1.12)	0.15** (1.16)
School related	-0.04 (0.96)	-0.02 (0.99)	0.22 (1.25)
n	569	2,179	915

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. diverted (1).
*p <.05, **p < .01.

Table E5. Forsyth County Race-Specific Regression Intake Results: Released/Closed vs. Approved

Variable	White (1)	Black (2)	Latino (3)
Gender	0.13	0.46**	0.56**
	(1.14)	(1.59)	(1.76)
Age	0.04	0.07	-0.15*
	(1.04)	(1.07)	(0.86)
Type of crime			
Property	0.47	0.28	0.37
	(1.60)	(1.32)	(1.45)
Person	0.59	0.35	0.33
	(1.81)	(1.41)	(1.40)
Drug	-0.51	-0.11	0.37
	(0.60)	(0.89)	(1.45)
Severity score	0.18**	0.01	0.15**
	(1.02)	(1.02)	(1.16)
Number of charges	0.55**	0.67**	0.91**
	(1.73)	(1.95)	(2.50)
Prior referrals	-0.11	-0.07	-0.06
	(1.32)	(0.94)	(0.94)
Risk score	0.03	0.05*	0.04
	(1.03)	(1.05)	(1.04)
Needs score	0.19**	0.10**	0.13**
	(1.20)	(1.10)	(1.14)
School related	-0.04	-0.78**	-0.77**
	(0.96)	(0.46)	(0.46)
n	569	2,179	915

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved.
*p <.05, **p < .01.

Table E6. Forsyth County Race-Specific Regression Intake Results: Diverted vs. Approved

Variable	**White (1)**	**Black (2)**	**Latino (3)**
Gender	-0.23	0.52**	0.43
	(0.80)	(1.68)	(1.53)
Age	0.05	0.07	-0.14
	(1.06)	(1.07)	(0.87)
Type of crime			
Property	0.43	-0.30	0.09
	(1.53)	(0.74)	(1.09)
Person	-0.30	-0.32	-1.09
	(0.74)	(0.73)	(0.34)
Drug	0.05	-0.27	0.27
	(1.05)	(0.76)	(1.31)
Severity score	0.16**	0.10**	0.16**
	(1.17)	(1.10)	(1.18)
Number of charges	0.35**	0.32**	0.45**
	(1.41)	(1.38)	(1.57)
Prior referrals	0.38	0.81**	0.76**
	(1.47)	(2.25)	(2.13)
Risk score	0.13**	0.09**	0.11**
	(1.13)	(1.10)	(1.12)
Needs score	0.01	-0.01	-0.02
	(1.20)	(0.99)	(0.98)
School related	-0.41	-0.77**	-0.99**
	(0.67)	(0.47)	(0.37)
n	569	2,179	915

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, diverted (0) vs. approved (1).
*p <.05, **p < .01.

Table E7. Forsyth County Logistic Regression Results: Adjudication

Variable	Main (1)	White (2)	Black (3)	Other (4)
Race/ethnicity				
Black	0.02 (0.90)			
Latino	-0.06 (0.94)			
Gender	-0.01 (0.99)	-0.10 (0.91)	0.15 (1.16)	-0.66 (0.52)
Age	0.16** (1.17)	0.03 (1.03)	0.19 (1.21)	0.09 (1.09)
Type of crime				
Property	0.02 (1.02)	-0.43 (0.65)	-0.12 (0.89)	0.38 (1.46)
Person	-0.17 (0.85)	-0.37 (0.69)	-0.50 (0.61)	0.54 (1.72)
Drug	0.22 (1.25)	0.25 (1.29)	0.27 (1.31)	0.24 (1.27)
Severity score	0.09** (1.09)	0.16** (1.18)	0.08** (1.08)	0.10** (1.10)
Number of charges	-0.08 (0.92)	0.05 (1.06)	-0.08* (0.93)	-0.13 (0.88)
Prior referrals	-0.07 (0.93)	-0.39 (0.68)	-0.05 (0.96)	-0.07 (0.93)
Risk score	0.06** (1.06)	0.14** (1.16)	0.05** (1.05)	0.07* (1.07)
Needs score	-0.01 (0.99)	-0.03 (0.97)	-0.02 (0.98)	0.01 (1.01)
School related	0.10 (1.10)	0.07 (1.08)	-0.04 (0.97)	0.27 (1.31)
-2 Log Likelihood	2,020.2	227.3	1,217.3	543.2
n	1,539	185	918	436

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, non-adjudicated (0) vs. adjudicated (1).
*p <.05, **p < .01.

Table E8. Forsyth County
Logistic Regression Results: Disposition

Variable	Main (1)
Race/ethnicity	
Black	0.83
	(2.29)
Latino	0.23
	(1.25)
Gender	0.13
	(1.14)
Age	0.41*
	(1.50)
Type of crime	
Property	-0.37
	(0.69)
Person	-0.18
	(0.84)
Drug	1.99**
	(2.28)
Severity score	0.17**
	(1.18)
Number of charges	0.08
	(1.08)
Prior referrals	0.03
	(1.03)
Risk score	0.15**
	(1.16)
Needs score	-0.03
	(0.97)
School related	-1.17
	(0.31)
-2 Log Likelihood	335.8
n	453

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, community-based (0) vs. out-of-home placement (1).
*p <.05, **p < .01.

Appendix F: Cumberland County Analysis Results

Table F1. Cumberland County Variable Frequencies (n=4,833)

Variable	Value	n	%
Independent Variables			
Race/ethnicity	White	930	19
	Black	3,300	68
	Other	603	13
Gender	Female	1,419	29
	Male	3,414	71
Age	Younger to older	Mean = 13.1	
Type of crime			
Property	No	4,019	83
	Yes	814	17
Person	No	4,055	84
	Yes	778	16
Drug	No	4,443	92
	Yes	390	8
Weapon	No	4,600	95
	Yes	233	5
Other	No	2,215	46
	Yes	2,618	54
Severity score	Less severe to more severe	Mean = 2.6	
Number of charges	Fewer to greater charges	Mean = 1.6	
Prior referrals	Fewer to greater prior referrals	Mean = 1.5	
Risk score[a]	Low to higher risk	Mean = 5.7	
Needs score[b]	Low to higher needs	Mean = 8.7	
School related	No	2,132	44
	Yes	2,701	56
Dependent Variables			
Intake	Released/closed	952	20
	Diverted	1,520	32
	Approved/petitioned	2,361	48
Adjudication[c]	No	1,229	52
	Yes	1,132	48
Judicial disposition	Community-based	687	82
	Out-of-home placement	155	18

Note. Race/ethnicity group "Other" consists of Latinos, Asians and Native Americans.
[a]Risk score missing cases: n=752 or 16%.
[b]Needs score missing cases: n=882 or 18%.
[c]Cases do not add-up from those adjudicated to judicial disposition, missing 26% or 290 cases.

Table F2. Cumberland County Variable Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. White	1.00															
2. Black	-	1.00														
3. Other	-	-	1.00													
4. Gender	0.03*	-0.01	-0.02	1.00												
5. Age	-0.03	-0.01	0.04*	-0.14*	1.00											
6. Property	-0.01	0.02	-0.01	0.01	0.15**	1.00										
7. Person	-0.02	0.04**	-0.03*	0.07**	-0.09**	-0.20**	1.00									
8. Drugs	0.10**	-0.11**	0.07*	0.08**	-0.13**	-0.13**	-0.13**	1.00								
9. Weapon	0.10**	-0.09**	0.01	0.05**	-0.15**	-0.10**	-0.10**	-0.07**	1.00							
10. Other	-0.08**	0.06**	0.06	-0.12**	0.10**	-0.49**	-0.48**	-0.32**	-0.25**	1.00						
11. # of charges	-0.01	0.01	-0.01	0.09**	0.10**	0.22**	0.04**	-0.08**	-0.01	-0.15**	1.00					
12. Severity score	-0.03*	0.03	0.06	0.12**	-0.10**	-0.04**	0.47**	-0.09**	-0.06**	-0.24**	0.06**	1.00				
13. Prior referrals	-0.10**	0.09**	-0.03	0.08**	0.19**	0.05**	0.09**	-0.10**	-0.07**	-0.02**	0.09**	0.06**	1.00			
14. Risk score	-0.07**	0.08**	-0.01	0.12**	0.18**	0.05**	0.12**	-0.05**	-0.07**	-0.06**	0.15**	0.09**	0.63**	1.00		
15. Needs score	-0.04*	0.02	0.02	0.04**	0.25**	0.04**	0.06**	-0.03	-0.09**	-0.02	0.14**	0.05**	0.39**	0.75**	1.00	
16. School related	0.02	0.01	-0.03*	0.03*	-0.22**	-0.27**	-0.05**	0.20**	0.13**	0.07**	-0.21**	-0.03	-0.14**	-0.10**	-0.13**	1.00

* p <.05, **p < .01.

Table F3. Cumberland County Multinomial Regression Intake Results

Variable	Released/closed v. Approved/petitioned (1)	Released/closed v. Diverted (2)	Diverted v. Approved/petitioned (3)
Race/ethnicity			
Black	0.51**	0.10	0.41**
	(1.66)	(1.10)	(1.51)
Other	0.25	-0.05	0.30*
	(1.28)	(0.95)	(1.35)
Gender	0.41**	0.21*	0.19*
	(1.50)	(1.24)	(1.21)
Age	0.22**	0.10**	0.12**
	(1.24)	(1.12)	(1.12)
Type of crime			
Property	0.16	0.06	0.10
	(1.78)	(1.07)	(1.11)
Person	0.10	-0.15	0.25
	(1.11)	(0.87)	(1.28)
Drug	0.30	0.52**	-0.22
	(1.35)	(1.68)	(0.81)
Weapon	-0.09	-0.20	0.11
	(0.92)	(0.82)	(1.11)
Severity score	0.05**	-0.01	0.06**
	(1.05)	(0.99)	(1.06)
Number of charges	0.58**	0.15*	0.43**
	(1.16)	(1.16)	(1.54)
Prior referrals	-0.01	-0.39**	0.38**
	(0.99)	(0.68)	(1.47)
Risk score	0.07**	-0.07**	0.14**
	(1.07)	(0.93)	(1.15)
Needs score	0.13**	0.06**	0.06**
	(1.14)	(1.07)	(1.06)
School related	-0.70**	-0.05	-0.75**
	(0.50)	(1.05)	(0.47)

-2 Log Likelihood 6,496.6, n = 3,950.

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved/petitioned (1); released/closed (0) vs. diverted (1); diverted (0) vs. approved/petitioned (1).

*p <.05, **p < .01.

Table F4. Cumberland County Race-Specific Regression Intake Results: Released/Closed vs. Diverted

Variable	White (1)	Black (2)	Other (3)
Gender	0.27 (1.31)	0.25* (1.28)	-0.10 (0.91)
Age	0.18** (1.20)	0.09** (1.09)	0.04 (1.04)
Type of crime**			
Property	0.07 (1.08)	-0.01 (0.99)	0.54 (1.72)
Person	-0.36 (0.70)	-0.09 (0.92)	-0.42 (0.66)
Drug	0.59 (1.81)	0.41 (1.51)	0.69 (1.97)
Weapon	-0.36 (0.70)	-0.06 (0.94)	-0.12 (0.88)
Severity score	0.01 (1.01)	-0.01 (0.99)	0.07 (1.07)
Number of charges	0.17 (1.18)	0.19* (1.21)	-0.13 (0.88)
Prior referrals	-0.55* (0.56)	-0.28** (0.76)	-1.15** (0.32)
Risk score	-0.05 (0.95)	-0.10** (0.91)	0.09 (1.10)
Needs score	0.04 (1.04)	0.08** (1.08)	0.04 (1.04)
School related	0.31** (1.37)	0.06 (1.06)	-0.36 (0.67)
n	773	2,687	490

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. diverted (1).
*p <.05, **p < .01.

Table F5. Cumberland County Race-Specific Regression Results: Released/Closed vs. Approved

Variable	White (1)	Black (2)	Other (3)
Gender	0.49 (1.64)	0.46** (1.58)	-0.04 (0.96)
Age	0.36** (1.43)	0.21** (1.23)	0.01 (1.01)
Type of crime			
Property	-0.26 (0.77)	0.24 (1.27)	0.29 (1.33)
Person	-0.56 (0.57)	0.20 (1.22)	0.77 (2.16)
Drug	0.41 (1.51)	0.33 (1.39)	0.03 (1.03)
Weapon	-0.05 (0.95)	0.15 (1.16)	-1.03 (0.36)
Severity score	0.12** (1.13)	0.04* (1.04)	0.05 (1.05)
Number of charges	0.49** (1.63)	0.61** (1.84)	0.69** (1.99)
Prior referrals	-0.34 (0.71)	0.07 (1.07)	-0.10 (0.90)
Risk score	0.07 (1.08)	0.07* (1.07)	0.15* (1.17)
Needs score	0.17** (1.18)	0.12** (1.11)	0.18** (1.19)
School related	-1.04** (0.35)	-0.57** (0.56)	-1.07 (0.34)
n	773	2,687	490

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, released/closed (0) vs. approved (1).
*p <.05, **p < .01.

Table F6. Cumberland County Race-Specific Regression Results: Diverted vs. Approved

Variable	White (1)	Black (2)	Other (3)
Gender	0.23 (1.25)	0.21 (1.24)	0.06 (1.06)
Age	0.18** (1.19)	0.21** (1.13)	-0.02 (0.98)
Type of crime			
Property	-0.33 (0.72)	0.25 (1.28)	-0.25 (0.78)
Person	-0.21 (0.81)	0.29 (1.34)	1.19* (3.30)
Drug	-0.18 (0.83)	-0.09 (0.92)	-0.65 (0.52)
Weapon	0.31 (1.36)	0.21 (1.23)	-0.90 (0.41)
Severity score	0.12** (1.13)	0.05** (1.05)	-0.02 (0.98)
Number of charges	0.32** (1.38)	0.42** (1.53)	0.82** (2.27)
Prior referrals	0.22 (1.24)	0.35** (1.42)	1.05** (2.86)
Risk score	0.12** (1.13)	0.16** (1.18)	0.06 (1.06)
Needs score	0.13** (1.13)	0.03* (1.03)	0.14** (1.15)
School related	-1.29** (0.27)	-0.64** (0.53)	-0.71** (0.49)
n	773	2,687	490

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, diverted (0) vs. approved (1).
*p <.05, **p < .01.

Table F7. Cumberland County Logistic Regression Results: Adjudication

Variable	Main (1)	White (2)	Black (3)	Other (4)
Race/ethnicity				
Black	-0.15			
	(0.87)			
Other	-0.09			
	(0.64)			
Gender	0.15	-0.22	0.20	0.09
	(1.16)	(0.80)	(1.22)	(1.09)
Age	0.09**	0.04	0.10**	0.12
	(1.10)	(1.04)	(1.10)	(1.13)
Type of crime				
Property	-0.51**	-0.75*	-0.50**	-0.60
	(0.60)	(0.47)	(0.61)	(0.55)
Person	-0.11	-0.19	-0.06	-0.51
	(0.90)	(0.83)	(0.95)	(0.60)
Drug	0.65**	0.57	0.56	0.97
	(1.92)	(1.76)	(1.74)	(2.63)
Weapon	0.01	-0.31	0.05	0.07
	(1.01)	(0.73)	(1.05)	(1.08)
Severity score	0.01	0.02	0.01	0.04
	(1.01)	(1.02)	(1.01)	(1.04)
Number of charges	-0.14**	0.01	-0.15**	-0.28**
	(0.87)	(1.01)	(0.86)	(0.76)
Prior referrals	-0.03	-0.20	-0.03	0.10
	(0.97)	(0.82)	(0.97)	(1.10)
Risk score	-0.01	0.06	-0.02	-0.03
	(0.99)	(1.06)	(0.98)	(0.97)
Needs score	0.05**	0.01	0.07**	0.03
	(1.06)	(1.01)	(1.07)	(1.03)
School related	0.11	0.81**	0.02	-0.15
	(1.11)	(2.25)	(1.02)	(0.86)
-2 Log Likelihood	2,272.1	334.4	1,643.2	272.7
n	1,717	260	1,246	211

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, non-adjudicated (0) vs. adjudicated (1).
*p <.05, **p < .01.

Table F8. Cumberland County
Logistic Regression Results: Disposition

Variable	Main (1)
Race/ethnicity	
Black	-0.31 (0.73)
Other	-0.32 (0.72)
Gender	0.71 (1.19)
Age	0.17 (1.19)
Type of crime	
Property	0.12 (1.13)
Person	-0.04 (0.96)
Drug	0.65 (1.92)
Weapon	0.67 (1.96)
Severity score	0.08** (1.08)
Number of charges	0.19** (1.21)
Prior referrals	0.15 (1.16)
Risk score	0.20** (1.22)
Needs score	-0.02 (0.98)
School related	-0.54* (0.59)
-2 Log Likelihood	425.3
n	677

Note. Numbers in table are regression coefficients, with exponential B values in parentheses. Reference group is White for race/ethnicity dummy variables. Type of crime represented by dummy variables with "other" offense as reference group. To read, community-based (0) vs. out-of-home placement (1).
*p <.05, **p < .01.

Appendix G: Introduction Letter and Survey

North Carolina Department of Public Safety

Governor's Crime Commission

Roy Cooper, Governor
Erik A. Hooks, Secretary

Robert Evans, Chairman
Caroline C. Valand, Executive Director

February 7, 2019

Dear Colleague:

The Governor's Crime Commission is working with Cambiare Consulting to conduct an assessment study of disproportionate minority contact (DMC) in North Carolina's juvenile justice system. The assessment study is a part of the state's effort to comply with the requirements of the Juvenile Justice and Delinquency Prevention Act (JJDP Act) of 1974, which requires states to address specific delinquency prevention and system improvement efforts to reduce, without establishing or requiring numerical standards or quotas, the disproportionate number of minority juveniles who come into contact with the juvenile justice system.

In the next few weeks, you will receive an email from Dr. Stan Orchowsky of Cambiare Consulting with a link to an online survey regarding DMC. The purpose of the survey is to obtain your opinions regarding the existence, causes of, and solutions to DMC in your county/district.

Your input is critical to understanding the nature of DMC and what can be done to address it. When you receive the email, please take a few minutes to complete the brief online survey. If you have any questions, please contact Dr. Orchowsky at stan@cambiareconsulting.com.

Thank you in advance for your assistance with this important effort.

Sincerely yours,

Caroline C. Valand
Executive Director

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Disproportionate Minority Contact (DMC) in North Carolina

* Required

(click Next at bottom of page to continue)

Background

The Governor's Crime Commission has partnered with Cambiare Consulting to conduct an assessment study of Disproportionate Minority Contact (DMC) (also referred to as Racial and Ethnic Disparities or RED) in North Carolina's juvenile justice system. DMC refers to the disproportionate number of minority youth who come into contact with the juvenile justice system. The assessment study is a part of the state's effort to comply with the requirements of the Juvenile Justice and Delinquency Prevention Act (JJDP Act) of 1974, which requires states to address specific delinquency prevention and system improvement efforts to reduce, without establishing or requiring numerical standards or quotas, the disproportionate number of minority juveniles who come into contact with the juvenile justice system. For this assessment, minority populations are defined as American Indian and

Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or other Pacific Islanders.

Informed Consent

This survey is designed to obtain your views on DMC in your locality or region. You are being invited to participate in this survey because of your work with youth in the juvenile justice system in your county/district. The survey will ask for your opinions regarding the seriousness of DMC in your county/district, factors that contribute to DMC in your county/district, and potential interventions that might help to reduce DMC in your county/district.

No risks have been identified as being associated with completing this survey. There will be no direct benefits to you resulting from your completion of the survey. While you will not benefit directly from completing the survey, your participation may help us identify critical information to make more informed recommendations about how to reduce DMC in North Carolina's juvenile justice system. This in turn may keep some minority youth from entering, or penetrating further, into the juvenile justice system in North Carolina

Your participation in this survey is completely voluntary. You may stop your participation at any time, or refuse to answer specific questions. The survey should take between 15 and 30 minutes to complete. Your individual responses will remain confidential and will only be seen by the researchers at Cambiare Consulting. All results will be reported in aggregate form so that individual responses cannot be identified. Cambiare has not identified any reasonably foreseeable risks or discomforts that might result from your responding to this survey.

Once survey administration has been completed (roughly 4 weeks from the date you complete this survey) the survey responses will be downloaded and maintained on a password protected external flash drive. No one but the PI will have access to the drive or the password. Data will be kept on the hard drive until the completion of the project (roughly 3 months after you complete this survey), at which time they will be deleted and the flash drive erased.

Should any information be found or determined during the analysis of the survey data or any other part of the assessment study that could affect your willingness to participate, you will be informed of this via email. You may withdraw from the assessment study by contacting Dr. Stan Orchowsky at stan@cambiareconsulting.com. The researchers retain the right to terminate your participation without your consent at any time should this be deemed necessary.

If you have any question about the survey, please contact Dr. Stan Orchowsky at stan@cambiareconsulting.com. If you have any questions regarding your rights as a participant in the assessment study, you can contact Solutions IRB, LLC (the body that oversees our protection of study participants) at 855-226-4472 or participants@solutionsirb.com.

You may request a copy of this informed consent statement by emailing Dr. Stan Orchowsky at stan@cambiareconsulting.com.

1. **By clicking on the "I agree" box below, you assert that you are over the age of 21, understand the purpose of the survey and the voluntary nature of your participation, and agree to participate in the survey.** *
   Check all that apply.

   ☐ I agree

2. **County/District** *

   _____

3. **Position/Job Title** *
Mark only one oval.

- Judge
- District Attorney
- Defense Attorney
- Juvenile Court Counselor
- JCPC Chair
- YDC/Detention Center Director
- Local Program Manager/Service Provider
- Police Chief
- Sheriff
- School Resource Officer

4. **(1) In general, how familiar with/knowledgeable about the issue of DMC would you say you are?** *
Mark only one oval.

	1	2	3	4	5	
Not at all familiar with						Very familiar with

5. **(2) How serious a problem is DMC in your county/district?**
Mark only one oval.

	1	2	3	4	5	
Not a serious problem						Very serious problem

6. **(3) With regard to DMC, how would you say your locality/region compares with others in North Carolina?**
Mark only one oval.

	1	2	3	4	5	
Much worse						Much better

7. **(4) Which of the following SYSTEM factors do you believe contribute to DMC IN YOUR COUNTY/DISTRICT (check as many as you think apply):**
   Check all that apply.

   - [ ] Minority youth are MORE LIKELY to be arrested
   - [ ] Minority youth are LESS LIKELY to be diverted
   - [ ] Minority youth are MORE LIKELY to be placed in secure custody (detention)
   - [ ] Minority youth are MORE LIKELY to be transferred to Superior Court
   - [ ] Minority youth are LESS LIKELY to have their cases dismissed by a juvenile court judge
   - [ ] Minority youth are MORE LIKELY to be placed in a Youth Development Center
   - [ ] Minority youth are LESS LIKELY to be selected for participation in mental health and substance abuse treatment programs
   - [ ] Minority youth are MORE LIKELY to be returned to court for technical violations of their probation.
   - [ ] Other: _____

8. **(5) Disproportionality related to the factors you identified above might be due to: (a) differences between minority and non-minority youth (such as risk of reoffending); (b) bias (either conscious or unconscious); or (c) a combination of the two. IN YOUR COUNTY/DISTRICT would you say disproportionality is MAINLY due to:**
   Mark only one oval.

   - ◯ differences between minority and non-minority youth
   - ◯ bias
   - ◯ a combination of the two
   - ◯ Other: _____

9. **Please explain your answer:**

   _____

   _____

   _____

   _____

   _____

6) How helpful do you think each of the following would be in reducing DMC in your county/district?

10. **(a) Training for law enforcement officers, judges, and juvenile court counselors on implicit (unconscious) bias.**
    Mark only one oval.

	1	2	3	4	5	
Not helpful	◯	◯	◯	◯	◯	Very helpful

11. **(b) Use of risk assessment at all phases of the juvenile justice system**
Mark only one oval.

	1	2	3	4	5	
Not helpful	⬭	⬭	⬭	⬭	⬭	Very helpful

12. **(c) Availability of a wider range of alternatives to detention**
Mark only one oval.

	1	2	3	4	5	
Not helpful	⬭	⬭	⬭	⬭	⬭	Very helpful

13. **(d) More juveniles receiving legal representation**
Mark only one oval.

	1	2	3	4	5	
Not helpful	⬭	⬭	⬭	⬭	⬭	Very helpful

14. **(e) Increased capacity to provide mental health and substance abuse treatment**
Mark only one oval.

	1	2	3	4	5	
Not helpful	⬭	⬭	⬭	⬭	⬭	Very helpful

15. **(f) More programming designed specifically for minority youth**
Mark only one oval.

	1	2	3	4	5	
Not helpful	⬭	⬭	⬭	⬭	⬭	Very helpful

16. **(g) Providing services to families (including siblings) of system-involved youth**
Mark only one oval.

	1	2	3	4	5	
Not helpful	⬭	⬭	⬭	⬭	⬭	Very helpful

17. **(h) Increased emphasis on prevention efforts**
Mark only one oval.

	1	2	3	4	5	
Not helpful	⬭	⬭	⬭	⬭	⬭	Very helpful

18. **(i) “Decriminalizing” offenses specific to youth (such as truancy and curfew violations)**
Mark only one oval.

	1	2	3	4	5	
Not helpful	◯	◯	◯	◯	◯	Very helpful

19. **(j) Reducing the number of referrals from/arrests by School Resource Officers**
Mark only one oval.

	1	2	3	4	5	
Not helpful	◯	◯	◯	◯	◯	Very helpful

20. **(k) Changing the perception that minority youth are more dangerous than non-minority youth**
Mark only one oval.

	1	2	3	4	5	
Not helpful	◯	◯	◯	◯	◯	Very helpful

21. **Please feel free to expand on any of your answers to the above questions.**

22. **(7) Are there any policies, programs, or initiatives that have been implemented in your county/district that have REDUCED DMC?**

23. **(8) Are there any policies, programs, or initiatives that have been implemented in your county/district that have INCREASED DMC ?**

24. **(9) What policies, programs, or initiatives COULD BE implemented in your county/district to reduce DMC?**

25. **(10) Please provide any other thoughts/comments below.**

Thank you for your responses!