

# DISPROPORTIONATE MINORITY CONTACT IN NORTH CAROLINA

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**A STUDY OF THE OVERREPRESENTATION  
OF ETHNIC MINORITY YOUTH  
IN NORTH CAROLINA'S JUVENILE JUSTICE SYSTEM**

**A Report Prepared For The North Carolina Department Of Juvenile  
Justice And Delinquency Prevention**

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## I - Introduction Section I

### INTRODUCTION

In 1999, the North Carolina Office of Juvenile Justice entered into an agreement with North Carolina Central University to conduct a study of the overrepresentation of ethnic minority youth in the state's Juvenile Justice System. The study compared dispositions for minority and non-minority juveniles, as well as services made available to the two groups and their respective families from 1996 to 1999.

Minority overrepresentation occurs when a larger proportion of ethnic minority youth are present at various stages within the juvenile justice system (such as intake, detention, adjudication, and disposition) than their proportion in the general population (Snyder and Sickmund, 1999). The issue gained national attention when the Coalition of Juvenile Justice highlighted it to Congress in its 1988 Annual Report to the legislators (Hsia and Hamparian, 1998). Awareness of overrepresentation of ethnic minority youth, particularly African-American youth, in the juvenile justice system accelerated as a result of scholarly publications by researchers such as Krisberg et al. (1987), Huizinga and Elliot (1987), and Pope and Feyerherm (1990a, 1990b, and 1992). They respectively noted that:

- The proportion of minority youth in correctional facilities increased even though the number arrested declined over the same period;
- African Americans were arrested and charged with more serious crimes than their white counterparts; and
- Disparity is most pronounced at the stages of intake and detention.

In 1992, Congress amended the Juvenile Justice and Delinquency Prevention (JJDP) Act of 1974 and made the reduction of Disproportionate Minority Confinement (DMC) a requirement for continued participation in the Formula Grants Program. States participating in the program are required to determine whether the proportion of ethnic minority youth in confinement exceeds their proportion in the population, and if so, demonstrate efforts to reduce it (Hsia and Hamparian, 1998).

Since the early 1990s, the State of North Carolina has been a partner in federal initiatives to

- Determine whether minority youth are over-represented in the juvenile justice system,
- Assess the factors contributing to it, and
- Develop policies and programs to address the problem.

In 1991, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) established the federal government's DMC initiative to assist states in their efforts to address DMC issues and North Carolina was one of five states awarded funds to test various approaches for addressing DMC (Devine, Coolbaugh, and Jenkins, 1998). Lessons learned from the

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pilot studies remain relevant and useful for guiding research and for developing interventions to address DMC. For example, the pilot studies informed the development of the DMC process: assigning organizational responsibility, analyzing juvenile justice data, identifying underlining factors, creating and enhancing interventions, and developing methods to measure the impact of DMC initiatives (Ibid, p2).

North Carolina also initiated studies aimed at gaining a better understanding of the factors that contribute to minority overrepresentation. Dean and Brame (1994), selected 10 Counties in North Carolina in order to (a) examine whether minority juveniles were at greater risk of adjudication than their Caucasian peers, and (b) assess the probability of confinement in training schools by race. They found that African Americans comprised about one-fourth of the juveniles in the community but accounted for about half of the juveniles referred to intake and adjudicated; and made up two-thirds of the juveniles committed to secure facilities. Gillespie, Wilson, and Yearwood (2000) used data from the entire state to examine if minority overrepresentation changed over time in the areas of arrest and incarceration. They found that although minority arrests have somewhat declined, minority detention and training school admissions have increased since 1990. Furthermore, there was no statistically significant association between the number of alternative programs within a district and minority incarceration rates.

This study built on the work already done in this subject area and provides new information to further our understanding about the factors that contribute to the overrepresentation of ethnic minority in the state's juvenile justice system. This new information may assist North Carolina's policy makers and practitioners in making well-informed policy and program decisions to ensure the equitable administration of justice and strengthen the juvenile justice system in meeting the needs of all youth and families under juvenile justice jurisdiction.

Subsequent sections of this report will briefly discuss:

- Pertinent literature that helped articulate the problem, frame research questions, and lay out the premise for evaluating and interpreting the results;
- Methods used for sampling, and procedures for data collection and analysis;
- Results and findings from testing hypotheses;
- The evaluation and interpretation of results; and
- Conclusions made from the findings, and recommended action.

## Section II

### REVIEW OF THE LITERATURE<sup>1</sup>

The terms justice and equity are closely related and have been used synonymously to illustrate fairness in both spoken and written language. A review of the literature germane to the issue area reveals a variance in the terms since the administration of justice, in many instances, is not equitable. However it must be clearly stated that disparities in processing outcomes cannot, and should not, be automatically attributed to discrimination.

In order to engage in a qualitative and meaningful review of the literature, it is imperative to establish a common vocabulary to further our understanding of this complex issue. Therefore, it is important to define and differentiate between three key terms: overrepresentation, disparity, and discrimination.

The federal Office of Juvenile Justice and Delinquency Prevention (OJJDP, 1999) defined these terms in the following ways. Overrepresentation occurs when a larger proportion of a particular group are represented at various stages of the juvenile justice processing system than their proportion in the general population would suggest. Disparity suggests different juvenile justice processing outcomes for different groups, which in turn may lead to overrepresentation. Discrimination refers to deliberate differential treatment of juveniles based wholly, or in part, on their gender, racial, and/or ethnic status.

Michael Leiber (2002) noted that traditional explanations for the overrepresentation of ethnic minority youth in the juvenile and criminal justice systems have been differential offending and/or selection bias. Differential offending implies that specific racial/ethnic groups commit crimes at different rates. For example, Michael Tonry (1995) suggested that the dramatic rise in juvenile crime between the early 1980s and the early 1990s contributed to minority overrepresentation in the juvenile justice system. He implicitly argued that since minority youth committed more crimes and delinquent acts, it is logical to expect a much higher proportion of this group in the juvenile justice system. Other researchers acknowledged differential offending as a causal factor in the overrepresentation debate, but noted that the extent of observed disparities in the processing of juvenile offenders through the system could not be explained by differential offending alone (Krisberg et al., 1987; Huizinga and Elliott, 1987; Pope and Feyerherm, 1992). Selection bias, or the inequitable use of confinement, framed the debate that brought this issue to national prominence (Leiber, 2002).

<sup>1</sup> Researchers used previous research to introduce the context and perspective that guided this study. It should not be considered a comprehensive review of earlier work in this area. Please see Leiber, M (2002). *Crime & Delinquency*, Vol. 48 No. 1, pp. 3-45, for an up to date review of DMC literature.

## Juvenile Justice Institute @ NCCU 3 II – Review Of The Literature

Lessons learned from pilot projects in five states validate previous findings in that specific factors that contribute to DMC traverse several domains. Multiple factors contributing to overrepresentation are found in four principle domains: the juvenile justice and education systems; socioeconomic conditions; and the family. (Devine, Coolbaugh, and Jenkins, 1998).

### Problem Statement

By enacting legislation to address disproportionate minority confinement, the federal government acknowledged that overrepresentation of ethnic minority youth in the juvenile justice system was indeed a problem that needed its attention. Congress requires states to indicate in their application for formula grants how they would address Disproportionate Minority Confinement (DMC).

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) requires states to go through a four-phase process in meeting the DMC requirement of the Juvenile Justice and Delinquency Prevention Act. These steps are Identification, Assessment, Intervention, and Monitoring and Evaluation. According to the DMC Technical Assistance Manual (OJJDP, 2000):

- Identification determines if minority youth are over represented in a state's juvenile justice system;
- Assessment focuses on understanding why minority overrepresentation exists at the various decision points in the juvenile justice system;
- Intervention involves the process of developing and implementing strategies to reduce minority overrepresentation; and
- Monitoring and Evaluation attempt to determine the effectiveness of disproportionate minority confinement initiatives.

This study is a Phase-Two assessment to further our understanding of some of the factors that have contributed to the overrepresentation of ethnic minority youth in North Carolina's juvenile justice system. The study built on earlier work done in this area, and sought to answer the following questions raised by North Carolina's Office of Juvenile Justice.

### Research Questions

- Are there differences in the dispositions for minority and non-minority juveniles who were adjudicated delinquent or undisciplined? and
- Are there differences in the services made available to minority and non-minority juveniles and their families?

## Hypotheses

The following hypotheses will be used to test for disparities in the decision-making process within the juvenile justice system. Two out of three research hypotheses focused on processing outcomes for minority versus non-minority juveniles at Intake, and Disposition. The third looked at access to services for the two juvenile groups and members of their families.

### Hypothesis I

There are differences in intake decisions between minority and non-minority juveniles who were adjudicated delinquent or undisciplined, committed comparable offenses, and have similar prior court histories.

### Hypothesis II

There are differences in disposition decisions between minority and non-minority juveniles who were adjudicated delinquent or undisciplined, committed comparable offenses, and have similar prior court histories.

### Hypothesis III

There are differences in access to services for minority and non-minority juveniles (and their respective families) who were adjudicated delinquent or undisciplined, committed comparable offenses, and have similar prior court histories.

Finding answers to the research questions will assist policy makers and practitioners to devise effective interventions to reduce minority overrepresentation, increase access to services for all youth and their families, and strengthen the juvenile justice system's capacity to meet its civic obligations and the needs of North Carolina's youth, their families, and communities.

The next section of this report discusses the methods adopted for this study.

## Section III

### METHOD

The purpose of this study was to examine to what extent

- Disposition decisions differed for minority juveniles and non-minority juveniles and
- Access to services differed for minority juveniles than for non-minority juveniles, and for their respective families.

Data was collected from the North Carolina Department of Juvenile Justice and Delinquency Prevention (DJJDP), and thirty county juvenile justice agencies.

#### Sample Selection

To ensure that all regions of the state were accurately represented, a stratified sampling design was adopted since the measures of important demographic variables were unevenly distributed across the state. Ten counties with the largest population sizes were drawn into the sample because these counties account for more than 30% of the state's population. Counties were selected from the following six strata:

1. Economic development regions
2. Percent of minority population, 1998
3. Training school commitment rate per 1,000 juveniles, 1997-8
4. Percent of people living in a municipality, 1997
5. Percent of the population considered poor
6. Population by size, 1998.

Appendix A1 contains the sample selection procedures, A2 contains the operational definitions of the variables in the study, and A3 contains the glossary of key terms.

The following tables in Appendix B describe the characteristics of the sample:

- Appendix B1 presents indicators associated with selected counties
- Appendix B2 shows descriptive statistics associated with juveniles at risk of formal processing;
- Appendix B3 presents descriptive statistics associated with juveniles at risk of confinement; and
- Appendix B4 shows descriptive statistics associated with juveniles placed in training school facilities.

In most cases, juvenile justice agency records provided information relative to types of offense, juvenile's legal history, school attendance, family socio-economic characteristics, and demographics.

## Data Collection

The data collection instrument comprised spreadsheet listings of specific juvenile records including their names and other demographic information, court information including prior offense variables, and other economic and social variables. Data were collected from several sources including the Department of Juvenile Justice, county juvenile justice agencies, and US Census Bureau. Data collection began in December 1999 and ended February 2002.

## Data analysis

Using SPSS version 11.0 (SPSS Inc., Chicago, Ill), descriptive statistics and logistic regression analyses were computed to test the relationships of legal and extra-legal (demographic) characteristics with juvenile intake and disposition decisions in selected North Carolina counties. Logistic Regression is the preferred statistical technique when a research project involves a qualitative or categorical dependent variable (Dowdall, Babbie & Halley, 1997, p.249). Variables were entered into the analysis with the backward stepwise method. Independent variables were chosen based on their relationships to decisions made in the processing of juvenile cases through the justice system, along with their availability in the data set.

## Limitations of the Study

There were several circumstances and events that proved limiting in conducting a comprehensive analysis of the subject matter. In particular, insufficient information in the data sets (limited number of cases and/or missing variables) limited the application of multivariate statistics to address the key research questions. Consequently, researchers did not have the opportunity to ascertain the full extent of disparate decision-making in the processing of juvenile cases through the justice system, and decision affecting access to services for the targeted population.

The following are noteworthy limitations of the study.

1. There were fewer available records for the study due to periodic purging of records when juveniles reached the age of maturity (18 years).
2. In some instances data retrieved from county offices were inconsistent with records provided by the Department of Juvenile Justice and Delinquency Prevention. This raised questions about the accuracy of the data.
3. Many records lacked important variables, such as family history and non-incarcerative dispositions.
4. Some records were unavailable due to computer problems in a selected county.

## Section IV

### RESULTS

The analyses focused on two major decision points in the state's juvenile justice processing system, intake approval and secure placement decisions. Logistic regression analysis was used to determine if there were differences in decisions made for similarly situated minority and non-minority juveniles during intake and disposition.

All juveniles who appear in court are considered to be at risk of formal processing, and placement in a secure facility. The research questions and hypotheses were framed to estimate the effects of ethnicity in processing decisions, and access to community services.

#### Minority Overrepresentation Index Matrix

Table 1 displays the indices of minority overrepresentation in specific juvenile justice decision points. The index values are calculated by dividing the percentage of minority juveniles in the juvenile justice population by the percentage of minority juveniles in the overall juvenile population. An index value of more than one indicates minority overrepresentation, one indicates proportional representation, and less than one indicates minority under-representation. (Devine, P., Coolbaugh, K., and Jenkins, S., 1998)

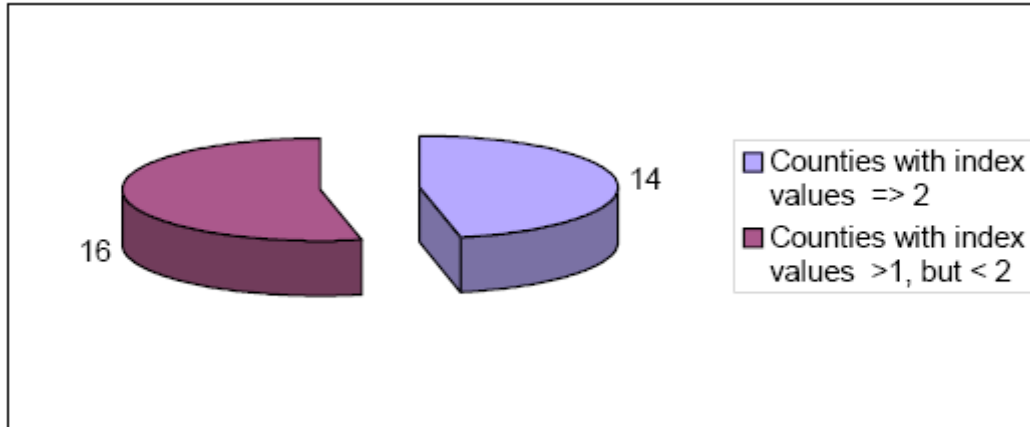
The Matrix shows moderate minority overrepresentation in all counties. However, 14 out of 30 counties showed index values of more than two. This means that ethnic minority juveniles are represented in at least one stage of the juvenile justice system at a proportion that is two or more times greater than their general population would suggest. The rest of the counties had index values greater than one, but less than two. Figure 1 illustrates the proportion of counties indicating minority overrepresentation with index values that are less than two or index values that are equal to or greater than two.

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Table 1: Minority Overrepresentation Indices For 30 Counties  
In North Carolina (1996-1999)

County	Arrest	Intake	Secure Placement
Anson	1.38	1.48	1.58
Buncombe	2.15	2.25	2.7
Chatham	1.64	1.54	1.13
Cherokee	1.16	0	0
Chowan	1.65	1.73	2.11
Cumberland	1.71	1.74	1.81
Davidson	2.1	2.22	1.89
Durham	1.89	1.91	2.05
Forsyth	2.11	2.17	3.07
Gaston	1.84	2.04	4.08
Greene	1.59	1.51	1.97
Halifax	1.11	1.18	1.32
Hoke	1	1	0.92
Martin	1.46	1.47	1.54
Mecklenburg	2.02	2.16	1.08
Montgomery	1.76	1.87	1.99
New Hanover	2	2.03	2.18
Onslow	2.08	2.25	2.31
Perquimans	1.59	1.62	1.45
Pitt	1.7	1.8	2.18
Polk	2.54	2.97	2.45
Rowan	2.5	2.5	2.75
Rutherford	1.87	1.91	0.91
Surry	1.8	1.93	3.16
Swain	0.49	0	0
Vance	1.45	1.48	1.47
Wake	2.1	2.28	2.75
Washington	1.41	1.42	1.53
Watauga	1.35	1.72	0
Wilson	1.7	1.69	1.93

Figure 1: 30 Counties In North Carolina Grouped By Index Values Of Minority Overrepresentation



## Hypotheses Testing<sup>2</sup>

Null Hypothesis I: There are no differences in intake approval decisions between minority and non-minority juveniles who were adjudicated delinquent or undisciplined, committed comparable offenses, and have similar prior court histories. There was sufficient evidence indicating that in at least three counties, the odds of an approval decision for formal processing were greater for minority juveniles than non-minority juveniles. However, there was insufficient evidence to reject the null hypothesis in 14 of the 17 counties studied.

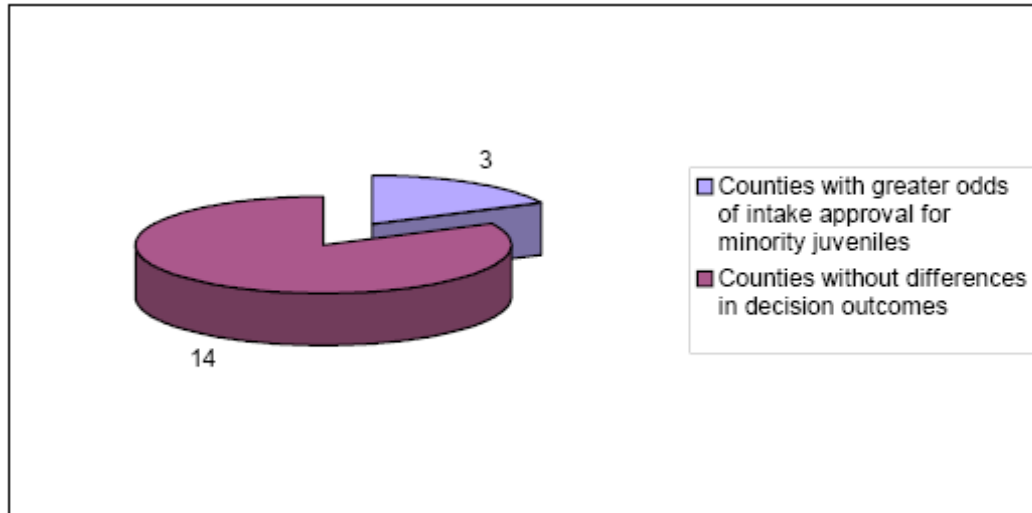
There are other factors that predict approval decisions including types of offense, prior involvement with the justice system, and family characteristics. Appendix C1 contains the Logistic Regression results indicating the odds of approval decisions at juvenile intake in selected Counties in North Carolina.

Figure 2 shows that in three counties in North Carolina, the odds of approving juveniles for further processing in the juvenile justice system were greater for minority juveniles than for non-minority juveniles.

<sup>2</sup> Insufficient information in many counties limited regression analyses to 17 out of 30 counties in the study sample.

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**Figure 2: Differences in Intake Approval Decisions in 17 Counties in North Carolina.**



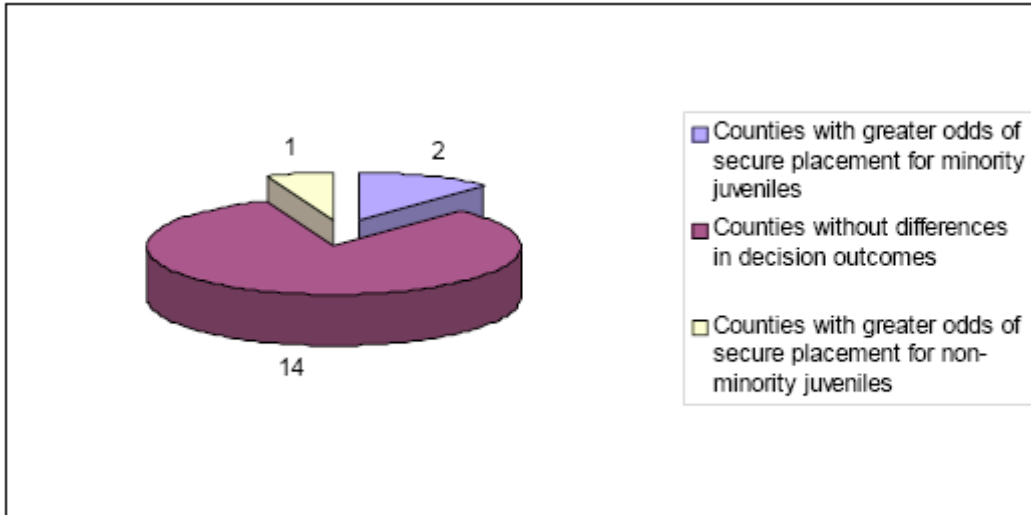
**Null Hypothesis II: There are no differences in disposition decisions between minority and non-minority juveniles who were adjudicated delinquent or undisciplined, committed comparable offenses, and have similar prior court histories.**

There was sufficient evidence indicating that in at least two counties, the odds of secure placement were greater for minority juveniles than non-minority juveniles. Furthermore, the aggregate of sampled counties suggested that the odds of secure placement were moderately higher for minority youth than for non-minority youth. However, there was insufficient evidence to reject the null hypothesis in 14 of the 17 counties studied. Also, in at least one county, the odds of secure placement for formal processing appeared to be greater for non-minority juveniles than minority juveniles.

Other factors that predict disposition decisions include types of offense, prior involvement with the justice system, and family characteristics. Appendix C2 contains the Logistic Regression results indicating the odds of secure placement for juvenile offenders in selected North Carolina Counties.

Figure 3 shows that in at least two counties in North Carolina, the odds of approving juveniles for further processing in the juvenile justice system were greater for minority juveniles than for non-minority juveniles. In at least one county in North Carolina, the odds of approving juveniles for further processing in the juvenile justice system were greater for non-minority juveniles than for minority juveniles.

**Figure 3: Differences in Secure Placement Decisions for Juveniles in 17 Counties In North Carolina.**



**Null Hypothesis III: There are no differences in access to services for minority and non-minority juveniles (and their respective families) who were adjudicated delinquent or undisciplined, committed comparable offenses, and have similar prior court histories. There was insufficient information in county records to test this hypothesis.**

## Section V

### DISCUSSION

This study set out to ascertain whether differences existed in intake and disposition decisions made for minority and non-minority juveniles, and whether both groups had equal access to community-based services. Three hypotheses were tested to address the key research questions.

The indices of minority overrepresentation suggested moderate overrepresentation in the study sample. Study results indicate that in at least three out of 17 counties, the odds of approval decisions for formal processing were greater for minority juveniles than for non-minority juveniles. It is noteworthy that sufficient information for regression analysis was available in only 17 out of the 30 counties studied. Regarding decisions for secure placement, the findings suggested that ethnicity was a factor in a least three out of 17 counties examined.

These results are not generalizable across the state since (a) decision patterns appear to vary by county, and (b) the study data set lacked sufficient information to address the research question in 13 counties. Furthermore, the study did not include information about decision-making at the point of arrest. The decisions to arrest juveniles for infractions precede the decision-points in the study data set.

The findings are consistent with prior research indicating that:

- Disparity is attributable to both differential offending and system bias;
- Disparity can be found at any stage of processing within the juvenile justice system; and
- There are variations across jurisdictions marked by differences in outcomes. (Lieber, M., 2002; Pope and Feyerherm, 1992)

There was insufficient evidence to determine equity of access to community-based services.

It is possible that changes in legislation at the middle of the study period (1998) might have influenced the findings of this study. In particular, structured decision-making for juvenile dispositions would likely reduce the occurrence of unwarranted disparities in the processing of juvenile cases.

## Conclusions

1. There are differences in intake and dispositional decisions and outcomes for minority and non-minority juveniles who were adjudicated delinquent or undisciplined, committed comparable offenses, and had similar prior court histories. However, differences in decision-making and outcomes were found in only three of the 17 counties examined.
2. The minority overrepresentation indices suggested that minority overrepresentation existed in most jurisdictions. In 14 counties in North Carolina, ethnic minority juveniles were represented in the juvenile justice system at two or more times their proportion in the general population.
3. Due to insufficient information in the data set, researchers were unable to determine if there were differences in intake and disposition for minority and non-minority juveniles in 13 out of 30 counties in the study sample.

## Recommendations

1. Overrepresentation of ethnic minority youth in North Carolina's juvenile justice system should be addressed wherever it exists. A strategic technical assistance capability exists at the Juvenile Justice Institute at North Carolina Central University to assist state and local jurisdictions address this problem.
2. Jurisdictions need to periodically monitor decisions made at pertinent decision points in the juvenile justice processing system to assess the impact of ethnicity on decisions that are made.
3. Incentives should be given to local jurisdictions to encourage the consistent collection of important client information at key decision points. Local data management systems should be linked to the state's juvenile justice information system.

Further research focusing on developing effective interventions to reduce minority overrepresentation would benefit the State of North Carolina and the Department of Juvenile Justice and Delinquency Prevention.

## REFERENCES

Author. (1999, December). Minorities in the juvenile justice system. National Report Series, Juvenile Justice Bulletin. Washington, DC: U. S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Dean, C. W. (1994, July). Embracing diversity, expanding common ground: The disproportionate incarceration of North Carolina's minority children. Charlotte, N. C: Office of Justice Research, University of North Carolina at Charlotte, Department of Criminal Justice.

Devine, P., Coolbaugh, K., & Jenkins, S. (1988). Disproportionate minority confinement: Lessons learned from five states. Washington, D.C.: Office of Juvenile Justice and Delinquency Prevention.

Dowell, G. W., Babbie, E., Halley, F. (1997). Adventures in Criminal Justice Research: Data Analysis Using SPSS for Windows. CA: Pine Forge Press.

Huizinga, D., & Elliot, D. (1987, September). Juvenile offenders: Prevalence, offender incidence, arrest rates by race. *Crime & Delinquency*, 33:206-223.

Hsia, H., & Hamparian, D. (1998). Disproportionate minority confinement: 1997 update. Juvenile Justice Bulletin. Washington, D. C: Office of Juvenile Justice and Delinquency Prevention.

Leiber, M (2002). Disproportionate minority confinement of youth (DMC): An analysis of state and federal efforts to address the issue. *Crime and Delinquency*, Vol. 48 No. 1, pp. 3-45,

Pope, C., & Feyerherm, W. (1990a). Minority status and juvenile justice processing: An assessment of the research literature (Part I). *Criminal Justice Abstracts*, 22,337-385.

Pope, C., & Feyerherm, W. (1990b). Minority status and juvenile justice processing: An assessment of the research literature (Part II). *Criminal Justice Abstracts*, 22, 527-542.

Pope, C., & Feyerherm, W. (1992). Minority and the juvenile justice system: Full report. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Snyder, H., & Sickmund, M. (1999). Juvenile offenders and victims: 1999 national report. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Tonry, M. (1995). *Malign neglect: Race, crime and punishment in America*. New York: Oxford University Press.