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Relationships between Racial Diversity of Counties and Police Departments and Disproportionate Minority Contact at the Referral-Level in the State of Georgia

Jacquelyn D. Johnson
Walden University

Walden University

College of Psychology and Community Services

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Jacquelyn D. Johnson

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the review committee have been made.

Review Committee
Dr. Ernesto Escobedo, Committee Chairperson,
Criminal Justice Faculty

Dr. Melanye Smith, Committee Member,
Criminal Justice Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

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Abstract

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by

Jacquelyn D. Johnson

MS, Capella University, 2011

BS, Georgia Southwestern University, 1983

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

The existence of disproportionate minority contact (DMC) is a serious problem throughout the juvenile justice systems in every state in the United States. The DMC phenomenon is well documented in the 159 counties in the State of Georgia juvenile justice system. Although numerous researchers have investigated the role of county-level variables in the creation of these racial disparities, these researchers have not discovered any explanations for differences in outcomes from one county to another county within the same state based on the diversity of the county population or police departments in each county. The purpose of this quantitative study was to investigate the effect of the racial composition (Black and White) or diversity of the county population and county's police departments at the referral stage of the juvenile justice process in each of the 159 counties in the State of Georgia. DMC existed in 95 counties. Disproportionate White Contact (DWC) was found in three counties and parity indicating no significant differences in referrals between the Black and White youth in 17 counties. The Kendall's tau-b correlation statistical procedure was used and found that that county diversity was positive and significantly correlated to DMC ($\tau_b = 0.119$, $p \leq 0.05$). Counties with the highest population of Black youth and the highest police department diversity had the highest Relative Rate Index (RRIs) indicating DMC. There was no significant correlation between the diversity of police departments and DMC. Findings may be used by police administration for positive social change through police training programs.

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Dedication

This project is dedicated to my mother, Cornelia R. Johnson, who pushed me to start this journey. My biggest regret is that she did not live to see the completion of this academic accomplishment.

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I would like to thank Fleeter M. Reed, my best friend for life for always being there for me during my trials, tribulations and successes. To my family, sorors, students and friends, thank you for your invaluable help. Thank you to my committee members, Dr. Ernesto Escobedo, Dr. Melayne V. Smith, and Dr. Darius Cooper for your steadfast guidance through this process. And finally, to Dr. Richard Hudson, I could not have completed this journey without your support and guidance. Thank you.

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Chapter 1: Introduction to the Study

Introduction

The United States has the highest incarceration rate in the world according to a report to the United Nations Human Rights Committee (Sentencing Project, 2018). Although the incarceration rate is the lowest rate since 2002, it is still the highest in the world (Lopez, n.d.). In 2008, there were 2.3 million prisoners, and in 2016, there were 2.2 million. The rate was 1,000 per 100,000 in 2008 and 860 per 100,000 in 2016 (Lopez, n.d.). Historically, Blacks and other minorities have been treated differently and more stringently than the White citizens in the nation (Bell & Rasquiza, 2014; Rosich, 2007). Rosich (2007) stated,

> In the early decades, lynching, chain-gang style penal practices, and prosecutorial and judicial bigotry were common, particularly in the southern criminal justice systems. Throughout the United States, racial minorities were generally tried by all white-juries in all white courtrooms, as was the case, for example, in the 1931–32 Scottsboro rape trial. In 1910, Blacks, who were about 11 percent of the U.S. population, were 31 percent of the prison population. Blacks accounted for 405 of the 455 of executions for rape between 1930 and 1972 (p. 2).

Extensive documentation provided evidence that racial disparities in the judicial system are a severe problem currently in the United States (Lehmann, et al., 2017; Mauer, 2011). Ghandnoosh (2014) stated:

> Punishment in the United States is both severe and selective. With the world's highest incarceration rate and one in nine prisoners serving life sentences, the

> United States remains the only Western democracy still using the death penalty. Low-income people of color have disproportionately borne the brunt of these policies. Nearly 60% of middle-aged Black men without a high school degree have served time in prison. And while Blacks and Latinos together comprise 30% of the general population, they account for 58% of prisoners. Criminal justice policies and practices, and not just crime rates, are key drivers of these trends: correctional populations have grown during periods of declining crime rates, and people of color are disproportionately punished even for crimes that they do not commit at higher rates than whites (p. 5).

The phenomenon of Disproportionate Minority Contact (DMC) is well-documented. Within the juvenile justice system, data indicated that Black youth face the same discriminatory factors confronting adult offenders (Donnelly, 2015; Rovner, 2016). The focus of this study was the referral (arrest) phase of juvenile offenders within the juvenile justice system in the State of Georgia. My objective was to identify whether the racial diversity of counties and police departments within counties are significantly correlated in the state of Georgia. My goal was to produce recommendations to reduce DMC with these counties.

In this chapter, I include a detailed discussions of the major theories and theoretical foundation, Also, I include discussions of the problem statement, nature of study, research objectives and corresponding questions and hypotheses, assumptions, limitations and of most importance the significance of the study.

Background of the Study

The lack of equal treatment for Black youth is rooted in the history of the United States. Bell and Rasquiza (2014) stated that since the inception of juvenile courts in 1877, "Black youth were overrepresented in court caseloads compared to the greater population" (p. 10). Other researchers have documented that racial disparities exist at every stage of the juvenile justice process (Crutchfield et al., 2012; Curtis et al., 2016; Gonzales et al., 2018; Spinney et al., 2016). The youth of color are more likely than their White peers to be arrested, more likely to be referred to secure detainment or confinement, and transferred to adult court (Spinney et al., 2016). Other researchers addressed the impact of racial and gender compositions of counties on the treatment of juvenile offenders within their jurisdiction (Fabelo et al., 2015; Rovner, 2014). However, there are very few studies in which researchers examined the relationships of the racial compositions of counties and police departments responsible for the implementation of juvenile justice policies and programs and these racial disparities that exist in the incarceration of Black youth in the nation (Fabelo et al., 2015; Griffith et al., 2012; Rovner, 2014).

The problem of the overrepresentation of racial and ethnic minorities in the juvenile justice system indicated a serious problem in the implementation of laws and policies governing juvenile offenders in the United States (Development Services Group, Inc., 2014; Rovner, 2014). Evidence-relevant statistics revealed that disparities exist at every stage of the criminal justice process (Crutchfield et al., 2012; Curtis et al., 2016; Shannon & Hauer, 2018). However, although many studies have been conducted to

identify the reasons for these disparities and programs instituted to reduce these disparities, these disparities persist (Development Services Group, Inc., 2014; Rovner, 2014). Rovner (2014) stated that a "litany of studies has identified the reasons for the existence of DMC, such as selective enforcement, differential opportunities for treatment, institutional racism, indirect effects of socioeconomic factors, differential offending, biased risk assessment instruments, and differential administrative practices" (p. 1). According to the report issued by the Development Services Group, Inc (2014), these disparities can be attributed to differential offending or differential treatment. The differential offending perspective theorizes that juveniles raised in economically disadvantaged and unstable communities, who attend low-performing public schools, have delinquent peers, live in single-parent households, or exposed to violence are risk factors for delinquency. The differential treatment perspective, also known as the bias theory, theorizes that minority youth are more likely than White youth to suffer harsher consequences because the system treats minority youth differently or more punitively (Darling-Hammond, 2017; Ghandnoosh, 2014; Padgaonkar et al., 2021; Piquero, 2015; Rovner, 2016).

My objective in this study was to address two gaps that I identified in the literature. The racial composition of criminal justice agencies may be one of the major contributing factors to the DMC phenomenon (Dollar, 2014). Specifically, police officers have been identified as first line in the arrest or referral process of juvenile youth (Griffith et al., 2012; Padgaonkar et al., 2021; Spinney et al., 2012). The first gap that I investigated was the correlation between the racial diversity of police departments and

DMC for each county in the state of Georgia. The second gap that I investigated was the correlation between the racial diversity of each county and DMC. Ross (2015) conducted a study to determine the effect of county-level racial/ethnic composition to police shooting. However, Ross (2015) did not have findings because of the poor quality of the data.

Theoretical Foundation

Numerous theories have been postulated that are pertinent to the theoretical foundation for this study. Two macro-theories, structural racism and institutional racism are the theoretical foundations for this study. The first research question on the effect of county population diversity is premised on the theory of structural racism. According to Lawrence and Keleher (2004), the theory of structural racism,

> …is the normalization and legitimization of an array of dynamics – historical, cultural, institutional and interpersonal - that routinely advantage whites while producing cumulative and chronic adverse outcomes for people of color. It is a system of hierarchy and inequity, primarily characterized by white supremacy – the preferential treatment, privilege and power for white people at the expense of Black, Latino, Asian, Pacific Islander, Native American, Arab and other racially oppressed people (para. 1).

Hinton et al. (2018) commented that the reasons for the over-representation of Black Americans are rooted in the history of the United States. Relationships between the majority and minority populations have always favored the dominant or majority population at the expense of the minority population. The Black Codes passed by

Confederate legislatures forced former slaves into an exploitative labor system. The Vagrancy laws stated that any Black person who could not prove he or she worked for a white employer could be arrested. In the other sections of the country, the targeting of Black American by the disparate enforcement of various laws was just as effective as the Black Codes. In the Northeast, Midwest, and West, “disparate enforcement of various laws against ‘suspicious characters,’ disorderly conduct, keeping and visiting disorderly houses, drunkenness, and violations of city ordinances made possible new forms of everyday surveillance and punishment in the lives of black people” (Hinton et al., 2018, p. 2). According to Hinton et al. (2018), "the War on Drugs ... inspired policies like drug-free zones that produced differential outcomes by race” (p.3).

DMC may be significantly correlated to the population structure of the county because of the historical and current evidence that Black youth are subjected to disparate treatment by the White majority in the counties. The structure of the justice system in the county, including teachers, police, prosecutors, and judges, is overwhelmingly White. Researchers have documented that Blacks will be treated more harshly in such structures (Hinton et al., 2018; Seabrook & Wyatt-Nichol, 2016).

> Lawrence and Keleher (2004) defined institutional racism in the following way:
>
> Institutional racism occurs within and between institutions. Institutional racism is discriminatory treatment, unfair policies and inequitable opportunities and impacts, based on race, produced and perpetuated by institutions (schools, mass media, etc.). Individuals within institutions take on the power of the institution

> when they act in ways that advantage and disadvantage people, based on race. (para. 5).

Clair and Winter (2016) have documented institutional dimensions of racial justice in the nation. For example, in a qualitative study, a White judge attributed the existence of racial disparities to what he refers to as institutional racism that "permeates everything" (p. 10). A second White judge stated that the court system "is institutionally prejudiced" (p. 10). Seabrook and Wyatt-Nichol (2016) presented a historical perspective on how racism, described as institutional, is embedded in the criminal justice system.

Although the theories of structural and institutional racism are macro-level theories, which are applicable to this study, at the micro-level of analysis, several theories have been postulated as the cause of DMC: differential treatment, differential offending, bias policing, implied threat and implicit bias (Development Services Group, Inc., 2014). In the literature review chapter, I discuss several other theories and provide additional insights into the DMC phenomenon, such as the theories of differential treatment, differential offending, bias policing, implied threat, and implicit bias (see Darling-Hammond, 2017; Ghandnoosh, 2014; Padgaonkar et al., 2021; Piquero, 2015; Rovner, 2016). Several researchers have expressed that in general, racial disparities and in particular, DMC, are very complex phenomena. Many studies that have been conducted to determine the causes of these phenomena have come to contradictory conclusions regarding racial disparities (Bell & Rasquiza, 2014; DeLone & DeLone, 2017). According to Rover (2014), "Selective enforcement, differential opportunities for treatment, institutional racism, indirect effects of socioeconomic factors, differential

offending, bias risk assessment instruments, and differential administrative practices" were factors for DMC (p. 1). Bell and Rasquiza (2014) stated "that although research does indicate implicit bias may be a factor in juvenile justice decision-making, there is no research proving that implicit bias is, in fact, a cause of the racial disparities" (p. 35). DeLone and DeLone (2017) stated that "the racial disparities in juvenile justice processing present a tapestry of contextual discrimination that suggests that bias occurs in some situations" and continued theoretical development is warranted…" (p. 4).

Problem Statement

Prior to this study, it was not known if or to what extent the racial diversity (Black and White) of counties and law enforcement officers (police departments) in the state of Georgia were correlated to DMC. The racial composition of police department may be one of the major contributing factors to this phenomenon (Dollar, 2014). Studies by Ross (2015) and Fabelo, et al. (2015) were essential to this study because I used these studies as the conceptual foundation and operationalization of the variables for the analysis of data. Based on these two studies, I identified two unresolved issues in the previous research that need further study. The first issue was to investigate whether the racial diversity of counties was significantly correlated to DMC in Georgia. second issue was to investigate whether the racial diversity of county police department was significantly correlated to DMC in Georgia.

In Ross's (2015) study, one of the research questions focused on county-level racial bias and police shooting. The variables associated with this research question were county-level absolute population size, county-level racial/ethnic composition and county-

level race-specific crime rates (aggravated assault and weapons possession). Ross (2015) found that racial bias was a significant factor in police shootings. The probability of being black, unarmed and shot by police was about 3.49 times the probability of being White, unarmed and being shot. In some counties, the negative risk ratios of 20 to 1 or more existed. However, the finding, relative to this set of variables, showed that the racial bias observed in police shootings was not explainable by county-level racial bias. Ross (2015) stated that "county-level data are far too coarse to use to reliably tease apart the conditions that drive racial bias in police shooting…" (p. 6). With reference to the variable of county-level racial/ethnic composition, the data were insufficient to correlate any relationship to the dependent variable of racial bias in police shooting.

Fabelo et al. (2015) conducted a study to evaluate the impact of reforms designed to improve recidivism in the state of Texas. One significant finding by Fabelo et al. (2015) was that the rearrest rates of juvenile youth with similar characteristics under county probation supervision varied considerably from one county to the other. Fabelo et al. (2015) suggested further study to determine why some counties had higher than expected recidivism while others had less than expected rates of recidivism. The first step in compliance with this recommendation would be an analysis of the structural variable of county racial composition to DMC in the state of Georgia.

My goal for this study was to extend the investigation DMC in the state of Georgia conducted by Gonzales et al. (2018) by analyzing the 2018 data on referrals in the counties in the state of Georgia. Griffith et al. (2012), Padgaonkar et al. (2021) and Spinney et al. (2012) have found that that police officers are the first to encounter

juvenile offenders. Researchers have identified the engagement of local officials at the local level as an important factor in DMC. My second objective in this study was to investigate whether there was a significant correlation between the racial diversity of county police departments and DMC. My third objective in this study was to investigate the relationship between the county racial diversity and DMC in the state of Georgia.

Purpose of the Study

The purpose of this quantitative study was to investigate disproportionate racial disparities in the juvenile justice system in the 159 counties in Georgia. I investigated the correlations between the racial diversity of counties and police departments within counties and DMC in the state of Georgia. My goal was to contribute to the literature by providing insights into the complexities of racial disparities and providing a better understanding of the relationships between racial disparities DMC and the racial composition of the counties and the racial composition of police departments in each county in the State of Georgia.

Nature of the Study

I used a quantitative, correlational methodology for this study. Quantitative research, based on the school of positivism, is rooted in the perspective that there is an objective reality that can be scientifically verified (Babbie, 2015). Long (2014) stated "Research methodology is significant not only because it embodies philosophical assumptions, but because it guides the selection of research methods" (p. 428). Methods are specific strategies, procedures, and techniques for analyzing and interpreting data.

A quantitative methodology is a scientific approach to understanding human behavior, organization or in general human phenomena (Chaumbra, 2013).. Quantitative methods are useful for identifying and establishing significant relationships between independent and dependent variables of interest in the study. Quantitative methods are used by researchers to quantify variables and measurements, to design experiments, and to utilize statistical analysis to provide answers to research questions and hypotheses The nature of the data, i.e., quantitative, and the purpose of the study dictate that the correlational design is the ideal design to answer the research questions and the hypotheses (Comiskey & Dempsey, 2015). The quantitative, correlational design includes statistical procedures that are used to address the research questions. It should be noted that significant correlation is not causation. Although variables may be statistically significant, it cannot be concluded that the independent variable is the cause of the effect on the dependent variable.

Research Objectives

My primary objective in this study was to extend an understanding of the DMC phenomenon by analyzing the relationships between racial demographics in Georgia counties, the racial demographics of the police department in each county and DMC in the juvenile justice system. The implication for social change gleaned from this study is essential for several stakeholders, such as the communities, public officials, law enforcement officials, policymakers, and most importantly, the Black youth impacted by the discriminatory implementation of juvenile justice law based on race. Specifically, positive findings may be used to mandate cultural competency training programs

designed to reduce racial disparities in the Georgia juvenile justice system (Gonzales et al., 2018).

Research Questions and Hypotheses

I created three research questions and associated hypotheses for this study. I focused only on DMC at the referral stage. Gonzales et al. (2018) identified decisions made at the referral stage creates the DMC, and this pattern of DMC is reflected at subsequent stages of the juvenile justice process. I based the research questions on this stage of the juvenile process.

Research Question 1 (RQ1): Are there significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia?

Null Hypothesis ($H_0$1): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia.

Alternative Hypothesis (H_a1): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia.

Research Question 2 (RQ2): Are there significant differences in RRIs indicating DMC based on the racial composition of the police department in each county?

Null Hypothesis ($H_0$2): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the police department in each county.

Alternative Hypothesis (H_a2): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the police department in each county.

Research Question 3 (RQ3): Are there significant differences in RRIs indicating DMC based on the racial composition of the county?

Null Hypothesis ($H_0 3$): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the county.

Alternative Hypothesis (H_a2): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the county.

Operational Definitions

Several variables were defined for this study.

At-Risk: For the State of Georgia, the at-risk population is defined as the segment of the population less than 17 years old or from 0 to 16 years of age.

Child: Under Georgia Code Section 15-11-2 (2020), a child is defined as any individual who is under the age of 17 years; under the age of 21 years, who committed an act of delinquency before reaching the age of 17 years, and who has been placed under the supervision of the court or on probation to the court; or under the age of 18 years, if alleged to be a deprived child.

County Diversity Index: Each county diversity index is based on the diversity index

equation (United States Census Bureau, 2020). See Appendix B for the diversity index for each county in Georgia.

Disproportionate Minority Contact (DMC): As defined by the Office of Juvenile Justice and Delinquency Prevention (OJJDP), DMC is "the disproportionate number of minority youth who are arrested (referred) into contact with the juvenile justice system" (Gonzales et al., 2018, p. 1).

*Diversity Index Equation***:** The calculation of the diversity indices is based on the method developed to measure racial diversity in populations. The operationalized diversity index is calculated by a formula which considers the state's level of racial diversity and is based on the amount of variance in the state's population across racial groups (Blau, 1977). The formula is as follows:

D = 1 – ((proportion of the population who are American Indian or Alaska Native)^2 + (proportion of population who are Asian)^2 + (proportion of population who are Hawaiian or Other Pacific Islander)^2 + (proportion of population who are Hispanic students or Latino)^2 + (proportion of population who are Black or Black)^2 + (proportion of population who are White)^2)

The diversity index using the Simpson Index scale is easily interpreted. The scores would range from 0 to 100, with low scores indicating low diversity and high scores representing high diversity.

Police Department Diversity Index: Each county's police department (Black and White police officers only) diversity index is based on the diversity index equation. See Appendix B for the diversity index for police departments in each county.

Referral Stage: Intake refers to the placement of juvenile offender at the first stage of the process. The offender may be placed at (a) a home awaiting prosecution, (b) a non-secure detention site, or (c) in secure detention at a regional youth detention center (RYDC). The second stage of the process is diversion/informal. The offender may be placed at (a) a home, or in (b) a non-secure residential treatment facility. The third stage is probation in which the alternatives are identical to the options at the diversion/informal stage. The fourth stage is a short-term program at a (a) non-secure residential treatment or placement in a (b) RYDC or (c) Youth Detention Center (YDC). The final stage in this process is commitment. The four options for this stage are (a) at home, or (b) in a non-secure residential treatment facility, or (c) at the RYDC Awaiting Placement, or (d) placement at a YDC. In the State of Georgia, arrests were incorporated in referrals.

Relative Rate Index: The Relative Rate Index (RRI) is a measure of the rate of racial disparity between White youth and youth of color at a particular stage in the system.

For each of the legal stages, data are available for the following categories: referrals (arrested) unique youth served, admissions, releases, average length of stay, average daily population, and child-care days served. For this study, data for the two categories, referrals and at-risk population by race were analyzed. All variables are continuous variables.

Assumptions

My primary assumption for this study was that the collected data are accurate. For example, one objective was to identify individuals (and their race/ethnicity) in each

county agency responsible for decisions at every level of the juvenile justice process. To obtain this information, I submitted requests pursuant to Georgia's Open Record Act to officials responsible for this data. A second assumption was that the data identifying the race of each of these individuals were accurate.

To conduct a quantitative, correlational design, I am required to run several tests to determine which of three statistical tests, that is, Pearson's *r*, Spearman Rank-order *r*, and Kendall's tau-b statistic, was the correct one to evaluate the research questions. There are several assumptions associated with Pearson-Product Moment correlations, which are levels of measurements, linearity, homoscedasticity, and outliers (Laerd Statistics, 2018). The data (a) should be measured at the interval or ratio level; (b) should have a linear relationship between variables; (c) is equally distributed around the regression line; (d) and there are no significant outliers. If any of these assumptions are violated, I will used the non-parametric Kendall's tau-b procedure to analyze for statistically significant correlations between the independent and dependent variables.

Limitations

The primary limitation of this study was that the target population consisted of 159 counties in the State of Georgia. Therefore, the findings are only valid for the population of these counties and cannot be generalized to other states with different population characteristics. Other states have different programs implemented and funding patterns to address the problem of DMC. Further, the population for the State of Georgia is overwhelmingly White and Black which may significantly influence the implementation of the juvenile justice process in Georgia. This study was a quantitative,

correlational design which can only measure relationships between variables and not cause and effect (Babbie, 2015; Bordens & Abbott, 2017).

Scope and Delimitations

Delimitation refers to those characteristics that limit and define the boundaries of the study (Simon & Goes, 2013). The first delimitation was the selection of the sample. the juvenile justice system at the county level. Researchers in other states have studied factors associated with DMC (Coalition for Juvenile Justice, 2017; Fabelo et al., 2015; Griffith et al., 2012). Although some of these researchers included county-level variables in their studies, they did not focus on the racial identification of the decision-makers at the county-level and their possible impact on DMC. Therefore, any significant findings are limited to the State of Georgia juvenile justice system.

The second delimitation is the independent variable, police department diversity, and the relationship of this variable to DMC. As noted, other researchers in this area of study selected other variables, such as programs designed to reduce DMC (Fabelo et al., 2015) or the impact of budgeting at the county-level (Coalition for Juvenile Justice, 2017). What these other researchers have revealed is that each state has unique and different features that were not analyzed in this proposed study.

The third delimitation is the inclusiveness of the target population of all counties in the State of Georgia as the sample for the study. The fourth delimitation is that any significant findings between the independent and dependent variables may be due to implicit bias. I have not designed this study to identify the role of implicit bias and DMC. Additional research is needed that uses psychological tests constructed to measure

whether implicit bias and DMC are significantly correlated for the populations in this study.

The disproportionate incarceration rate of minority offenders nationwide is a clear indicator that systemic biases exist within our juvenile justice system (Chapple et al., 2017; Smith et al., 2017). Contributing factors to this bias may include attitudes and perceptions of criminal justice officials (Chapple et al., 2017; Ghandnoosh, 2014; Gonzales et al., 2018). Moreover, the type of training and personal prejudices of police officers which impact the disposition actions of the case may also be contributing factors (Hall et al., 2016; Weir, 2016). Also, the juvenile's attitude, race, gender, and social status which impact on the adjudication of the case and negative perceptions may influence the handling of a case. There have only been a few studies that have addressed whether the racial and gender compositions of populations at a more global level, that is racial demographics of counties and police departments, have a significant impact on the treatment of juvenile offenders within its jurisdiction (Lehmann et al., 2017; Mauer, 2011; Shannon & Hauer, 2018).

The system of inequality that is perpetuated in the nation is built into the system by rules, written and unwritten, policies, and practices of social/business institutions. This social stratification impacts our interpersonal relationships and our view of self. Winant (2006) suggested that racism perseveres "as an idea, as practice, as identity, and as social structure" (p. 987). We exist in a paralleled society with diverse outcomes of a cultural and political-economic shift that have, in essence, created a dichotomy of advancement and stasis in racial institutions. The implication for social change gleaned from this study

is essential for several stakeholders, such as the communities, public officials, law enforcement officials, policymakers, and most importantly, the Black youth impacted by the discriminatory racial implementation of juvenile justice law. Those responsible for policy can reduce disparities by developing policies designed to accomplish this objective. The media and criminal justice implementers can "implement several proven interventions to sever associations of crime with race (Ghandnoosh, 2014). Specifically, positive findings possibly provide practical implications conducive to mandate cultural competency training programs designed to reduce racial disparities in the Georgia juvenile justice system.

Summary

In summary, in this chapter I introduced information that indicated the pervasiveness of the DMC phenomenon in America. Of interest to this study is the impact of DMC within the juvenile justice system in the State of Georgia. Researchers have shown that racial disparities exist at every level of the juvenile justice system. Because of some of the factors are rooted in historical relationships between the dominant White population and minorities, recent interventions have been mandated in the effort to reduce and eliminate racial disparities in the criminal and juvenile justice system.

Toward defining the problem statement, I reviewed several studies in which the researchers' findings supported the objectives of this study. In particular, several reviewed studies, Fabelo et al. (2015), Griffith et al. (2012), Ross (2015), and Gonzales et al. (2018) investigated the impact of county-level factors on racial disparities for juvenile

offenders. Based on this background, I constructed several research questions and corresponding hypotheses. This study is significant in that it may provide further insights on the impact of race in decision-making processes at the county-level by law enforcement officers. I presented several limitations to conclude the chapter.

In the next chapter, i.e., Chapter 2, Literature Review, I will present a review of the literature. I will include presentation of several theoretical perspectives in which this study is grounded and recent research results in the field of juvenile justice. In Chapter 3, Research Methods, I will discuss the problem statement, research questions and hypotheses, research methodology and design, population and sample selection, data collection and analysis, validity and reliability issues, limitations and ethical considerations. In Chapter 4, Data Analysis and Results, I will discuss the descriptions of the sample and the results of the statistical analysis of the research questions In Chapter 5, Discussion, Conclusions, and Recommendations, I will discuss the findings of the study within the context of previous research findings. In addition, I will discuss implications and recommendations for future study.

Chapter 2: Literature Review

Introduction

I had two primary goals in this research. The first was to investigate for significant correlations indicating disproportionate minority contact (DMC) disparities in the juvenile justice system in the 159 counties located in Georgia. The second was to investigate whether the racial compositions of the county population and the police departments were significantly correlated at the referral stage of the juvenile justice process. I used a quantitative correlational design for this study. Researchers use a quantitative methodology because it is an efficient and practical approach to the analysis of a collection of significant amounts of quantitative data obtained from several judicial districts (Curtis et al., 2016). The extensive documentation of racial disparities in the judicial system indicated a severe problem in the United States (Lehmann et al., 2017; Mauer, 2011). Evidence-relevant statistics revealed that disparities exist at every stage of the juvenile justice process (Crutchfield et al., 2012; Curtis et al., 2016; Gonzales et al., 2018; Spinney et al., 2016;). Youth of color are more likely than their White peers to be arrested, more likely to be referred to secure detainment, confinement, and transferred to adult court (Gonzales et al., 2018; Spinney et al., 2016). Other researchers have addressed the impact of racial and gender compositions of juveniles on the treatment of juvenile offenders within its jurisdiction (Fabelo et al., 2015; Gonzales et al., 2018; Griffith et al., 2012; Rovner, 2014). However, there are very few researchers that have studied the relationships of the racial compositions of the different counties and police departments

within these counties responsible for the implementation of juvenile justice policies and programs and these racial disparities (Griffith et al., 2012; Rovner, 2014).

It may be that criminal justice agencies that are predominantly White may be one of the significant contributing factors to this phenomenon (Dollar, 2014). In preliminary research of the literature, I failed to find any study that analyzes the racial disparities for juvenile offenders for all counties in Georgia and at the various stages in its system. One of the strategies of Georgia's Juvenile Detention Alternative Initiative (JDAI) is to combat racial and ethnic disparities in the juvenile justice system (Georgia Criminal Justice Coordinating Council, 2017). As of 2017, only seven counties in Georgia—Fulton, Clayton, Chatham, Gwinnett, Newton, and Dekalb—had been studied with an objective of assessing DMCs (Gonzales et al., 2018).

An earlier study on DMC in the State of Georgia reported that "the current data system that exists for the Georgia juvenile justice system is inadequate for the robust study that DMC requires" (Georgia Criminal Justice Coordinating Council, 2017, p. 71). Gonzales et al. (2018) conducted the most comprehensive study on DMC for the State of Georgia. Although the researchers included county-level factors, the racial diversity of the county or the police departments in each county were not included. In this study, I investigated the following question: What were the relationships between racial demographics in Georgia counties and racial compositions of police departments and DMC in the juvenile justice system? My objective was to provide answers to better understand the relationships between the racial compositions of the counties and police departments and DMC.

In the development of this study, I retrieved peer-reviewed articles, government, foundation and other research organizations' publications on juvenile justice in the United States. This search was conducted using the internet to download hundreds of articles. Many sources were accessed to retrieve peer-reviewed articles and reports by government entities and other organizations. The primary two research engines were Google Scholar and Ehost on the Walden Library site. I entered many research strings, such as the following: "*Georgia Juvenile Justice County Data,*" "*Juvenile Justice Studies,*" " *peer-reviewed articles on juvenile justice,*" "studies on DMC," "history of juvenile delinquency," "differential treatment theory," "differential offending theory," "racial or symbolic threat theory," "implicit bias theory," "structural racism," "institutional racism," and "juvenile justice statistics." My objective was to retrieve reference material published within the last 5 years. However, to provide a historical context for the study, I had to retrieve seminal sources on the juvenile justice system. Many of these articles were published at earlier periods than the last 5 years. I concluded this chapter with a summary.

History of Juvenile Justice Reform

America's responses to juvenile delinquency have varied over the history of the nation (Springer et al., 2011). During colonial times, labeled as the Puritan Period, the common law of England served as the definition of a juvenile. According to this definition, to be capable of committing a crime was (a) to have the will to commit a crime and (b) to have committed a crime. Children up to the age of 7 years were considered too young to have the intention to commit a crime. Children between the ages of 7 to 14

years were considered too young to be guilty of a felony. Children over the age of fourteen received the same penalties as adults. Juvenile offenders, treated like petty criminals, were given warnings, subjected to public shaming, forced to become indentured laborers, subjected to a court-observed whipping, and manacled with handcuffs, leg irons, or other forms of restraint (Springer et al., 2011).

The first significant change in society's response to juvenile delinquency began in 1824 when in New York City, the Society for the Prevention of Juvenile Delinquency established the New York House of Refuge (Springer et al., 2011). In 1825, 1826, and 1828, separate juvenile facilities were created for juvenile offenders in New York City, Boston, and Philadelphia respectively. This period represented the beginning of the social reform movement known as the child-saving movement. Although reform schools were supposed to provide discipline in a homelike atmosphere with an emphasis on education, harsh punishment, severe whippings, and solitary confinement served as punitive techniques (Lyons, 2015; Springer et al., 2011).

In New York, neglected and delinquent children found refuge in foster homes (Springer et al., 2011). Other refuge homes opened in 1826 and 1828 in Boston and Philadelphia. However, the refuge home reform effort failed for many reasons.

> However, the treatment of children and the conditions in these homes were far from therapeutic. The children typically spent eight hours of the day at labor industries and factories, where the quality of children's lives did not improve. They also received the same types of punishments as used in

adult facilities such as ‘handcuffs, the ball and chain, leg irons and the barrel” (Springer et al., 2011, p. 4).

In response to the failure of reforms, the child-saver refers movement emerged in the nineteenth century and influenced the development of the juvenile justice system (Platt, 1969). “The essential preoccupation of the child-saving movement was the recognition and control of youthful deviance” (Platt, 1969, p. 28). The most significant result of the child-saver movement was that the “efforts of the child-savers were institutional expressed in the juvenile courts” (Platt, 1969, p. 28).

The first juvenile courts were informal civil tribunals conceived to end the tradition of adjudicating and imprisoning children with adult criminals (Humes, 2010). Children’s lack of maturity, psychologically, emotionally, and developmentally, was the rationale used for creating a separate system (Hess et al., 2012). In 1899, Illinois passed the Juvenile Court Act titled “Act to Regulate the Treatment and Control of Dependent, Neglect and Delinquent Children” (Ingram & Ryals, 2020, para. 5). This Act created a juvenile court in Cook County (Chicago) in which judges ruled on juvenile cases. Other states developed juvenile courts based on the philosophy that the treatment of children and adults should not be the same (Lyons, 2015).

An issue that confronted the juvenile justice system was the courts’ interpretations of the Thirteenth Amendment which prohibited involuntary servitude “except as a punishment for a crime whereof the party shall have been duly convicted” (Hancock, 1992, p. 615). More explicitly, according to Hancock (1992), many state programs compelled juvenile delinquents to perform involuntary labor, such as court-ordered

community service and vocational training programs, as well as a juvenile statute "to compulsory labor expressly for the purpose of punishment, not rehabilitation" (Hancock, 1992, p. 615). Because the Thirteenth Amendment prohibits involuntary servitude unless the person has been convicted of a crime, the argument has been made that there is an implicit exception which may justify the "imposition of compulsory labor on juvenile delinquents" (Hancock, 1992, p. 617). Under *parens patriae*, the state acting as a surrogate parent disciplining a juvenile qualifies for the implicit exception to the Thirteenth Amendment. Courts have arrived at different conclusions ranging from "compulsory labor incompatible with a delinquents' rehabilitation to required work programs which may provide useful therapy" (Hancock, 1992, p. 618). In conclusion, courts are forced to develop a more conscious development of the juvenile justice system to conform to the requirements of the Thirteenth Amendment.

Juvenile courts in the early 20th century adopted the doctrine of *parens patriae*, in which the state assumed the parental role, acting as the agent for the child's welfare (Mihailoff, 2008). Cases were conducted informally, as civil cases instead of criminal proceedings. Typically, appointed probation officers conducted investigations of the child's family, living conditions, and health, before a hearing, to assist in the determination of a court appearance or child social services placement or intervention. Juvenile courts had no juries, or fourth amendment protection such as rules of evidence and due process, or the compulsion of witnesses. Representation by attorneys was actively discouraged. Abrogation of parental authority served as the norm. Children were

labeled delinquents regardless if the crime was a statutory offense, a criminal act, or a family dispute (Mihailoff, 2008).

A different explanation for the emergence of the juvenile court noted by historians and sociologists suggests that despite the rhetoric of social reformers, crime control was the catalyst for the implementation of a separate system (Law Library - American Law and Legal Information, 2010). Prior to the development of juvenile justice, courts and juries typically found socially and physically immature defendants innocent or dismissed the charges against them. Police and prosecutors, frustrated with the criminal court's inability to adjudicate young offenders, welcomed the creation of a separate system more capable of addressing juveniles on their terms and that would be inclined to intervene even in minor offenses. For example, according to Lyons (2015), in 1941 California passed the Youth Corrections Authority Act which mandated that the purpose of juvenile corrections was rehabilitation and not punishment.

In 1950, Congress passed the Youth Corrections Act which gave judges greater flexibility in sentencing juveniles (Lyons (2015). Public sentiment has also changed since the inception of this system, calling for stiffer penalties or restorative justice. The increase in juvenile crime and population between the mid-1980s and early 1990s precipitated a change in criminal justice policy. Lawmakers adopted a so-called "get-tough" attitude on juvenile offenders by enacting more stringent laws. These reforms include policies that allowed for an increase in the adjudication of youth as adult offenders.

From colonial times to the beginning of the 20th century, no federal laws or policies addressed the issues of juvenile justice. Congress created the Children's Bureau to investigate and report on all matters pertaining to the welfare of children. Among the topics affecting children mandated by the Act was juvenile courts. In 1961, the passage of the Juvenile Delinquency and Youth Offenses Control Act attempted to demonstrate new methods of delinquency prevention and control. In 1964, under this Act, Washington, D.C. received approval for a special demonstration project. In 1968, Congress passed the Juvenile Delinquency Prevention and Control Act. Under this Act, states were "to prepare and implement comprehensive juvenile delinquency plans and, upon approval, received Federal funds to carry out prevention, rehabilitation, training, and research program" (Office of Juvenile Justice Delinquency Prevention, np). The Omnibus Crime Control and Safe Street Act of 1968 and its amendment in 1971 provided a grant for community-based juvenile delinquency prevention programs.

The most significant advancement in juvenile justice was the passing of the Juvenile Justice and Delinquency Prevention Act (JJDPA) in 1974. Notable features of the JJDPA include discretionary and block grants to support youth programs developed by public and private youth-serving agencies. JJDPA also included the edict to remove status offenders within two years from secure detention and correctional facilities. Mandates also specified that juveniles could not be placed with adults convicted of criminal charges and required that States must participate in the JJDPA (Office of Juvenile Justice Delinquency Prevention, np) There was no involvement of the federal courts because juvenile courts were under the jurisdiction of states. However, there were

significant differences between the juvenile courts' interpretations of their treatment of juvenile offenders that raised constitutional questions and required intervention by the Supreme Court.

Rulings by the Supreme Court have also dramatically changed the way that this system does business (Lyons, 2015: Rovner, 2017; Sentencing Project, 2023). Juvenile statutes and procedures were virtually unchanged from the 1900s until 1966 when the Supreme Court ruled on several procedures of the juvenile courts. In Kent v. United States, the Supreme Court addressed the question of whether a youth has a right to be heard prior to having the juvenile court's judge waiving jurisdiction and thereby transferring the youth to adult court. The Supreme Court ruled that the hearing for the youth must include the essential elements of due process and fair treatment.

The landmark Supreme Court decision in the court case of In re Gault, 387 U. S. 1 (1967), involved a 15-year-old youth, Gerald Gault, who was arrested for making lewd phone calls to a neighbor and was ordered committed to the State Industrial School as a juvenile delinquent (Lyons, 2015). The Supreme Court held that the Fourteenth Amendment also protects juveniles. The requirements included adequate notice to the youth or parent of the youth, the right to be represented by counsel, an opportunity for confrontation and cross-examination at the hearing, and constitutional privilege against self-incrimination. In the landmark case of In re Winship, 397 U. S. 358 (1970), the Supreme Court held that the beyond a reasonable standard also applied in criminal prosecutions against youth. In McKeiver v. Pennsylvania, the Supreme Court held that juveniles are not entitled to a trial by jury in juvenile court proceedings (Lyons, 2015).

These earlier Supreme Court decision established the constitutional protection pursuant to the Fifth and Fourteenth Amendments. Subsequent Supreme Court decisions from 2005 to 2016 addressed the limitation of sentencing for youth found guilty of serious crimes such as homicide. In Roper v. Simmons' case in 2005, the Supreme Court abolished the death penalty in all circumstances for juvenile offenders under eighteen and held that the death penalty for youth to be cruel and unusual punishment (Rovner, 2017). This decision was the first Supreme Court decision influenced by brain research that the human brain continues to mature until about the age of 25 (Phalon, 2016; Rovner, 2017). The importance of this fact, noted by the Supreme Court in Thompson v. Oklahoma, in which the court stated, "The susceptibility of juveniles to immature and irresponsible conduct is not as morally reprehensible as that of an adult" (Lyons, 2015, p. 749).

The next question confronting the nation was whether life without parole for youth who committed serious crimes was constitutional. In Graham v. Florida, the Supreme Court ruled that the penalty of life without parole for youth not convicted of homicide was unusually harsh punishment for a juvenile (Sentencing Project, 2023). In Miller v. Alabama, the Supreme Court addressed the constitutionality of life without parole for juveniles convicted of homicide-related offenses. The Court ruled that mandatory life without parole sentences violate the Eighth Amendment (Sentencing Project, 2023). However, the inconsistency of state courts in interpreting the Miller decision required the Supreme Court to address whether the Miller decision would be applied retroactively. In Montgomery v. Louisiana, the Supreme Court extended the ruling in the Miller decision to be applied retroactively (Sentencing Project, 2023; Lyons,

2015). The Supreme Court ordered resentencing for the approximately 2,100 youths serving mandatory life sentences. Following these parole hearings, Peck et al. (2013) reported that 77% of these youth were minorities and more than 60% were Black. Importantly, this decision answered the question of whether the principle of Miller v. Alabama applied retroactivity and affirmed that it does.

The Problem: Disproportionate Minority Contact

The lack of equal treatment for Black youth is rooted in the history of the nation (Bell & Rasquiza, 2014; Rosich, 2007). From the inception of juvenile courts in 1899, "Black youth were overrepresented in court caseloads compared to the greater population" (Bell & Rasquiza, 2014, p. 10). In a report issued in 1940, a review of 53 courts in the nation, the author stated, "that Negro children are represented in a much larger proportion of the delinquency cases…cases Negro boys were less frequently dismissed than were White boys" (p. 12). In 1988, the President and Congress received the report "A Delicate Balance" authored by the National Coalition of State Juvenile Justice Advisory Groups (Rovner, 2014). In the Executive Summary, the authors stated:

> We know that some minorities do commit a slightly greater number of serious crimes but not at a rate or level of any great significance when compared to white. We also know that small and repeated actions of hundreds of individuals in the juvenile justice system often add up to decisions and actions that are prejudicial and racist in consequence. Having said this, however, we have contributed little to our understanding of the problem. Disparate juvenile and criminal justice rates for minorities are not a new phenomenon (p. 1).

In response to recommendations in the report, the JJDPA amendment in 1988 mandated that participating states be required to address DMC (Sickmund & Puzzanchera, 2014). The amendment recognized that racial and ethnic disparities were pervasive at every stage, i.e., arrest, referral, diversion, detention, petition, adjudication, probation, placement, and waiver, of the juvenile justice system and not limited to secure confinement only. The DMC mandate, enacted by Congress in 1988, addresses the issue of minority overrepresentation in the juvenile justice system (Donnelly, 2015). Specifically, it requires states to reduce this population if the percentage relationship to the general population is a higher proportion. In 2002, the mandate was revised to include minority contact with the juvenile justice system. Currently, this is the only national law that penalizes states for failure to comply with this type of edict. Failure to comply may result in a 20% reduction in federal funding. The remaining funding must then be allocated to measures to bring the state within compliance standards. An amendment in 2002 to the Act expanded the definition to represent DMC throughout the system.

Youth of color are disproportionately overrepresented throughout the juvenile justice system in nearly every state in the nation (Development Services Group, Inc., 2014; Gonzales et al., 2018; Griffith et al., 2012; Rovner, 2016; Sickmund & Puzzanchera, 2014; Spinney et al., 2016). Based on a study issued by the Development Services Group, Inc (2014), in a nation in which there approximately 70.5 million youth in the age range of 10 to 17, 59 percent are White, and 41 percent are racial minorities. Although White youth comprise the majority of this age group, law officials only detained only 31 percent of these juveniles. Minorities represented the other 69 percent of

detainees. Notably, the disparity rates for Black were particularly stark. While Black youth represented 13% of the juvenile population, “they were 31% of those arrested, 42% of those detained, 39% of those placed in residential facilities, 32% of those adjudicated, 40% of those transferred to adult prisons, and 58% of those sentenced to prison” (Development Services Group, Inc., 2014, p. 3).

Although there has been a significant decrease in the numbers of juvenile arrest and detainment to juvenile facilities, the racial disparities persist. Rovner (2016) stated

> Between 2003 and 2013 (the most recent data available), the rate of youth committed to juvenile facilities after an adjudication of delinquency fell by 47 percent. Every state witnessed a drop in its commitment rate, including 19 states where the commitment rates fell by more than half. 2. Despite this remarkable achievement, the racial disparities endemic to the juvenile justice system did not improve over these same ten years. Youth of color remain far more likely to be committed than white youth. Between 2003 and 2013, the racial gap between Black and White youth in secure commitment increased by 15% (para. 1).

Factors Influencing DMC

The United States Department of Justice issued a technical manual to informed agencies and officials responsible for the administration of the juvenile justice system of the state of the system based on a review of the literature. In response to the DMC mandate of the JJDP Act of 2002, the DMC core requirement changed from disproportionate minority “confinement” to disproportionate minority “contact.” Rather than identify any theories to explain the phenomenon of DMC, the manual described the

following eight possible explanations leading to DMC: (a) differential behavior, (b) mobility effects, (c) indirect effects, (d) differential opportunities for prevention and treatment, (e) differential processing or inappropriate decision-making criteria, (f) justice by geography, (g) legislation, policies, and legal factors with disproportionate impact, and accumulated disadvantage (United States Department of Justice, 2009).

Differential behavior refers to involvement in more serious offenses or involvement in delinquent activities at an earlier age or involvement with other social services or justice-related systems. Mobility effect refers to findings that a youth may commit delinquent behavior in one jurisdiction and processed further in another jurisdiction. An example of seasonal mobility was the findings that one Midwestern county discovered the arrests of Blacks exceeded the total number of youths estimated in the census as a county resident. Further investigation found that there was a substantial increase in the number of Black youths in the community during the summer (United States Department of Justice, 2009).

Immigration and migration-related mobility refer to DMC resulting from policies and practices of the United States Immigration System and the detainment of Hispanic youth. Indirect effects refer to risk factors which are correlated with race or ethnicity that may lead to differential offending issues. Differential opportunities for prevention and treatment refer to the lack of access or eligibility to programs to prevent juvenile offending or drug and mental treatment programs. Differential processing or inappropriate decision-making criteria refer to decisions by officials to treat minority youth differently based on how “family” is defined. A Black youth is more likely to live

with a family member other than the parent, and therefore such youth are at a disadvantage in terms of consideration for or from detention. Justice by geography refers to the actions by officials to minority youth differently in one jurisdiction than in another in the same state. Legislation, policies, and legal factors refer to the fact that whiles these factors may be neutral in intent will have a disproportionate impact on minority youth. Accumulated disadvantage refers to that fact that issues that impact minority youth tend to accumulate rather than dissipate as they move through the system (United States Department of Justice, 2009). As stated before, what is notable about the analysis by the Department of Justice's report is the lack of any reference to any theory or theories to identify causes of DMC (United States Department of Justice, 2009). However, there are numerous theories that have been developed and validated as causal factors to explain the DMC phenomenon.

Theories of DMC Phenomenon

Youth of color are disproportionally sentenced to harsher punishments than their white counterparts. In addition, recent research indicated that court actors tend to use a "perceptual shorthand" that may depict minority youth as "more adult-like, culpable for their offenses, and less amenable to treatment" (Fader et al., 2013, p. 127). Contemporary views depicting Black and Hispanic youth as "dangerous and irredeemable" are mitigating factors used by prosecutors. The overrepresentation of youth of color in the juvenile justice system presented a challenge to federal and state researchers. In response to this challenge, the 1992 amendment to the JJDPA mandated that for a state to receive a grant under the Formula Grants Program, data for each stage must be submitted to

measure the levels of disparities for each racial/ethnic group. The five-stage process requires states to (a) identify the extent to which DMC exists; (b) assess the reasons for the DMC; (c) develop an intervention plan to address DMC; (d) to evaluate the effectiveness of the interventions; (e) and monitor DMC trends (Development Services Group, Inc., 2014). In responses to the "assess the reasons," several theories have been advanced to explain the overrepresentation of minority juveniles in the juvenile justice system (Development Services Group, Inc., 2014; Dollar, 2014; Mauer, 2011).

Theories of Structural and Institutional Racism

There have been numerous theories developed to understand the complexities of juvenile delinquency, such as structural racism, institutional racism, differential offending, differential treatment, racial or symbolic threat, differential policing, and implicit and explicit bias. Of these theories, the macro-theories of structural racism and institutional racism provide the fundamental and theoretical foundation for this study. The theory of structural racism, which is the support for the first research question posing the possible impact of racial composition at the county level, states that racism is so embedded in the nation that it affects majority and minority relationships to the detriment of minorities. Structural discrimination refers to rules, norms, routines, patterns of attitudes and behavior in institutions and other societal structures that represent obstacles to groups or individuals in achieving the same rights and opportunities that are available to the majority of the population.

As stated by Garcia and Sharif (2015), while racism can include interpersonal acts of discrimination against an individual, racism goes beyond personal exchanges and

extends to structural factors, such as institutional policies and norms" (p. 28). Racism is a powerful structural force that functions to oppress racial minorities in the nation (Clair & Denis, 2015). The thesis that the racial composition of a county may be related to DMC is based on "how political, economic and social arrangements are structured by racial hierarchy and supported by colorblind ideology" (Clair & Denis, 2015, p. 860).

It should be noted that structural discrimination refers to acts of discrimination whereas structural racism refers to the ideology or beliefs in the superiority of the dominant group. Regarding the first research question, which is to determine whether there are significant relationships between the diversity of the county population and DMC in the juvenile justice system, the underlying premise is that the structural factors rooted in the historical pattern of oppression of minorities by Whites are significantly related to DMC. It is not the individual act of one or two decision-makers to treat Black youth more punitive than White youth that reflects structural racism. It is when researchers found the existence of DMC in every state of the nation that it becomes structural in nature (Piquero, 2015; Rovner, 2014).

The theory of institutional racism, which is the support for the second research question on the possible impact of the racial composition of decision makers in the juvenile justice system, simply states that significant institutions in the nation, such as the public school system, the criminal justice system, the political system, are affected by race discrimination. Both theories attribute racial disparities to discriminatory policies and practices endemic to racism in America. Chapple et al. (2017) identified institutional racism as a fundamental factor in the differential treatment of Black citizens. Institutional

racism refers to governmental laws, policies, and practices, such as redlining, neighborhood school requirements, unfair lending laws, that perpetuate discrimination based on race. Institutional racism is deeply rooted in the nation's history of slavery, Jim Crow laws, and legalized discrimination based on the Supreme Court's Plessy v. Ferguson case which upheld the constitutionality of racial segregation (Chapple et al., 2017) are prime examples of institutional racism. The legacy of Plessy v. Ferguson, that is, separate but equal, still impacts the ideology of White superiority in contemporary America. In a recent Pew Research poll, 54 percent of Whites respond that Blacks who cannot get ahead are mostly responsible for their own condition, 59 percent of Blacks disagreed and responded that discrimination is the reason (Pew Research Center, 2017). Seabrook and Wyatt-Nichol (2016) stated that racism is embedded in the criminal justice system. The authors presented racial profiling and the use of deadly force by police against unarmed minorities, as evidence of the pervasive practice of racism in the criminal justice system.

There are many studies and reports confirming the validity of these theories. According to Kakade et al. (2012), inequalities-manifest or latent- in juvenile justice system practices fosters these racial disparities. The 2014 ACLU report to the Inter-American Commission on Human Rights identified the significance of race as the primary factor in the treatment of Blacks (ACLU, 2014). Although government officials only began to recognize DMC as a serious issue with the amendment to the JJDPA in 1988, scholars identified this problem as early as 1940. Proof of this was evidenced by Mary Huff Diggs's report issued in 1940 that documented the well-recognized

phenomenon we now call disproportionate minority contact (DMC) in youth court cases. In her review of 53 courts across the country, she identified ‘that Negro children are represented in a much larger proportion of the delinquency cases than they are in the general population (Bell & Rasquiza, 2014, p. 12).

Theory of Differential Treatment

The theories of structural and institutional racism are macro-level theories which provide some theoretical support for the study. The micro-level theory of differential treatment also provides theoretical support for this study. Numerous studies have concluded that Blacks are more likely to be stopped by police officers (Badger, 2014; Mathias, 2017). They are more likely to be denied bail, are more likely to be detained in municipal and state courts (Clair & Winter, 2016; Sentencing Project, 2018), and are more likely to receive longer sentences than similarly situated White offenders (ACLU, 2014;Clair & Winter, 2016).

From 2002 to 2013, in New York City, police officers stopped more than 5 million citizens in the “stop and frisk” program. Although young Black men represented only 1.9 percent of the city’s population, they represented 25 percent of those stopped under the program (Badger, 2014). In Brownsville, Brooklyn, a predominantly Black community, NYPD officers stopped 93 of every 100 residents. More young Black men were stopped in 2011 than there were Black men in New York; eighty-five percent of those stopped were Black and Latino (Mathias, 2017). In 2013, a federal judge, in a landmark decision, ruled that New York City’s “stop and frisk” program violate the

Equal Protection Clause afforded by the Constitution (Center for Constitutional Rights, 2017).

The primary question that needs to be addressed is what the factors that influence and explain the differential treatment of youth offenders are. As the statistics in the previous discussions on differential treatment indicate, historically and currently, Black youth are treated more harshly and severely than similarly situated White youth by law enforcement agencies. Clair and Winter (2016) conducted a qualitative study on the perceptions and views of 59 judges in a northeastern state. The authors noted that other studies have shown how judges' biases and susceptibilities to cultural schemas can impact offenders' sentencing outcomes. "Largely missing is research on how judges think about racial disparities (as to the degree to which they espouse implicit or explicit racial stereotypes), and the extent to which they consider such disparities when making decisions regarding individual cases at various stages of trial" (p. 4). Findings included the following: Most of the judges acknowledged, and expressed concern about, the existence of racial disparities. Seventy-six percent responded with a combination of disparate impact and differential treatment as the reason for the disparities. Many of the judges acknowledged the possibility that their own implicit and explicit biases contribute to racial disparities.

As indicated by the ACLU (2014) report, Black and Latino offenders have significantly higher odds of incarceration, receive longer sentences, and are more likely to receive life sentences without the possibility of parole (LWOP). The disparity is even higher for juvenile offenders sentenced to LWOP. The implementation of the War on

Drugs increased the racial disparities in drug arrests. Analyses of data on rates of drug and substance use have found that Black youth have similar or lower rates compared to White youth. Yet, Black youth were 2.5 times as likely as Whites to have been arrested multiple times and 1.6 times more likely to be arrested once (Kakade et al., 2012).

It is difficult to discern any other conclusion than that differential treatment is a significant factor when analyzing data regarding the treatment of pre-school children. Black children represent 19% of preschool enrollment but 47% of preschool children receiving one or more out-of-school suspensions. White children represent 41% of preschool enrollment but only 28% of preschool children receiving one or more out-of-school suspensions (U.S. Department of Education, 2016, p. 3).

Status offenses, e.g., truancy, runaways, violating curfew, underage drinking, and incorrigible behaviors, are noncriminal acts that are considered law violations only because of a youth's status as a minor (Development Services Group, Inc., 2014; Peck et al., 2013). According to Peck and Jennings (2016), Black youth received more severe outcomes at the diversion, detention, and out-of-home placement stages. A study by Fader et al. (2013) tracked all Philadelphia delinquents who were court-committed to intervention services. During a ten-year period, data were collected at four points: "(a) from the juvenile's court file, or ''J-file,'' (b) at the time of intake into the program, (c) at the time of discharge from the program, and (d) six months after discharge from the program" (p. 129). A quantitative research design was then used to evaluate the data. The results of the study revealed that a therapeutic facility was the modal disposition, for white youth while Black and Latino's modal placements were a physical regimen across

program categories. Further, Black youth were significantly more likely to be committed to reforms schools than White juvenile offenders.

Theory of Differential Offending

In contrast to the theory of differential treatment, the micro-theory of differential offending states that minorities tend to have more, and higher levels of the risk factors associated with offending (DeLone & DeLone, 2017; Development Services Group, Inc., 2014; Peck & Jennings, 2016; Piquero, 2015). Also, the overrepresentation of minorities reflects racial and ethnic differences in the incidence, seriousness, and persistence of engagement in delinquent behavior (Kakade et al., 2012). As noted by Piquero (2015), differential offending "avoids focusing on the decisions of the criminal justice system in lieu of the overrepresentation of minorities in offending behavior" (p. 23). Living in economically disadvantaged and unstable communities, low-performing public schools, greater exposure to violence and dysfunctional families, have been identified in the literature as differential offending risk factors (Development Services Group, Inc., 2014). Dysfunctional families refer to unmarried or single parents, incarcerated parents, poor parent-child communication, and harsh or inconsistent discipline (Office of Juvenile Justice and Delinquency Prevention, 2014).

The exposure to more risk factors in some Blacks neighborhood contributes to juvenile offending. Often, law enforcement agencies have identified heavily minority-populated communities as priority high crime areas or "hotspots." As a result, patrol enforcement techniques lead to the arrest of many Black juvenile offenders. For example, property crimes represent the highest category of arrest for juveniles. In 2011, Black

youth were more than two-and-a-half times more likely to be arrested for a property crime than White youth for a property offense (Rovner, 2014). Rovner (2014) reported that although 16 percent of all students in public school are Black, they constitute 31 percent of all arrests.

Sampson et al. (2005) conducted a study to analyze factors, such as gender, age, family structure, socioeconomic status, residential stability, and family structure, that have hypothesized to be significantly related to racial/ethnic gaps in perpetrating violence. The population for the study consisted of participants aged 8 to 25 years living in 180 Chicago neighborhoods. The odds of perpetrating violence were 85% higher for Blacks compared to Whites. DeLone and DeLone (2017) concluded that the study by Sampson et al. (2005) suggested theoretical support for the theory of differential offending.

Koch et al. (2016), using the National Longitudinal Survey of Youth 1997, examined racial disparities in arrests for drug offending. Based on the differential offending theory, Koch et al. (2016) stated some scholars have claimed that these racial disparities would be based on the fact that Black youth are more likely to commit drug offenses than Whites or Hispanics. However, the results of the study found that Blacks were more likely to be arrested for drug use and drug dealing than similarly-situated Whites. The authors concluded that the results did not support the differential drug offending theory but supported the biased drug enforcement theory.

Stringer and Holland (2016) conducted a study to answer the question of whether Blacks received disproportionately longer sentences for drug offenses than White drug

offenders. Noting that "a great deal of empirical research has found support for" the differential offending thesis, "numerous studies have found that racial inequality continues to exist even when controlling for legally relevant variables, suggesting that racial inequality may be a product of residual prejudices" (p. 330-331). The authors concluded that racial disparities "persist despite the introduction of legal controls, including prior convictions, the number of counts, and the type of offense..." and therefore rejected the differential offending thesis (p. 341).

Theory of Implicit Bias

This study would not be complete without a presentation of the theory of implicit bias. Central to the research questions is the impact of implicit bias and the criminal justice system. Implicit bias is the theory, postulated by Greenwald and Banaji in 1995, that one may have a bias against a member of another racial group without conscious awareness of that bias (Chapple et al., 2017; Ghandnoosh, 2014; Hall et al., 2016; Greenwald & Banaji, 1995). Smith et al. (2017) stated that many scholars have demonstrated that implicit negative stereotypes of Black Americans pervade the American psyche. "Criminal law scholars have employed implicit bias analyses to help explain racial discrepancies in police stop-and-frisk rates, arrest rates, prosecutorial charging and bargaining, sentencing, and other areas where disparities persist" (p. 874-875). Within the context of the criminal justice system, according to Smith et al. (2017), implicit bias is white favoritism. Numerous studies have revealed that implicit racial bias even among individuals who explicitly disavowed prejudice (Ghandnoosh, 2014).

The history of America is the history of racial subjugation and oppression of Blacks in every aspect of daily living. Throughout this history, one of the most dangerous stereotypes is the criminal nature of Blacks. Researchers on the theory of implicit bias have revealed deep-seated and pervasive belief by Whites to associate Blacks and Latinos with criminality (Ghandnoosh, 2014; Padgaonkar et al., 2021). In a study, special unit officers were more likely to exhibit racial bias in their decision to shoot. In an experiment in which the police officer is "presented with images of young men, white and black, holding either guns or innocuous objects, …, the most common mistakes are shooting unarmed black targets and failing to shoot an armed white target" (Weir, 2016, p. 3). Spencer et al. (2016), while stating that their analysis of "police bias" started from "the assumption that police officers do not intentionally discriminate" (p. 50), concluded the following:

> Because they are often operating under conditions of uncertainty, high discretion, and stress and threat, the pervasive stereotypes linking Blacks and Latinos with violence, crime, and even specifically weapons are likely to cause them to make misattributions in seeking to disambiguate the intentions and behaviors of citizens. This can lead to racially disparate rates of stops, searches, arrests, and use of force (p. 59).

Ghandnoosh (2014) discussed the implicit bias thesis from the position that White Americans, in general, support more punitive policies and punishment for alleged crimes by Black citizens than for White citizens. For example, based on studies from 1993 to 2013, about 25% to 33% of Whites believed the American justice system is biased

against Black people while 68% of Black responded that the system is biased against Black people. Hall et al. (2016) that found that police officers perceived young Black boys were older and less innocent than White boys and this "adult-like quality made them appear to be more appropriate candidates for greater use of police force. While the participants' estimations were explicitly endorsed, the explicit ratings were undergirded by an implicit dehumanization of Blacks as vicious, violent animals" (p. 5).

Historically, innocent Blacks have been the victims of lynching and assassination by Whites without fear of being held accountable by the justice system. Most troubling currently is the killing of innocent Blacks by White police officers. As reported by Weir (2016), an unarmed Black is 3.5 times more likely to be shot by police than an unarmed White. An analysis of fatal police shootings between 2010 and 2012 revealed that the likelihood of a young Black civilian as a victim was 21 times more likely than young White males (Hall et al., 2016). It is difficult to understand the killing of Tamir Rice, a 12-year-old Black, who was shot by a White police officer. The officer shot the child within 2 seconds after arriving at the playground.

The theory that implicit bias may account for some of the racial disparities that exist within the criminal justice system is well-documented. Hundreds of studies have been conducted identifying the factor of implicit bias in the criminal justice system. As stated by Bell and Rasquiza (2014), "While some scholars deny or downplay the role of bias as a cause of racial disparities in the juvenile justice system, a wider body of research supports the notion that some type of bias lies at the root of these disparities" (p 7). Clair and Winter (2016) stated that the "differential treatment theories "arises from

overt or implicit discrimination of Blacks and Latinos…" (p. 2). In a review of the literature, Bell and Rasquiza (2014) presented studies that documented implicit bias among key decision-makers in the system, i.e., judges, law enforcement officers, prosecutors, and probation officers. Based on the pervasiveness' of implicit bias that is structural in the society, it is not difficult to understand why crime rates are higher for Blacks than for Whites.

As stated by Bell and Rasquiza (2014), although racial bias and DMC for juvenile have been studied for decades, the complexity of these phenomena have yielded contradictory results. Studies may find that although "implicit bias may be a factor in juvenile justice, there is no research proving that implicit bias is in fact a cause of the racial disparities" (p. 35). DeLone and DeLone (2017) commented that research suggested that racial disparities in the juvenile justice process may be the results of individual bias or institutional discrimination or both. They concluded that

> racial disparities in juvenile justice processing present a tapestry of contextual discrimination that suggests that bias occurs in some situations, for some offenses, but the pattern varies by racial and ethnic group examined, region examined, and even time periods addressed by the study (p. 4).

Stringer and Holland (2016), contrasting the theories of disproportionate offending, direct impact of residual prejudices, differential attributions of blameworthiness and dangerousness on sentencing, stated that "the incongruity of explanations may actually be artifactually generated as the results of differential methodologies" (p. 330).

Disproportionate Minority Contact Research

Congress enacted the Juvenile Justice and Delinquency Prevention (JJDP) Act in 1974. This landmark legislation established the Office of Juvenile Justice and Delinquency Prevention (OJJDP) to support local and state efforts to prevent delinquency and improve the juvenile justice system. The 1992 amendment to the Act required that states must comply with specific core requirements to receive Title II Formula Grants. The 2002 amendment modified the DMC to require states to develop programs to address delinquency prevention and reduce racial disparities. To be funded under the Title II Formula Grant Program, states must collect data at each stage of contact. The data report the racial composition of the youth at arrest, referral, secure detention, the petition filed, adjudication, probation supervision, secure confinement and transfer to adult court, on the racial composition of youth (Development Services Group, Inc., 2014).

Research has shown that discrimination based on race/ethnicity was pervasive at each stage of the juvenile justice process (Spinney et al., 2016). Two essential requirements under the 2002 amendment were the mandate to states to use the relative rate index (RRI) to measure disparities and states to input data on the flow of youths at nine points in their juvenile justice system into a Web-based data entry system. “The RRI is calculated by dividing the rate of activity involving minority youths divided by the rate of activity involving white youths” (Spinney et al., 2016, p. 9). In the following reviews of studies on DMC, it is the RRI that is used to determine the existence of DMC or disparities in the juvenile Justen systems.

A study was conducted in Texas to evaluate the impact of programmatic reforms designed to improve juvenile recidivism (Fabelo et al., 2015). The study, based on a sample of 13,000 youth from a population of 1.3 million records, provided detailed information about each child and their treatment for the years of 2004 to 2012. One objective of the study was to investigate to what extent changes in state policy were responsible for the decrease in the numbers of incarcerated youth. A second objective was to determine if a positive or negative recidivism rate existed based on the placement of an adjudicated youth under the supervision of a local juvenile probation department or to a state-run correctional facility. Moreover, finally, a third objective was to determine the impact on DMC rates for Black and Hispanic youth. Of the 259 counties in Texas, eight counties were selected for an in-depth quantitative and qualitative analysis. In agreement with the national trend, Fabelo et al. (2015) found that there were significant decreases in juvenile arrests and of the average daily population in state-run secure juvenile facilities. Fabelo et al. (2015) stated that even though the decline in these numbers began before the state's reforms, the trend accelerated after the changes. Further, the researchers stated that no study, including their study, has provided a definitive explanation for the decline in juvenile arrests. Regarding the critical issue of reducing the racial/ethnic disparities, the DMC persists. In 2005, the rates for percent of dispositions resulting in commitment were 4.7% for Black, 3.0% for Hispanic and 2.6% for White. In 2012, the rates for percent of commitment placement were 2.3% for Black, 1.5% for Hispanic and 1.2% for White. In response to the issue of recidivism, 75% of youth on probation and 85% of youth released from state-run secure facilities resulted in

re-arrest within five years. The re-incarceration rates were 24% for youth on probation and 54% for youth released from state-run facilities. The researchers computed the probability of re-arrest within one year based on characteristics of the youth in the county and other factors. Of 30 counties, eight had higher than expected rates, nine had lower than expected rates, and thirteen had neutral results (Fabelo et al., 2015)

Griffith et al. (2012) conducted a comprehensive assessment and analysis of DMC within Pennsylvania's juvenile justice system in response to the core requirement of the Juvenile Justice Delinquency Prevention Act of 2002. The objectives of the study were (a) to determine the extent of DMC in the counties; (b) the DMC associated with each stage of the juvenile justice system; (c) what minority groups were most affected by DMC; and (d) what changes have occurred over a 20-year period. Using the RRI index as the operationalized representation of DMC, the findings from the study indicate that DMC was evident at 8 of 10 decision points for all minorities. Griffith et al. (2012) also revealed that minority youth were three times more likely to be arrested, two and one-half times more likely to experience secure detention and twice the rate to experience secure confinement. Of the 67 counties, only three counties have balanced RRI for arrest; only five counties at secure detention; and seven at residential placement. One of the findings of the study that is directly supportive of the proposed study was the identification that "RRIs, with the exception of arrest, are more reflective and representative of decisions made by juvenile justice practitioners rather than the individual characteristics of a specific juvenile and representative of systemic issues …." (Griffith et al., 2012, p. 8).

Two objectives of the study conducted by Spinney et al. (2016) were to identify sites that had successfully reduced DMC and (2) gather information on the strategies used in those sites. Nine sites were selected and represented a demographically diverse sample. Five of these jurisdictions reduced DMC at arrest or referral to court, three jurisdictions reduced DMC at diversion, and two reduced DMC at secure confinement. In Bernalillo County, N.M., racial disparities were reduced for Black, Hispanic and Native American youth for referrals to probation and diversions from court. In Clark County, Nev., racial disparities for Black both decreased at secure detention and secure confinement. For secure detention, the RRI index decreased from 1.7 to 1.4 and 2.4 to 1.7 for secure confinement. In the State of Connecticut, "the RRI values for referrals declined from 2.9 to 1.6 for Hispanics and 6.3 to 4.7 for Black youth" (p. 3). In Essex County, N.J., at referral, the decline was 4.9 to 3.5 for Black youth and 2.2 to 2.1 for Hispanic youth. Hillsborough, N.H., Montgomery County, Ala., Philadelphia, Pa., Tulsa County, Okla., and Utah County, Utah reported similar significant reductions in DMC.

One central finding of the studies by Griffith et al. (2012) and Spinney et al. (2016) was the identification of the engagement of law enforcement officials at the local level as an important factor in DMC. It is these findings that provide the primary objective of the proposed study, which is to investigate the correlations between the racial/ethnic composition of the counties and the police departments responsible at the referral stage of the juvenile justice process. The three main strategies articulated by Spinney et al. (2016) was the engagement of police officers, judges, and the community. It is important to note that the theory of differential treatment and strategies of police and

judge engagement suggest that the underlying premise is the existence of racial and ethnic prejudicial attitudes of law enforcement officials are significant factors to be considered in the efforts to reduce DMC. A curriculum developed in Connecticut "targeted 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" (Spinney et al., 2016, p. 18). It was necessary to have the engagement of judges because of contacts deeper within the system. It was noted that "Getting the buy-in of judges was not always easy" (p. 18).

The studies by Ross (2015) and Fabelo, et al. (2015) were essential to this study because these researchers provided the conceptual foundation, the operationalization of the variables and statistical procedures for the analysis of data. Further, based on these studies, the issues to be investigated and gaps for this study were identified. Ross (2015) presented the results of a study in which one of the research questions focused on county-level racial bias and police shooting. The variables in the study were county-level absolute population size, county-level racial/ethnic composition and county-level race-specific crime rates (aggravated assault and weapons possession). Ross (2015) found that racial bias was a significant factor in police shootings. The probability of being black, unarmed and shot by police was about 3.49 times the probability of being White, unarmed and being shot. In some counties, the negative risk ratios of 20 to 1 or more existed. However, the finding, relative to this set of variables, showed that the racial bias observed in police shootings was not explainable by county-level racial bias. As stated

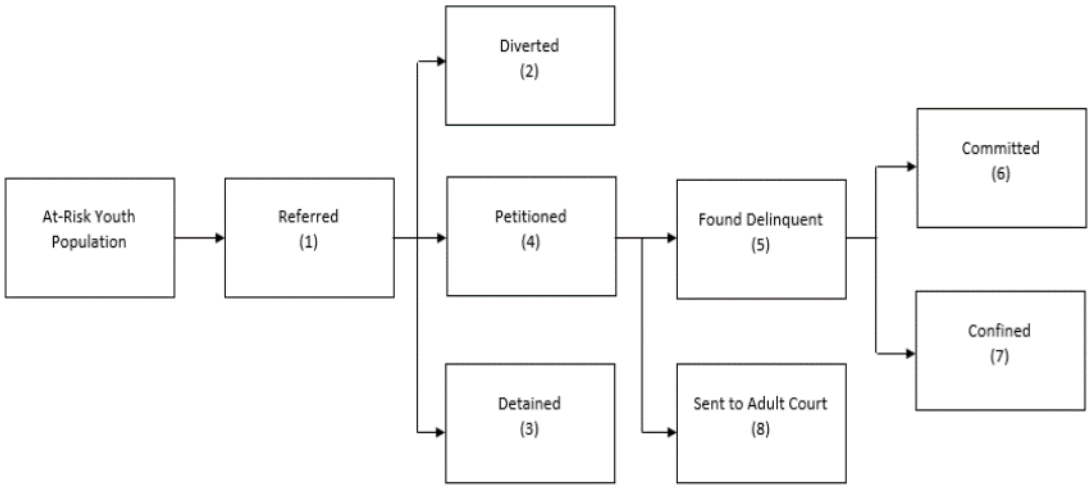
earlier, Ross (2015) stated that “county-level data are far too coarse to use to reliably tease apart the conditions that drive racial bias in police shooting…” (p. 6).

Disproportionate Minority Contact in the State of Georgia

Georgia’s juvenile justice system is diverse and consists of local juvenile courts who serve either single counties or multi-county jurisdictions and Georgia’s Department of Juvenile Justice (DJJ). Independent juvenile courts are in 12 of the state’s most populous counties and have jurisdiction over approximately half of the state’s youth population, and dependent juvenile courts are located in 142 counties. In the majority of these counties, intake services are provided exclusively through DJJ employees (Gonzales et al., 2018). According to Gonzales et al. (2018), decision-making factors are essential to consider in understanding DMC in the State of Georgia.

Figure 1

Georgia Juvenile Justice Decision Points



Note. Reprinted from “DMC”, by Gonzales et al. 2018, p. 4. Retrieved from 2018 DMC Assessment - 6.26.18.pdf (georgia.gov)

There are six primary decision points for youth entering Georgia's juvenile justice system: (a) arrest; (b) intake; (c) adjudication; (d) detention; (e) disposition; and (f) placement (for committed youth; See Figure 1). At any point in the process, offenders may be, and often are, diverted from further penetration of the system Georgia Department of Juvenile Justice, 2017). It is the referral point that is most critical to DMC because the decision to charge the youth or dismiss the case and withdraw the complaint results in DMC that continues throughout the juvenile justice process. For example, according to Gonzales et al. (2018),

> At baseline, Black youth represent just over one-third of the state's at-risk youth population, with White youth representing just over half. After the point of referral, Black youth represent 60% of the population, while White youth are just over one third. In other words, referral to the juvenile justice system inverts the racial composition of the at-risk juvenile population and results in disproportionate representation of Black youth within the juvenile justice system. Since a greater percentage of the Black youth population is referred to the juvenile justice system, this group comes to represent an increasingly larger portion of the system involved population at later outcomes. (p. 22).

In Figure 2, using the RRI analysis, the statewide data are presented (Gonzales et al., 2018). The values in bold indicate significant differences between the three groups, White, Black, Hispanic and Asian. As noted, an asterisk indicates less than 1% and two asterisks indicate an insufficient number of cases for analysis. With specific reference to Black, the youth are more likely to be arrested, referred to juvenile court, have case

diverted, involve secured detention, have case petitioned, have case resulting in secure confinement, have the case transferred to adult court. The only positive category was cases resulting in delinquent findings.

Figure 2

Relative Rate Analysis

Relative Rate Index Compared with :	White							
	White	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/ Mixed	All Minorities
2. Juvenile Arrests	1.00	**1.87**	**0.36**	**	*	*	*	**1.38**
3. Refer to Juvenile Court	1.00	**1.49**	**2.02**	**	*	*	*	**1.52**
4. Cases Diverted	1.00	**1.08**	**1.22**	**2.05**	*	*	*	**1.10**
5. Cases Involving Secure Detention	1.00	**1.52**	**1.43**	**1.69**	*	*	*	**1.52**
6. Cases Petitioned	1.00	**1.23**	**1.32**	1.02	*	*	*	**1.23**
7. Cases Resulting in Delinquent Findings	1.00	**0.93**	**0.86**	0.88	*	*	*	**0.93**
8. Cases resulting in Probation Placement	1.00	**1.70**	**1.35**	**	*	*	*	**1.68**
9. Cases Resulting in Confinement in Secure	1.00	0.95	0.90	**	*	*	*	**0.94**
10. Cases Transferred to Adult Court	1.00	**2.11**	1.15	**	*	*	*	**1.99**
Group meets 1% threshold?	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**	
Key:								
Statistically significant results:			**Bold font**					
Results that are not statistically significant			Regular font					
Group is less than 1% of the youth population			*					
Insufficient number of cases for analysis			**					
Missing data for some element of calculation			---					

Note. Reprinted from "Georgia's Three-Year Plan for Juvenile Justice: 2015-2017", p. 66. Retrieved from https://cjcc.georgia.gov/sites/cjcc.georgia.gov/

Gonzales et al. (2018) conducted the most comprehensive study on DMC in the State of Georgia. The study was longitudinal, and the sample consisted of all juveniles in the system for the years of 2006 to 2014. The objectives of the study included addressing questions, such as "which Georgia counties have the highest rates of DMC" and "what county-level factors at the referral stage contribute to DMC in the State of Georgia?"

(Gonzales et al., 2018, p. i). The points of analysis were referred, diverted, detained, petitioned, delinquent, committed, confined and adult court.

Gonzales et al. (2018) identified the following: (a) ten top counties were that persistently disproportionately referred Black youth; (b) , ten top counties that disproportionately diverted White youth; (c) and ten top counties that disproportionately detained, confined, and committed Black youth. County-level factors included in the analysis focused only on factors related to the Black population, such as "number violent crime arrests for Blacks per 10,000 youth, county graduation rate of Black youth and number of Black Youth arrested for drug crimes per 10,000 youth" (Gonzales et al., 2018, p. 29). The researchers found the following variables significantly predictively increase Black disproportionality at referral in a county: corporal punishment, out-of-school suspensions per 100 students, percent of the population that is Black youth, Black youth violent crime per 10,000, and percent of Black youth in poverty. The study did not analyze the fact of racial demographics of the county population or the decision-makers.

Although the study did not conduct any implicit bias tests for any of the stakeholders, implicit bias was introduced by several of the stakeholders as one of the factors to be considered in the objective to reduce DMC in the state. One judge who was interviewed stated that "law enforcement needs implicit bias training for every single person in every department" (Gonzales et al., 2018, p. 44). Gonzales et al. (2018) stated that "interventions aimed at reducing DMC will have the greatest impact at referrals" (p. 47). They recommended that an increase in the amount of implicit bias and cultural competence training for police officers may reduce the numbers of Black youth arrested.

Summary

The problem of the overrepresentation of racial and ethnic minorities in the criminal justice system or DMC became a prominent policy issue during the latter half of the 20th century. Criminal justice policy has changed as a result of the increase in juvenile crime and population between the mid-1980s and early 1990s. These reforms include policies that allow for an increase in the adjudication of youth as adult offenders. Lawmakers adopted a "get-tough" attitude on juvenile offenders by enacting more stringent laws. The change resulted in the largest number of citizens of any nation in jail or prisons. Although there has been a decrease in the number of criminal offenders incarcerated, the numbers are still staggering large.

As a consequence of these statistics which still indicated the overrepresentation of juvenile of color at every step of the juvenile justice process, federal laws have been implemented with the objective of reducing the numbers of juvenile offenders. In this chapter, I included a comprehensive review of the historical background of the problem. I presented a review of theories on structural and institutional racism as the primary theoretical foundation for the proposed study. Further, I presented a comprehensive review of the latest research and studies on the problem of DMC. I concluded, based on the review, that additional studies are needed to identify causes of and the perpetuation of DMC within juvenile justice systems throughout the nation. My objectives in this study were to investigate the (a) the existence of DMC for each county in the state of Georgia and (b) to conduct correlational relationships between racial demographics in Georgia counties and racial compositions of police departments and DMC in the juvenile justice

system. My primary objective was to gain insight into the complexities of racial disparities and provide a better understanding of the relationships between racial disparities and the racial compositions of the counties and police departments.

In Chapter Three, Research Methods, I discuss the description of the methodology, research questions and hypotheses, and the rationale for the type of methodology, i.e., quantitative, correlational design, i.e., design for the study. Also, in Chapter 3, I discuss population and sample selection, limitations and delimitations, the significance of the study, data collection, data analysis, issues related to validity, reliability, and confidentiality and protection of human subjects.

Chapter 3: Research Methods

Introduction

Prior to this study, it was not known if or to what extent the racial diversity of counties' law enforcement officers in the state of Georgia were correlated to disproportionate minority contact (DMC). Dollar (2015) stated that one of the major contributing factors to this phenomenon is racial composition of criminal justice agents and agencies (Dollar, 2014). Fabelo, et al. (2015) and Ross's (2015) studies are essential to this study because these researchers provided the conceptual foundation and operationalization of the variables for the analysis of data. The racial diversity of counties was based on the racial composition of the county population. Further, based on these studies, I identified factors that are investigated in this study. I designed this study to determine whether the correlations between the racial diversities of counties and police departments within these counties and DMC in Georgia are statistically significant.

I found that the disproportionate incarceration rate of minorities is a national trend. Although there has been a decline in the number of juveniles in the juvenile justice system, there are still significant racial disparities in the numbers of Black youth compared to White youth at every stage of the juvenile justice process. As reported by Rovner (2014), Black youth were more than four times as likely to be committed as White youth. "In 2010, Blacks comprised 17 percent of all juveniles, but 31 percent of all arrests" (Rovner, 2014, p. 1). "Black youth were 269 percent more likely to be arrested for violating curfew laws than White youth" (Rovner, 2014. p. 3). The disproportionate minority problem existed in the categories of property crime arrests, drug offenses, and

school disciplinary offenses. Fabelo et al. (2015) found that re-arrest rates with similar characteristics under county probation supervision varied considerably from one county to the other. The authors suggested further study to determine why some counties had higher than expected recidivism while others had less than expected rates of recidivism.

Shannon and Hauer's (2018) review of the literature indicated a significant decline in the processing of minority youth at multiple stages of the system in Pennsylvania. However, in Iowa, there was no significant decline after mandates to reduce the processing of juveniles. The inference is that some counties have higher rates of racial disparities throughout the juvenile justice process while other counties have lower rates of racial disparities than expected. Gonzales et al. (2018) found significant variations in DMC at the county level and suggested that implicit bias at the arrest level significantly predicts DMC throughout the juvenile justice process.

The quantitative, correlational design was used to investigate the following: (a) whether racial disparities existed at the referral stage of the juvenile justice process in the 159 counties in the State of Georgia; (b) whether there was a significant relationship between the racial composition of the county and these racial disparities; and (c) whether there was a significant relationship between the racial composition of the police departments and these racial disparities. My analysis of DMC only at the referral stage was based on my research's finding that the DMC that occurs at this stage is perpetuated throughout the system (Gonzales et al., 2018). Stated differently, Black youth who are referred are also more likely to be found delinquent and committed than similarly-situated White youth.

In the remaining sections of this chapter, I discussed the content of the remaining chapters. In the "Research Design and Rationale section," I discussed quantitative, correlational design methodology and the rationale for selecting this approach to investigate questions and hypotheses for the study. In the "Target Population," Sampling Procedure," "Sample Size," and Data Collection," I discussed the details of sampling, the size of the sample populations, and the collection of data for this study. In the sections, "Validity and Reliability" and "Confidentiality and Protection of Human Subjects," I discussed questions and issues on validity and reliability of data and confidentiality and protection of human subjects. In the "Summary section," I discussed the conclusions relative to the sections in this chapter and a preview of the next chapter.

Research Design and Rationale

Research Design

The study was a quantitative, correlational design. I choose the quantitative, correlational design was chosen to examine whether significant relationships exist between independent and dependent variables in a study. Babbie (2015) and Comiskey and Dempsey (2015) have indicated that this is the correct design because of the nature of the data. The independent variables were racial diversity of counties and racial diversity of police departments in each county and the dependent variable is DMC. Because of the nature of the data, i.e., quantitative data and the purpose of the study, which is to analyze for statistical significance relationships between the independent and dependent variables, I choose the quantitative, correlational design to test for significance between dependent and independent variables in the study.

Other quantitative designs, that is descriptive design, experimental design and quasi-experimental design, were eliminated for the following reasons. I eliminated the descriptive design because this design lacks the capability to test for statistically significant relationships between the variables. I eliminated the experimental design because the purpose of this design is to determine cause-and-effect relationships between groups/variables. Usually, participants are randomly placed into either the control group or the experimental group. The experimental group is exposed to a stimulus, and a statistical test is administered to determine whether there is a statistically significant difference between the control and experimental groups that was caused by the stimulus (Bordens & Abbott, 2017). I eliminated the quasi-experimental design because the purpose of this design is to establish cause and effect between two variables but without the rigorous control necessary for experimental design. This type of design does not have control and experimental groups (Bordens & Abbott, 2017).

Research Methodology

In this study, I used a quantitative methodology. Quantitative research, based on the school of positivism, proposes that there is an objective reality that can be scientifically verified (Babbie, 2015). Quantitative research is one of the dominant paradigms in the field of social science research and has been established as a principle for scientific investigations of social phenomena (Antwei & Hamza., 2015; Weir, 2016). Long (2014) stated: “Research methodology is significant not only because it embodies philosophical assumptions, but because it guides the selection of research methods” (p. 428).

A quantitative methodology is a scientific approach to understanding human behavior, organization, or in general human phenomena (Bordens & Abbott, 2017; Rudnick, 2014). Quantitative methods are useful for identifying and establishing significant relationships between independent and dependent variables of interest in the study. Researchers use quantitative methods to quantify variables and measurements, to design experiments, and to utilize statistical analysis to provide answers to research questions and hypotheses (Chaumbra, 2013). There are statistical procedures that are available to address the research questions, which are complex. Quantitative methodology advantage is that it provides an efficient and practical approach to the analysis of a collection of large amounts of quantitative data such as the source of data for this study (Comiskey & Dempsey, 2015). This study used secondary data from a database available to the public. The type of data were quantitative, and therefore quantitative methodology is a more accurate approach to answer the research questions and related hypotheses. Also, quantitative analysis utilizes descriptive measures to summarize relationships between the variables in the study (Chaumbra, 2013).

Quantitative methodology was chosen rather than qualitative methodology. A qualitative methodology is an empirical approach to understanding human behavior and phenomena which cannot be analyzed using numerical data (Rudnick, 2014). Qualitative analysis presents a more complete understanding of the human experience. Qualitative analysis involves the collection of information from participants, such as feelings, emotions, reactions, which cannot be quantitatively measured. Because of the nature of

the research questions, hypotheses, and numerical data, qualitative analysis was inappropriate for this study.

Target Population

There were two target populations. The first target population consisted of the White and Black residents of the 159 counties in the State of Georgia. The ratio variable of county diversity is defined as the number of Black to White residents of each county. The second unit of analysis was the population of Black and White police in each county. The individuals of interest were those who are the initial decision-makers at the referral (arrest) stage of the juvenile justice process. The third unit of analysis was the RRI for each county.

Sampling Procedure

Total population sampling is a type of purposive sampling technique that researcher use when examining the entire population that have a particular set of characteristics (Laerd Statistics, 2018). The major characteristic associated with each population in the study is the race of the individual. More specifically, my objective was to calculate the diversity index for each of the groups, that is, the county and police departments described below. Police officers are usually the first responders to complaints involving juveniles. All data were aggregate data.

Sample Size

The were two target populations. The sample for the county diversity variable is the total White and Black population for each county in the State of Georgia in 2016. The estimated total population for the State of Georgia was 9,688,690. Of this population,

5,484,889 were White, and 3,205,543 were Black (United States Census Bureau, 2020). The target populations for the decision-makers were police officers responsible for referral decisions involving juveniles. There were 280 police departments in the state. I calculated this number based on responses to Open Records requests from the police departments in each county.

Data Collection

There were two independent variables, i.e., county diversity and police departments diversity, and one dependent variable, the RRI for each county, constructed for this study. There were several sources of data retrieved for the two independent variables, i.e., racial and county (Black and White) diversity. I retrieved the data for the racial diversity of each county from the United State Census database (United States Census Bureau, 2020). I obtained the aggregated data for police officers required to calculate the diversity index by request pursuant to Georgia's Open Records Act. I calculated the RRIs for each county based on the referrals and at-risk population for Black and White juveniles for each county for the year of 2019 in the State of Georgia. I obtained these records by accessing the Georgia Dashboard which issued an Excel file containing these records (Georgia Juvenile Justice Clearinghouse, 2023).

Validity and Reliability

The reliability and validity of data are factors to consider when conducting social scientific research. As defined by Heale and Twycross (2015), reliability is the consistency of responses to the same question or instrument each time it is administered. Or as stated by Bordens and Abbott (2017), reliability is the quality of measurement that

suggests that the same data would have been collected each time in repeated observations of the same phenomenon. Validity is the measure that accurately reflects the concept, such as motivation, locus of control, extraversion, and introversion, that the question(s) or questionnaire intends to measure (Bordens & Abbott, 2017; Heale & Twycross, 2015). I did not use any surveys or questionnaires, so the only questions to be addressed were the reliability and validity of the secondary sources of juvenile justice data from the Georgia Department of Juvenile Justice.

The validity and reliability of data for this study met the standard based on federal and state statutes and guidelines that mandated the reporting compliance of all federal and state agencies relative to the data for this study. I retrieved the data for the county diversity independent variable from the United States Census Bureau. The Census Bureau serves as the leading source of quality of data about the population of the United States. The data must conform to the requirement of the Information Quality guidelines. The Census Bureau "…has set a high standard of scientific integrity by embracing a common set of professional standards and operational practices designed to ensure the quality, integrity, and credibility of…statistical activities" (United States Census Bureau, 2017, para. 3). The data for referral was retrieved from the Office of Juvenile Justice and Delinquency Prevention's (OJJDP) Statistical Briefing Book. The quality and integrity of data must meet the same requirements as defined for the Census Bureau data (United States Census Bureau, 2017).

Data Analysis

The first step of the analysis process was to calculate the diversity indices for each county and the decision-makers (police officers) in the referral process of the juvenile justice system. There were two diversity indices: the diversity index for each county and the diversity index for police officers for each county. The diversity index was a modified version of the index used by Stout et al. (2018). The formula is as follows:

Diversity Index. $=1 - \text{Square Root } [(\%\ \text{Black} - u)^2 + (\%\ \text{White} - u)^2 \ / \ 2] * 100$

The second step of analysis was to determine the Relative Rate Index (RRI), which is the measure of DMC used in this study.

Relative Rate Index (RRI) = (Referrals Minority Group Total At Risk Population Minority Group)/(Referrals White Youth At Risk White Youth Population).

Interpreting RRI Calculations:

- RRI greater than 1 = Disproportionate Black Contact
- RRI less than 1 = Disproportionate White Contact
- RRI Statistically equal to 1 = The two groups experience equal contact

At the referral stage of the juvenile justice process, the RRI was calculated. The RRI is the number of Black to White ratio or Black/White at each level of the process. For example, if the rate of arrest is 50 per 1000 White youth and 300 per 1000 Black youth, the RRI would be equal to 300/50 or 6. An RRI of 6 would indicate that Black youth is 6 times more likely to be arrested than White youth. The OJJDP provides a tool to calculate the RRIs for statistical significance.

I used the Statistical Procedures for Social Sciences (SPSS) bivariate correlations procedure to produce a correlation table of the relationships between the independent variables of county and police department diversity and the dependent variable of RRI at the referral stage. I used the frequency procedure to generate the demographics for county and police departments populations and the profiles of Black and White youth at the referral stage. I used the Chi-Square procedure to test for significant differences in the RBIs for each county. Gonzales et al. (2018) used this test based on consultation with the National Training and Technical Assistance Center of the Office of Juvenile Justice and Delinquency Prevention. Statistically significant differences indicated the presence of either DMC or disproportionate White contact. I used several other SPSS procedures to check assumptions to justify the use of the Kendall's tau-b correlation procedure. I used the Kendall's tau-b correlation procedure to test for statistically significant correlations between the two diversity indices and the RRI for each county. Based on these analyses, I was sure that there was an alignment between the research problem and research objectives.

Research Questions and Hypotheses

Research Question 1 (RQ1): Are there significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia?

Null Hypothesis ($H_0$1): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia.

Alternative Hypothesis (H_a1): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia.

Research Question 2 (RQ2): Are there significant differences in RRIs indicating DMC based on the racial composition of the police department in each county?

Null Hypothesis ($H_0 2$): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the police department in each county.

Alternative Hypothesis ($H_a 2$): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the police department in each county.

Research Question 3 (RQ3): Are there significant differences in RRIs indicating DMC based on the racial composition of the county?

Null Hypothesis ($H_0 3$): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the county.

Alternative Hypothesis ($H_a 2$): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the county.

Confidentiality and Protection of Human Subjects

When conducting research involving human subjects, I am required to discuss issues of confidentiality, anonymity and protection of human participants. Congress

passed federal regulations with the standards to ensure that Institutional Review Boards (IRB) had the necessary guidelines to review research proposals (U. S. Department of Health and Human Services, 2016). Based on Title 45, Part 46 of the Code of Federal Regulations, these requirements include (a) informed consent, (b) assurance of confidentiality, and (c) assurance of anonymity (U. S. Department of Health and Human Services, 2016).

For this study, informed consent, assurance of anonymity and assurance of confidentiality were not required because I obtained all data for the study from public domain sources. I was not able to identify any individual because all data were aggregated. Or, as stated by the National Center for Education Statistics (2016), the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. Concerning data pursuant to Georgia's Open Records Act, Section 50-18-71 of Georgia Official Codes states that all public records shall be open for personal inspection and copying, except those which by order of a court of the state or by law are specifically exempted from disclosure. Notwithstanding any ethical concerns regarding human subjects, I submitted my proposal for the required approval to the IRB.

Summary

In summary, I devoted this chapter to present more detailed descriptions of the methodology for the study. I included the following in this chapter: the description of the quantitative correlational design, the description of the data, the sample size, and the procedure for the collection of archival data and the data that must be requested by open

record requests to Georgia's Department of Juvenile Justice and. I addressed questions regarding validity, reliability, and confidentiality and protection of individuals. In Chapter 4, I discuss the descriptive data for the populations, the statistical analyses of the data, and the results or findings. Also, I discuss the analyses of assumptions for data and the rationale for using the Kendall's tau-b correlation procedure to test for statistically significant correlations in the study.

Chapter 4: Data Analysis and Results

Introduction

The purpose of this quantitative, correlational study was to examine to what extent the racial diversities of 159 counties and police departments in the State of Georgia were correlated to the relative rate indices (RRI) at the referral stage of the juvenile justice process. In this chapter, I have included an introduction and presentation of the research questions, the description of the sample, a discussion of data analysis procedures and presentation of findings regarding the assumption checks, the results of the correlation analysis with answers for each research question, and a summary of the chapter. I used the quantitative, correlational design because of the nature of the data, that is, quantitative (interval) data and the purpose of the study, which was to assess the bivariate relationships of two diversity variables (measured for counties and police departments) and the RRIs at the referral stage for juvenile arrested in Georgia in 2019. I conducted the chi-square analysis for the RRIs for each county to determine whether DMC contact existed in each county.

I constructed three research questions and corresponding pairs of hypotheses for this study. I constructed the first question to determine whether the RRIs associated with each county was statistically significant. I constructed the second research question to determine whether the correlation between the RRI at the referral stage and the racial diversity index for police departments was statistically significant for the county. I constructed the third research question to determine whether the correlation between the

RRI at the referral stage and the racial diversity index was statistically significant for the county. The research questions and hypotheses were:

Research Question 1 (RQ1): Are there significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia?

Null Hypothesis ($H_0$1): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia.

Alternative Hypothesis (H_a1): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia.

Research Question 2 (RQ2): Are there significant differences in RRIs indicating DMC based on the racial composition of the police department in each county?

Null Hypothesis ($H_0$2): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the police department in each county.

Alternative Hypothesis (H_a2): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the police department in each county.

Research Question 3 (RQ3): Are there significant differences in RRIs indicating DMC based on the racial composition of the county?

Null Hypothesis ($H_0$3): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the county.

Alternative Hypothesis (H_a3): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the county.

Descriptive Findings

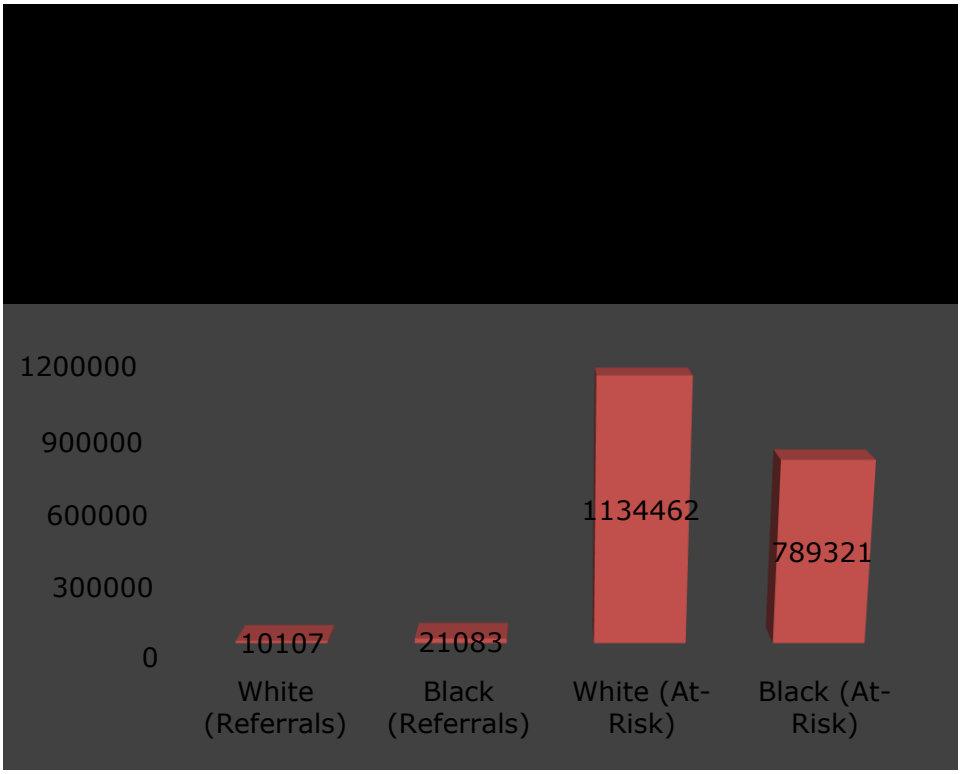
Sample Profiles

The samples consisted of police departments in each of the 159 counties in the State of Georgia. I obtained the police department data required to calculate the diversity index pursuant to the Open Records Acts in the State of Georgia. I obtained the racial population diversity index for each county in Georgia from the U.S. Census Bureau Georgia: 2020 (United States Census Bureau, 2020). The unit of analysis was the RRI for each county. I entered the arrested or referral data and the at-risk population for White and Black youth who are less than 17 years of age for each county data in an Excel workshop to calculate the RRI for each county. In the State of Georgia, juveniles were defined as population less the 17 years old or between 0 and 16 years of age. I obtained these data from the EZACO: Easy Access to State and County Juvenile Court Case Count for the State of Georgia. I obtained the referral data for each county from the Georgia Juvenile Justice Data Clearinghouse: Juvenile Justice Decision Points Report Raw Data for 2019 (Georgia Juvenile Justice Clearinghouse, 2023). After I had calculated the RRIs and county and police department diversity indices, I imported the data into an SPSS

datasheet for descriptive and statistical analysis purposes. I presented the results in Table 1. I was unable to record data for five counties (Crawford, Floyd, Glynn, Peach, Quitman) because the referral data from the Georgia Juvenile Justice Data Clearinghouse were missing. For 2019, there were 1,134,460 White at-risk youth and 789,321 Black at-risk youth in the State of Georgia. For the entire state, 10,107 White youth were arrested, and 21,083 Black youth were arrested. I calculated a RRI of 3.02 or a Black youth was 3 times more likely to be arrested than a White youth. For the entire state, this RRI was a highly significant correlation, i.e., $p<.00001$.

Figure 3

Referrals and At-Risk Population for the State of Georgia-2019



Data Analysis Assumptions: Pearson Correlations

I employed a quantitative methodology with a correlational analysis to test for statistical significance between the county diversity index, the police department diversity index and the RRIs for each Georgia county. I used the standard method established by the U.S. Department of Justice to test for statistical significance of the calculated RRIs (United States Department of Justice, 2009). I had to determine which correctional method, that is, the Pearson's *r*, the Spearman Rank-order *r* or Kendall's tau-b statistic, that was appropriate to analyze the data for significant relationships.

I had to conduct the five assumption tests to consider whether to use Pearson's correlation statistic to test for significance between the variables in the study. I conducted the first assumption test to determine whether the data were continuous. I conducted the second assumption test to determine whether the continuous variables were paired. I conducted the third assumption test to determine if there was a linear relationship between the predictor or independent variable and the criterion or dependent variable. I conducted the fourth assumption test to determine whether that there were significant outliers. I conducted the fifth assumption test to determine whether the variables were normally distributed. Based on the results of these assumptions, I conducted an additional assumption test to determine whether an alternate nonparametric statistic, the Kendall's tau-b correlations, was the correct procedure to analyze the hypotheses.

I presented the results of the assumption tests in Tables 1, Tables 2, Table 3 and Figure 4. I presented the descriptive, i.e., the mean, standard deviation, maximum and minimum, and summary data on the skewness and kurtosis for each variable. Skewness is

quantified as the representation of the extent to which a given distribution varies from the normal distribution (Laerd Statistics, 2018). Skewness is illustrated by kurtosis or the measure of degree that the distributed either to the right or left tail of the distribution. The degrees of skewness of the variables in the design determine the type of statistical test that can be used to analyze the associations between variables. I calculated the Z-scores by dividing the skewness by the standard error. Z-scores greater than +3.29 or -3.29 indicate outliers. The analysis of Z-scores indicated that the fourth assumption, that there should be no outlier, was violated for all variables except police department diversity index (Laerd Statistics, 2018).

Table 1

Descriptions of Study Variables

Statistic	Black At-Risk Population	White At-Risk Population	Number of Whites Referred	Number of Blacks Referred	County Diversity Index	Police Department Diversity Index	Relative Rate Index (RRI)
N	154	154	154	154	154	121	154
Mean	5125	7367	66	137	48.64	26.79	3.02
Std. Dev.	13263	13501	88	357	12.68	11.97	3.22
Min.	16	70	0	0	14.7	3.28	0.00
Max.	93438	85197	521	2753	75.1	49.4	24.55
Skewness	4.84	4.15	2.56	4.77	-1.08	.114	4.33
Std.Error	.195	.195	.195	.195	.195	.220	.195
Z-Skewness	24.82	21.28	13.32	24.46	-5.53	.518	22.20
Kurtosis	25.99	19.84	7.95	26.48	.642	-.919	24.58

Std.Error	.389	.389	.389	.389	.389	.437	.389
Range	93422	85127	520	2753	60.4	46.1	24.55

My second objective was to determine whether the fifth assumption, which stated that the variables were normally distributed, was violated. I conducted the Kolmogorov-Smirnov test of normality to determine whether the variables were normally distributed (see Table 3). If the significance or *p*-value is equal to or less than 0.05 for a variable, than the data were not normally distributed. The *p* values for all variables were highly significant, i.e., $p < .001$. I concluded, based on the results of the Kolmogorov-Smirnov test of normality, that the assumption of normal distribution for each variable was violated. Because of the violations of two of the assumptions, I concluded that the Pearson *r* statistics would not yield valid results (Laerd Statistics, 2018).

Table 2

Kolmogorov-Smirnov Tests of Normality for Variables

Variable	Kolmogorov-Smirnov Statistics	*df*	Sig.
White Referrals	.235	151	.000
Black Referrals	.335	151	.000
White At-Risk	.295	151	.000
Black At Risk	.337	151	.000
Black-White RRI	.203	151	.000
County Diversity	.124	151	.000
Police Department Diversity	.067	151	.017

Note: This is a lower bound of true significance
a. Lolloiefors Significance Correction

Assumptions Analysis for Kendall's tau-b Correlations

The nonparametric Kendall's tau-b statistic is recommended as an alternative to the Pearson's r method of analysis (Laerd Statistics, 2018). There were two assumptions to be met to analyze data with the Kendall's tau-b correlations. The first assumption is that the variables are measured on an ordinal or continuous scale. The second assumption is that there is a monotonic relationship between the two variables (Laerd Statistics, 2018). The first assumption was met by observation. My observation of the data indicated that the variables were continuous and were paired observations. I analyzed the data using Spearman's rank-order correlations to ascertain whether monotonic relationships existed between the Relative Rate Index and the two independent variables, county Diversity and police department diversity (See Table 3). The closer r_s is to zero, the weaker the association between the ranks. Based on the results of this analysis, I found a positive monotonic relationship between County Diversity and the Relative Rate Index (r_s = .182, $p \leq 0.05$). However, I found that the correlation between police department diversity and the relative Rate Index was not statistically significant which indicated further analysis was required to establish whether a monotonic relationship existed between these two variables (r_s = .052, p = .573). By observation of the scattergram plot of the relationship between police department Diversity and Relative Rate Index, I concluded that a monotonic relationship between police department diversity and relative rate index. Based on this analysis, I used the Kendall's tau-b to analyze RQ2 and RQ3.

Table 3

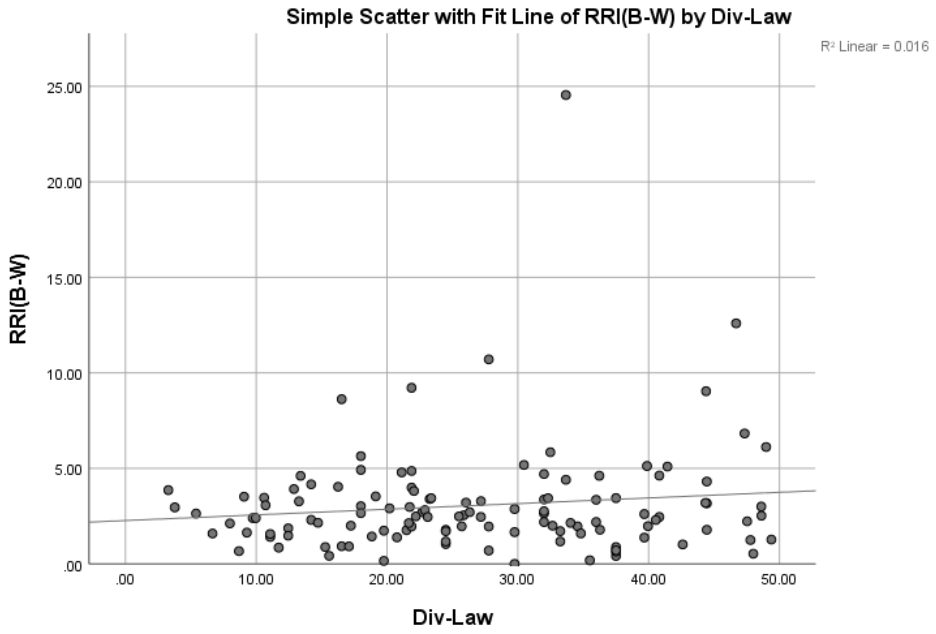
Spearman's Rank Order Analysis

Spearman's Rank-Order Analysis			Relative Rate Index
Spearman's r	County Diversity	Corr. Coeff.	.182*
		Sig.(2-tailed)	.024
		N	154
	Police Department Diversity	Corr. Coeff.	.052
		Sig.(2-tailed)	.573
		N	121

*$p \leq .05$

Figure 4

Scattergram of Police Department Diversity and Relative Rate Index



Results

My first objective was to investigate RQ1, which was: Are there significant differences in DMC rates at the referral stage of the juvenile justice process in each of the counties in Georgia? I rejected the null hypothesis that no significant differences existed in DMC rates at the referral stage of the juvenile process in each of the counties in Georgia. I was not able to calculate RRIs at the referrals stage for 37 counties because of extremely small numbers of referrals, ranging from zero to four referrals for either the Black or White youth for the year of 2019. I could not calculate an RRI for those counties because of the two requirements necessary for the calculation of an RRI. The RRI is equal to the number of referrals divided by the number of at-risk populations for the group. This is expressed in the following formula: RRI = (number of referrals per

group)/(numbers of at-risk youth in the group). Mathematically, division into zero is not allowed. The second requirement is related to one of the assumptions for the use of the chi-square equation. Cell counts for each category in the equation must be 5 referrals or greater in the observation. Counties with less than 5 referrals were omitted from an analysis of significance because of the violation of this assumption. Cases in which data were missing or did not meet the minimum population threshold of five or more were considered as invalid RRI calculations (Gonzales et al., 2018).

Based on the results I identified 95 counties with significant RRIs indicating significant DMC. In Table 5, I have listed the six counties with the highest RRIs in the state. I have included the other 89 counties with significant RRIs indicating DMC are shown in the table in Appendix A. I identified three counties (Pike, Crisp, and Whitfield) with significant RRIs indicating significant disproportionate White contact (see Table 6). I found 19 counties (Bryan, Seminole, Jenkins, White, McIntosh, Forsyth, Elbert, Hall, Chattahoochee, DeKalb, Long, Worth, Talbot, Johnson, Meriwether, Jeff Davis and Jasper) indicating parity in referrals rates for White and Black youth.

Table 4

Disproportionate Minority Contact (*DMC*)

County	**White Referred**	**Black Referred**	**RRI**
Cobb	471	1294	5.10***
Colquitt	47	156	5.84***
Dougherty	27	709	9.04***
Decatur	110	2158	10.70***
Fulton	199	2753	12.59***
Madison County	25	75	24.55**

*Note: *p≤ .05, **p ≤ .01, ***p≤ .001*

Table 5

Disproportionate White Contact (DWC)

County	White Referred	Black Referred	RRI
Pike	24	5	0.16***
Crisp	22	182	0.19***
Whitfield	253	67	0.42***

Note*: p≤ 0.001*

Table 6

Parity in Confinement

County	White Referred	Black Referred	RRI
McIntosh	40	20	0.67
Talbot	6	9	0.70
Hall	214	87	0.85
Turner	9	9	0.88
Meriwether	18	16	0.91
Jeff Davis	26	6	0.92
Jasper	14	5	1.04
Johnson	25	15	0.88
Worth	59	38	1.17
DeKalb	40	58	1.24
Forsyth	362	23	1.33
Candler	13	10	1.38
Elbert	34	30	1.39
Long	23	15	1.40
Bryan	116	37	1.41

Jenkins	10	21	1.85
White	74	5	2.01
Chattahoochee	8	6	1.96
Irwin	10	7	1.48

Note: The RRIs were not significant indicating parity in referral.

My second objective was to investigate RQ2: Are there significant differences in DMC rates based on the racial composition of the police departments in the State of Georgia? I conducted a Kendall's tau-b correlation analysis to determine the relationships between the police department diversity index and RRIs for each the county (See Appendix B). I found that the Kendall's tau-b correlation *p*-value of 0.574 was not statistically significant ($\tau_b = 0.035$, $p = 0.535$). Therefore, I rejected the alternative hypothesis and accepted the null hypothesis which hypothesized that the racial diversity of the police department was not significantly correlated to DMC in the counties in the State of Georgia.

My third objective was to investigate RQ3: are there significant differences in racial disparity rates based on the racial composition of the county? I conducted a Kendall's tau-b correlation analysis to determine the relationships between the County diversity index and RRIs for each the county (See Table 7). Based on this analysis, I found the Kendall's tau-b correlation *p*-value of 0.119 was statistically significant ($\tau_b = 0.119$, $p \leq 0.05$). I rejected the null hypothesis and accepted the alternative hypothesis. I concluded that county diversity was statistically correlated to counties' DMC in the State of Georgia. Counties with the largest RRIs were counties with the largest populations of Blacks (See table 6). Black youth (70,2857) were 42.7% of population of Decatur County

which had an RRI of 10.76; Black youth (86,587) were 69.3 % of the population of Dougherty County which had an RRI of 9.04; Black youth (709,820) were 29.2 % of the population of Cobb County which had an RRI of 5.10; Black youth (44,534) were 23.4 % of the population of Colquitt County which had an RRI of 5.84. Madison County, with an RRI of 24.55, was the only county with low populations of Black (4945) and White youths (9248).

Table 7

Kendall's tau-b Correlation Results

			Significant Level
Kendall's tau-b	County Diversity	Corr. Coeff.	.119*
		Sig. (2-tailed)	.028
		N	154
Kendall's tau-b	Police Department Diversity	Corr. Coeff.	.035
		Sig. (2-tailed)	.574
		N	121

* Note*: $p < 0.05$*

Summary

In line with the problem statement, I used a quantitative, correlation design to investigate three research questions: (a) Are there significant differences in DMC rates at the referral stage of the juvenile justice process in each of the counties in Georgia? (b) Are there significant differences in DMC rates based on the racial composition of the

criminal justice officials administering the cases? Are there significant differences in racial disparity rates based on the racial composition of the county? I concluded that all the variables violated the assumption for normality based on the Kolmogorov-Smirnov analysis for the assumption of normality for each variable. I used the non-parametric Spearman's rank-order correlation analysis to determine whether the relationships between the independent variables of county diversity and police department diversity and RRI's were monotonic, a condition which is required for analysis by the Kendall's tau-b statistic. I found that the relationship between county diversity and RRIs was monotonic, but additional analysis was required to determine whether the relationship between police department diversity and counties' RRIs was monotonic. I found from the scattergram of the two variables that the relationship was monotonic. I used the Kendall's tau-b to analyze research questions two and three or the correlations between county and police department diversities and counties' RRIs.

I found that RQ1 as to whether there are significant differences in DMC rates at the referral stage of the juvenile justice process in each of the counties in Georgia was supported. In 95 counties, I found that there were significant differences in the RRIs indicating DMC. In three counties, I found there were significant differences in the RRIs indicating disproportionate White contact.. I found that RQ2 as to whether racial diversity (Black and White) of the county police department was significantly correlated to the RRI for each county was rejected or there were no significant correlations between the police department diversity index and RRIs for the counties. I found that four of the five counties with the highest RRIs also had the highest diversity indices for police

department diversity. I found that RQ3 on the correlation between the diversity of the counties (Black and White) and RRIs were significant. I found a weak but significant positive relationship between the diversity of counties and the RRIs.

I devote Chapter Five, Discussion, Conclusions, and Recommendations, to a discussion of these results within the context of current research on understanding and explaining the complexity and negative impact of DMC on minority communities of color. Additionally, I discuss the strengths and weaknesses of the study and recommendations for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The problem of juvenile delinquency in the United States is serious and pervasive in urban and rural communities. In response to this problem, federal and state governments have engaged in targeted action to correct the problem. In 1974, Congress passed the Juvenile Justice and Delinquency Prevention Act (JJDPA) of 1974 which established the Office of Juvenile Justice and Delinquency Prevention (OJJDP) to support local and state efforts to prevent delinquency and improve juvenile justice system (Office of Juvenile Justice and Delinquency Prevention, 2023). With the juvenile justice system, many studies revealed that that minority youth and in particularly, Black youth, were disproportionally represented in the nation's secure facilities for juvenile offenders. In response to this overwhelming evidence of this disparate impact upon minority communities, Congress amended the Juvenile Justice and Delinquency Prevention Act of 1974 to address disproportionate minority contact (DMC).

> Specifically, the amendment required the state, if the proportion of a given group of minority youth detained or confined in its secure detention facilities, secure correctional facilities, jails, and lockups exceeded the proportion that group represented in the general population, to develop and implement plans to reduce the disproportionate representation (United States Department of Justice, 2009, p. intro 1).

Over the last 50 years, many researchers have established the existence and pervasiveness of DMC in the United States (Bell & Rasquiza, 2014; Fader et al., 2013; Rosich, 2007; Rovner, 2014). Based on this voluminous research on DMC, scholars have constructed numerous theories to explain the DMC phenomenon. Lawrence and Keleher (2004) defined structural racism as "… the normalization and legitimization of an array of dynamics – historical, cultural, institutional and interpersonal - that routinely advantage whites while producing cumulative and chronic adverse outcomes for people of color" (para. 1). Lawrence and Keleher (2004) defined institutional racism as "… discriminatory treatment, unfair policies and inequitable opportunities and impacts, based on race, produced and perpetuated by institutions (schools, mass media, etc.)" (para. 5). Chapple et al. (2017) defined implicit bias as the "unintended bias that operates without our conscious awareness" (p. 3). Padgaonkar et al. (2021) defined the differential selection and processing hypothesis as the "assertion that minority youth are overrepresented in the jut system due to differences in the patrolling, profiling, and processing of minorities by law enforcement officials, courts, and correctional system" (para. 3). Peck (2016) defined the differential offending as the explanation that "…race

differences in offending and court processing are due to minorities committing more crime and more serious and/or violent crime compared to Whites" (p. 1).

I constructed three research questions for this study. I constructed the first question to determine whether DMC existed for each of Georgian's 159 counties. I constructed the third research question to determine whether there were significant RRIs on structural and institutional racism factors as defined as social arrangements structured by "…racial hierarchy and supported by colorblind ideology" (Clair & Denis, 2015). The National Research Council (2016) confirmed the existence of DMC in the broader context of a racialized society in which many public policies and institutionalized practices operate to produce and maintain racial inequalities. Kahn and Martin (2016) summarized the policies and practices as follows:

> For one, disparate outcomes can result from larger systemic differences that disadvantage racial minorities in terms of housing (e.g., de facto geographic segregation), education (e.g., fewer educational opportunities with attendant constraints on earning potential), and jobs (e.g., discriminatory practices, reduced qualifications, lack of access to necessary transportation). Institutionalized racism that disadvantages racial minorities in terms of life opportunities and educational outcomes can contribute to social and economic factors that increase the likelihood of experiencing disproportionate police contact (e.g., joblessness, low socioeconomic status) (p. 88).

I constructed the second research question to determine whether DMC was significantly correlated to the diversity of the police department diversity in each county. Kahn and Martin (2016) stated that while the phenomenon of "the existence of racial disparities in policing is well established, it remains for more difficult to know definitively and scientifically that racial prejudice is the primary factor that motivates any given police officer's action" (p. 88).

Summary of Study

I conducted a study to specifically address (a) "what are the differences, if any, in DMC across race and ethnicities, and (b) what county levels factors at the referral stage contribute to DMC in the State of Georgia?" (Gonzales et al., 2018, p. i). The foundations for the research questions in this study were the two findings and recommendations relative to county level variables by Gonzales et al. (2018). Gonzales et al., 2018 reported that at the referral decision point, "…76% of the RRIs over a nine-year period showed disproportionate minority outcomes for Black youth" (p. 50). Although there was no direct evidence indicating bias on the part of police officers, Gonzales et al., 2018 recommended "to increase the amount of implicit bias training … to increase a police officer's understanding of biases and positively influence interaction between police and community" (p. 47). Also, Gonzales et al., 2018 recommended "reducing the use of harsh disciplinary measures at the school level to help reduce disproportionate referrals for Black youth" (p. 47). Based on these recommendations, I constructed the following research questions:

Research Question 1 (RQ1): Are there significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia?

Null Hypothesis ($H_0$1): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia.

Alternative Hypothesis (H_a1): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process in each of the counties in Georgia.

Research Question 2 (RQ2): Are there significant differences in RRIs indicating DMC based on the racial composition of the police department in each county?

Null Hypothesis ($H_0$2): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the police department in each county.

Alternative Hypothesis (H_a2): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the police department in each county.

Research Question 3 (RQ3): Are there significant differences in RRIs indicating DMC based on the racial composition of the county?

Null Hypothesis ($H_0$3): There are no significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the county.

Alternative Hypothesis (H_a3): There are significant differences in RRIs indicating DMC at the referral stage of the juvenile justice process based on the racial composition of the county.

I utilized a quantitative methodology design to measure for significant correlations between the three major variables and DMC in the 159 counties in Georgia. The three major variables in the study area were (a) the relative rate index or RRI which measures whether groups are treated equally within the juvenile justice system; (b) the county diversity index or the measure of the racial/ethnic diversity of each county's population; and (c) the police department diversity index or the measure of the racial /ethnic diversity of each county's police officers.

Summary of Findings and Conclusion

The objective of this study was to investigate the degree two county-level variables .. the diversity of the county and the diversity of the police department, to provide a quantitative answer to the question implied by the recommendations regarding functioning of structural and institutional racism. I constructed the first question to answer whether there was evidence of DMC at the referral decision point in 159 counties in the State of Georgia. I found extensive DMC in 95 counties, parity in 17 counties, and disproportionate White contact in three counties. I could not conduct an analysis for 44 counties because the referrals for either Black or White juveniles were less than five and the minimum cell count using the chi-square statistics must be 5 or greater.

I constructed the second research question to answer whether the diversity of police departments in each county was related to DMC. Although not stated in the

question is the implied assumption or belief that the more diverse police department should have lower DMC. I found that police department diversity was not significantly correlated to DMC based on the statistical analysis. I constructed the third research question to answer whether county diversity was significantly correlated to DMC. I found a significant correlation between the county diversity index and DMC. I concluded that counties with the highest RRIs indicating DMC have the highest concentrations of Black populations based on a more detailed analysis. Also, Gonzales et al. (2018) and Padgaonkar et al. (2021) identified significant correlations between the high concentrations of Blacks in the population with higher RRIs. However, Gonzales et al. (2018), found that the intervening variable of higher degrees of poverty of the population was significantly correlated to DMC and not simply the higher concentration of Blacks. As reported by Gonzales et al. (2018), "In 2015, the poverty rate for Blacks (26.7%) was twice that of Whites (13.9%) in Georgia. In 2015, 80% of Black children in Atlanta lived in poor communities compared to 6% of /whites…" (p. 25).

While my primary objective was to focus on DMC for Black youth, I found three counties, that is, Crisp, Pike and Whitfield, had significant RRIs indicating significant disproportionate White contact. Based on an analysis of the racial compositions of these counties and poverty rates by race within these counties, I concluded that they do not differ from many other counties with DMC in the state. The question that needs to be addressed by future researchers is what factors would account for the rather pronounced differences between these counties and counties with similar population characteristics that have RRIs indicating DMC.

Implications

I designed and implemented this study based on the DMC research by the Carl Vinson Institute of Government at the University of Georgia reported in 2018 (Gonzales et al., 2018). Among the major objectives was to investigate the relationships between county-level variables and DMC. I identified two variables in the study by Gonzales et al. (2018) that were the foundation for the research questions in this study. I constructed the first research question to determine the existence and extent of DMC in the 159 counties in Georgia. I confirmed the existence of DMC in 95 counties in the state of Georgia. I concluded based on further analysis that greater population density for Blacks was correlated to significantly higher RRIs indicating DMC. Gonzales et al. (2018) and Padgaonkar et al. (2021) identified factors within counties that provided an explanation for this significant relationship but was not investigated further in my study. One major factor identified with DMC is poverty within a Black community (see Gonzales et al., 2018; Kahn & Martin, 2016; Padgaonkar et al., 2021). These researchers have found that communities with high concentration of Blacks have significantly greater number of families within the poverty category (see Gonzales et al., 2018; Kahn & Martin, 2016; Padgaonkar et al., 2021).

The second variable among the county-level variables in the study by Gonzales et al. (2018) was law enforcement per 10,000 residents with an objective to test the theory of differential treatment by law enforcement. The differential treatment theory states that law enforcement treats Black youth differently and more disparately than White youth. Researchers have determined that differential treatment by law enforcement officials as a

"key predictor of a youth's outcome in the juvenile justice system after controlling for socioeconomic status, sex and age" (Gonzales et al., 2018, p. 25). In this study, I conducted an analysis to determine whether the correlation between police department diversity and DMC was statistically significant. I did not find a significant correlation between these variables. Notwithstanding this finding, other researchers have found that perceptions and behaviors of police officers in Black communities use different standards in their reactions to juvenile youth in Black communities than in White communities. For example, Padgaonkar et al. (2021) reported that "Black youth committed fewer and not more violent crimes than White youth prior to arrest, suggesting that Black youth are disproportionately targeted by policing…" (p. 12). Further, as reported by Padgaonkar et al. (2021), police subjectivity regarding the level of remorse by juvenile influenced decisions by police officers. For example, "…White youth are often perceived as more remorseful or as a victim of circumstance, whereas minority youth are often seen as not remorseful…" (Padgaonkar et al., 2021, p. 13). Although Black youth committed fewer offenses prior to arrest than White youth, "(T)he odds were 66.6% higher for Black youth relative to White youth to be arrested" (Padgaonkar et al., 2021, p. 9). Again, Padgaonkar et al., (2021) concluded that arresting decisions "can thus unintentionally be influenced by implicit racial biases among police and probation officers" (p. 13). In conclusion, although I did not find that the global measure of the diversity index for police officers was significantly correlated to DMC in this study, the finding of the higher RRIs associated with counties with the highest concentration of Blacks indicated a different interpretation of these facts. As noted by Gonzales et al. (2018) and Padgaonkar et al.

(2021), it is not whether police department are predominantly White or Black but the significantly greater extent of poverty for the Black youth as compared to White youth in low income or poverty level families that accounts for the DMC. I discuss this phenomenon further in the Recommendations for Future Research section.

Strengths and Weaknesses of the Study

The focus of this study was centered on three global objectives: (a) to determine the degree of DMC for 159 counties in the State of Georgia; (b) to determine whether the diversity of police department was significantly correlated to DMC in the counties in the State of Georgia; and (c) to determine whether the diversity of county population was significantly correlated to DMC in the counties in the State of Georgia. The major weakness in this study that I identified was the fact that these variables were global and as such, those factors which were related to county budgets and resource targeted to juvenile justice, school offenses and graduation rates, community programs, etc., were not studied. With reference to these aforementioned factors, there are questions remaining that researchers need answer as to why these variables are significantly correlated to DMC. There is a growing consensus of social scientists, such as Gonzales et al. (2018), Kahn and Martin (2016) and Padgaonkar et al. (2021). on the significance of implicit bias to DMC in the juvenile justice system. I constructed the research questions based on a quantitative, correlation design that would preclude the use of any implicit bias test or to have to interview any individual police officers.

An additional weakness was that I did not include any other minority group in the study. Although the county diversity index included other racial/ethnic groups (American

Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander and Hispanic), I found the numbers of counties with high percent of these groups were negligible with the exception of Hispanics in a few counties. According to report issued by the U. S. Census Bureau, the racial/ethnic population for the state of Georgia in 2019 consisted of 61.6% White, 12.4% Black, 18.7% Hispanic, and the remaining 6.2% as other. The overwhelming majority of the Hispanic population were centered in a few small towns or rural communities. After an extensive search I failed to find any data as to the percent of Hispanics police officers in the 159 counties in Georgia. Based on the data, with the exception of several major centers of population, for example, Atlanta, I found the vast majority of all county police departments consisted of mostly Whites officers only or only White and Black officers.

I found a small but significant correlation between county diversity and DMC. However, I did not design this study to identify those intervening factors that may account for the finding of significance between county diversity and DMC. From a theoretical perspective, this finding indicates indirect support for literature that has shown institutional and structural factors related to the racial/ethnic diversity of populations are significant to DMC (Gonzales et al., 2018).

Recommendations for Future Research

I found that DMC continues to be pervasive in the State of Georgia. Further, at the level of county, I found that the diversity of the county has a significant relationship to DMC. I was not able to identify those intervening variables that would provide a better understanding of this relationship because if design of the study, that is, a quantitative,

correlational design of aggregate data. Other researchers have established that factors, such as programs targeting juveniles to reduce delinquency, school budgets designed to improve drop-out especially for Black youth, efforts to reduce out-of- school suspensions, etc., are significant factors in efforts to reduce delinquency (Gonzales et al., 2018; U.S. Department of Education, 2016). With reference to police department diversity and DMC, I found that there was no significant relationship between the two variables. Although there was no statistical significance between police department diversity and DMC, I found that the counties with the highest densities of Blacks and the most diverse police departments have the highest RRIs indicating DMC. These findings indicate the need for further research to further understand the interactions between police officers and Black youth in these counties.

Numerous researchers have postulated the theory of implicit bias as an important variable to investigate DMC within the juvenile justice system (Ghandnoosh, 2014; Padgaonkar et al., 2021). The impact of implicit bias cannot be understated or minimized. As stated previously, the study by U. S. Department of Education Office for Civil Rights found that even Black preschool children were suspended more than once while only 18% of White pre-school children received suspension as a punishment. In 2018, the federal government issued a GAO report on “discipline disparities for Black students, boys, and students with disabilities. ….” (Welsh, 2021). Based on a systemic review of the research on this issue, Welsh (2021) concluded that “…racial differences in exclusionary discipline are due to higher rates of involvement in misbehavior or more severe misbehavior among Black students were dispelled… Instead, discipline disparities

are better explained by the behavior of adults-teachers, assistant principals, and principals" (p. 10). As noted previously, the perception of police officers within communities affects their judgment and decisions about Black youth. As this researcher has found, Black youth were more likely to be living in low-income neighborhoods (Gonzales et al., 2018). In these communities, researchers have isolated the interactions between police officers and juveniles in minority differ from police officers' interactions in White neighbors. In White neighborhoods, white youth are not treated as severely nor arrested for the same offenses as Black youth (Padgaonkar et al., 2021).

There is an extensive body of literature on DMC which has identified many of the global factors related to structural and institutional racism. Based on Congress amendments to the JJDPA in 1988 that required states to developed yearly plans to reduce the proportion of juvenile detained in facilities and to reduce racial disparities in confinement, the State of Georgia reported significant reductions between 2009 and 2014. Other states have reported similar results (Gonzales et al., 2018). There is an agreement that implicit bias training is essential to efforts to reduce DMC. In a report by The Sentencing Project (2018), it was stated that the "United States should work with leading scholars on implicit bias to develop the most effective training programs, and couple this with systems of monitoring and accountability to reduce the influence of implicit racial bias" (p 12). Eaglin and Solomon (2015), while noting the universality of implicit bias, stated that "encouragingly, studies show that when people become aware of the potential for prejudice, they are usually willing to correct it" (p. 35).

To understand these facts as outlined above, researchers have identified implicit bias of police officers as a significant factor for DMC (Eaglin & Solomon, 2015; Gonzales et al., 2018; Johnson, 2007; Sentencing Project, 2018). In this study, I found that police departments with the highest diversity of officers have the larger RRIs indicative of DMC which agrees with other researchers (Eaglin & Solomon, 2015; Gonzales et al., 2018; Padgaonkar et al., 2021). However, these findings are not in the expected direction, that is, the hypothesis was premised on the assumption that the more diverse police departments would have less DMC because of the numbers of Black officers. My finding suggests that other intervening variables are considerably more significant in understanding why the more diverse police department have significantly greater DMC. Further studies are recommended to address two questions. Are there significant differences between the implicit bias of Black officers and White officers and whether there are significant differences between the referral rates based on the race of the police officers?

I am recommending studies designed to investigate the feasibility of implementing programs designed to reduce DMC. The purpose of the program will be to train police officers on the effect of implicit bias" and how "to reduce and manage their biases" (Eaglin & Solomon, 2015, p. 36). Researchers have identified several cities in which successful programs were implemented that can serve as model programs designed to meet these objectives, i.e., reduction in the referral of juvenile youth and DMC. A two-day training called "Dismantling Racism" is an intensive workshop given in Mecklenburg County, N.C. to law enforcement and judicial officers. In Durham, N.C.,

Madison, Wisc., and Las Vegas, Nev., “five different ranks of police-including academy recruits and patrol officers, first-line supervisors, mid-managers, command-level personnel, and law enforcement trainers…” participated in the Fair and Impartial policing training program (Eaglin & Solomon, 2015). I am recommending further research recommended based the implantation of training programs as described above and whether such programs are effective in reducing DMC in Georgia.

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Appendix A Acceptance Letter

100 Washington Avenue South, Suite 1210
Minneapolis, MN 55401 Phone 612-312-1200

August 3, 2021

Dear,

This letter is to notify you that the Institutional Review Board (IRB) confirms that your doctoral capstone entitled, "Relationships between Racial Compositions of Counties and Juvenile Justice Decision-Makers at the Referral-Level and Disproportionate Minority Confinement in the State of Georgia," meets Walden University's ethical standards. Since this project will serve as a Walden doctoral capstone, the Walden IRB will oversee your capstone data analysis and results reporting. Your IRB approval number is 07-19-19-0725336.

This confirmation is contingent upon your adherence to the exact procedures described in the final version of the documents that have been submitted to IRB@mail.waldenu.edu as of this date. This includes maintaining your current status with the university and the oversight relationship is only valid while you are an actively enrolled student at Walden University. If you need to take a leave of absence or are otherwise unable to remain actively enrolled, this is suspended.

If you need to make any changes to the project staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive confirmation with a status update of the request within 10 business days of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB materials, you made a commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher.

Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the Documents & FAQs section of the Walden web site: http://academicguides.waldenu.edu/researchcenter/orec

You are expected to keep detailed records of your capstone activities for the same period of time you retain the original data. If, in the future, you require copies of the originally submitted IRB materials, you may request them from Institutional Review Board.

Both students and faculty are invited to provide feedback on this IRB experience at the link below:

http://www.surveymonkey.com/s.aspx?sm=qHBJzkJMUx43pZegKlmdiQ_3d_3d

Sincerely,

Research Ethics Support
Specialist
Office of Research Ethics and Compliance

Appendix B: Open Records Letter

Address

Date

Agency Information

Dear:

My name is_____. I am a doctoral candidate at Walden University, pursuing a Doctor of Philosophy in Criminal Justice. The working title of my dissertation study is Relationships between Racial Compositions of Counties and Juvenile Justice Decision-Makers at the Referral Level and Disproportionate Minority Confinement in the State of Georgia.

The purpose of this quantitative study is to identify specific areas of disproportionate racial disparities in the juvenile justice system in the 159 counties located in Georgia. The objectives are to investigate whether the racial compositions of the county population and the juvenile justice officials significantly relate to outcome variables associated with each stage of the juvenile justice process.

The extensive documentation of racial disparities in the criminal justice system highlights a serious problem in the United States. Evidence relevant statistics reveals that disparities exist at every stage of the criminal justice process (Crutchfield, Skinner, Haggerty, McGlynn, & Catalano, 2012; Curtis, Comiskey, & Dempsey, 2016; Shannon & Hauer, 2017). However, how, when, or why this discrimination occurs remains unclear. The racial composition of criminal justice agencies may be one of the major contributing factors to this phenomenon (Dollar, 2014). Preliminary research of the literature found only one study that analyzes the racial disparities for juvenile offenders in Georgia and/or at the various stages of the system. However, the study did not correlate county racial composition or juvenile justice officials (DJJ, police and judicial officials) with the racial disparity for each county. This study intends to extend this study by analyzing the relationship between racial demographics in Georgia counties and racial disparities in the juvenile justice system.

My study seeks to answer theses research questions:

- Are there significant differences in Disproportionate Minority Confinement (DMC) rates at the referral stage of the juvenile justice process in each of the counties in Georgia?
- Are there significant differences in DMC rates based on the racial composition of the criminal justice officials administering the cases?
- Are there significant differences in DMC based on the racial composition of the county?

My hypotheses for answering these questions are:

- $H1_0$: There are no significant differences in DMC rates at the referral stage of the juvenile justice process in each of the counties in Georgia.
- $H1_1$: There are significant differences in DMC rates at the referral stage of the juvenile justice process in each of the counties in Georgia.
- $H2_0$: There are no significant differences in DMC rates at the referral stage of the juvenile justice process based on the racial composition of criminal justice official administering the cases.
- $H2_1$: There are significant differences in DMC rates at the referral of the juvenile justice process based on the racial composition of criminal justice official administering the cases.
- $H3_0$: There are no significant differences in DMC rates at the referral stage of the juvenile justice process based on the racial composition of the county.
- $H3_1$: There are significant differences in DMC rates at the referral stage of the juvenile justice process based on the racial composition of the county.

The implication for social change gleaned from this study is essentially important for several stakeholders, such as the communities, public officials, law enforcement officials, policymakers, and most importantly, the Black youth impacted by the possibly

discriminatory racial implementation of juvenile justice law. Specifically, positive findings possibly provide usable implications conducive to mandate cultural competency training programs designed to reduce racial disparities in the Georgia juvenile justice system.

This study will only include an aggregate number of law enforcement officers – police, juvenile probation officers, and judges - for each of the counties. No individual agencies will be noted. The only identifier will be the county name itself.

My mentor for this dissertation is _____. He may be reached at _____

I am asking for your assistance in completing the personnel information for your agency. I have included a worksheet for the demographics that I need. The last column, personnel releasing data, is only needed if I have further questions.

Thank you for your assistance in this matter.

Sincerely,

Name

Email address

Appendix C: Referrals and At-Risk Population by Race

County	White Referrals	Black Referrals	White (At-Risk)	Black (At-Risk)
Appling	46	28	2740	952
Atkinson	6	3	1060	417
Bacon	19	15	1820	551
Baker	3	7	283	370
Baldwin	19	107	3530	4610
Banks	18	1	3540	124
Barrow	126	82	12820	2410
Bartow	198	57	18250	2980
Ben Hill	38	99	2030	1750
Berrien	41	20	3410	615
Bibb	47	487	10970	23740
Bleckley	20	21	1960	784
Brantley	13	3	3980	188
Brooks	12	40	1650	1490
Bryan	116	37	6580	1490
Bulloch	119	201	7840	4710
Burke	10	72	2310	3380
Butts	21	60	3250	1360
Calhoun	2	5	320	788
Camden	44	38	8420	2860
Candler	13	10	1410	788
Carroll	98	118	18020	5540
Catoosa	193	18	13270	570
Charlton	9	12	1630	677
Chatham	270	1052	27285	23052
Chattahoochee	8	6	1580	605
Chattooga	39	8	4510	437
Cherokee	295	87	42900	4100
Clarke	67	311	6820	9320
Clay	1	19	124	510
Clayton	56	974	7640	52716

County	White Referrals	Black Referrals	White (At-Risk)	Black (At-Risk)
Clinch	11	17	966	608
Cobb	471	1294	85197	45926
Coffee	69	56	5370	3040
Colquitt	47	156	5440	3090
Columbia	291	222	25005	6641
Cook	25	27	2510	1380
Coweta	67	69	22390	6530
Crisp	22	182	70	3100
Dade	48	1	990	42
Dawson	69	2	4280	68
De Kalb	40	58	2730	3180
Decatur	110	2158	48521	88927
Dodge	36	101	2640	1430
Dooly	2	21	874	1500
Dougherty	27	709	4743	13779
Douglas	147	417	13190	16310
Early	11	41	942	1590
Echols	1	1	572	46
Effingham	172	54	11060	2220
Elbert	34	30	2330	1480
Emanuel	63	132	2780	2210
Evans	28	37	1260	893
Fannin	98	1	3910	43
Fayette	100	113	15410	5850
Forsyth	362	23	38820	1860
Franklin	29	11	3790	546
Fulton	199	2753	85061	93438
Gilmer	153	0	4490	65
Glascock	4	0	603	73
Gordon	211	19	9894	503
Grady	21	26	2920	2030
Greene	14	52	1180	1590

County	White Referrals	Black Referrals	White (At-Risk)	Black (At-Risk)
Gwinnett	521	1354	82801	65492
Habersham	143	19	6680	300
Hall	214	87	28763	13738
Hancock	1	32	193	1270
Haralson	75	14	6110	388
Harris	44	19	5320	1170
Hart	26	20	3650	1220
Heard	1	3	2290	285
Henry	44	169	24280	23110
Houston	177	286	19060	12400
Irwin	10	7	1330	631
Jackson	142	43	12160	1200
Jasper	14	5	2220	766
Jeff Davis	26	6	2490	622
Jefferson	14	102	1320	2310
Jenkins	10	21	853	970
Johnson	25	15	1090	743
Jones	42	32	4800	1670
Lamar	10	2	2350	1140
Lanier	8	28	1620	615
Laurens	135	222	5930	4880
Lee	46	29	5420	1510
Liberty	79	198	6820	8000
Lincoln	4	1	877	574
Long	23	15	2460	1150
Lowndes	175	413	12300	10730
Lumpkin	60	6	5030	107
McDuffie	3	11	2440	2600
McIntosh	41	20	1450	1060
Macon	4	12	825	1750
Madison	25	75	5130	627
Marion	26	35	964	664

County	White Referrals	Black Referrals	White (At-Risk)	Black (At-Risk)
Meriwether	18	16	2300	2240
Miller	3	10	799	472
Mitchell	26	89	2070	2850
Monroe	32	24	3860	1350
Montgomery	15	14	1220	475
Morgan	20	27	2720	1090
Murray	138	1	7460	131
Muscogee	211	1076	16320	24160
Newton	47	143	11830	12380
Oconee	47	9	7400	447
Oglethorpe	23	14	2300	583
Paulding	356	351	27930	7830
Pickens	90	4	5590	102
Pierce	12	6	3670	460
Pike	24	5	310	412
Polk	77	27	6570	500
Pulaski	21	44	1230	787
Putnam	32	38	2240	1490
Rabun	55	1	2390	88
Randolph	1	26	368	1110
Richmond	150	1130	12570	29640
Rockdale	50	351	5690	11610
Schley	9	2	899	304
Screven	20	45	1500	1570
Seminole	17	25	933	790
Spalding	118	236	8510	5121
Stephens	88	28	4310	804
Stewart	1	7	210	599
Sumter	13	147	2080	4590
Talbot	6	9	379	816
Taliaferro	2	2	93	175
Tattnall	19	22	2800	1220
Taylor	11	20	971	793

County	White Referrals	Black Referrals	White (At-Risk)	Black (At-Risk)
Telfair	8	21	1470	1150
Terrell	3	60	487	1570
Thomas	51	84	5320	4390
Tift	91	116	4490	3340
Toombs	47	72	3530	2200
Towns	20	0	1390	16
Treutlen	2	6	895	619
Troup	82	204	891	581
Turner	9	9	896	1020
Twiggs	4	5	859	783
Union	57	2	3290	43
Upson	62	64	3670	1920
Walker	180	18	13390	818
Walton	52	55	15230	4170
Ware	82	80	4650	2850
Warren	6	0	303	865
Washington	18	64	1670	2710
Wayne	46	25	4830	1580
Webster	1	1	255	279
Wheeler	9	3	802	376
White	74	5	5150	173
Whitfield	253	67	14605	9144
Wilcox	3	2	982	559
Wilkes	5	26	889	1050
Wilkinson	14	25	1110	932
Worth	59	38	2970	1630

Appendix D: Diversity and Relative Rate Indices

County	Div-Ind©	Div-Law	RRI(B-W)	Significance
Appling	48.5	0.0	1.75	0.020000
Atkinson	58.2	49.4	1.27	0.733000
Bacon	43.9	39.7	2.61	0.003000
Baker	56.6	44.4	1.78	0.391000
Baldwin	56.1	44.4	4.31	0.000100
Banks	24.8	6.7	1.59	0.649000
Barrow	52.3	10.6	3.46	0.000010
Bartow	43.6	21.5	1.76	0.000100
Ben Hill	57.7	18.0	3.02	0.000010
Berrien	35.6	22.7	2.70	0.000100
Bibb	57.3	21.1	4.79	0.000010
Bleckley	45.2	0.0	2.63	0.001200
Brantley	17.7	0.0	4.89	0.005900
Brooks	56.5	0.0	3.69	0.000018
Bryan	48.1	11.1	1.41	0.065000
Bulloch	54.1	22.9	2.81	0.000010
Burke	56.4	18.0	4.92	0.000010
Butts	49.9	47.3	6.83	0.000010
Calhoun	48.9	42.6	1.02	0.985000
Camden	50.1	25.9	2.54	0.000010
Candler	56.6	39.7	1.38	0.443000
Carroll	49.9	12.9	3.92	0.000010
Catoosa	23.3	0.0	2.17	0.001100
Charlton	57.4	26.0	3.21	0.004900
Chatham	63.4	36.2	4.61	0.000010
Chattahoochee	62.4	21.9	1.96	0.203000
Chattooga	34	8.0	2.12	0.046000
Cherokee	42.8	0.0	3.09	0.000010

County	Div-Ind©	Div-Law	RRI(B-W)	Significance
Clarke	61.1	23.3	3.40	0.000010
Clay	52.5	40.8	4.62	0.095000
Clayton	49.3	48.6	2.52	0.000010
Clinch	51.7	40.8	2.46	0.015000
Cobb	67.3	41.4	5.10	0.000010
Coffee	59.3	18.8	1.43	0.042000
Colquitt	60.5	32.5	5.84	0.000010
Columbia	55.4	29.8	2.87	0.000010
Cook	53.6	25.7	1.96	0.012000
Coweta	49.9	19.1	3.53	0.000010
Crisp	56.5	35.5	0.19	0.000010
Dade	17	0.0	0.49	0.464000
Dawson	22.3	0.0	1.82	0.390000
De Kalb	58.6	47.8	1.24	0.280000
Decatur	65	27.8	10.70	0.000010
Dodge	49.6	30.5	5.18	0.000010
Dooly	58.1	49.0	6.12	0.004900
Dougherty	45.6	44.4	9.04	0.000010
Douglas	63.9	40.5	2.29	0.000010
Early	54.3	0.0	2.21	0.015000
Echols	51.4	0.0	12.43	0.021000
Effingham	42.2	11.1	1.56	0.003500
Elbert	51.3	20.8	1.39	0.183000
Emanuel	52.8	32.0	2.64	0.000010
Evans	59	12.4	1.86	0.010000
Fannin	14.7	0.0	0.00	0.920000
Fayette	60.2	21.7	2.98	0.000010
Forsyth	55.2	0.0	1.33	0.181000
Franklin	31.4	5.4	2.63	0.004000
Fulton	66.5	46.7	12.59	0.000010
Gilmer	27.9	0.0	0.45	0.398000
Glascock	19.9	0.0	2.07	0.514000

County	Div-Ind©	Div-Law	RRI(B-W)	Significance
Gordon	40.6	0.0	1.77	0.014000
Grady	59.2	24.5	1.78	0.045000
Greene	55.5	32.0	2.76	0.000300
Gwinnett	75.1	27.2	3.29	0.000010
Habersham	40.7	3.8	2.96	0.000010
Hall	56.4	11.7	0.85	0.202000
Hancock	44.8	21.9	4.86	0.081000
Haralson	19.3	0.0	2.94	0.000020
Harris	41.5	34.6	1.96	0.011000
Hart	41.4	14.2	2.30	0.003700
Heard	28.5	0.0	24.11	0.000040
Henry	62.9	16.3	4.04	0.000010
Houston	61.3	22.2	2.48	0.000010
Irwin	50.3	12.4	1.48	0.425000
Jackson	38	10.7	3.07	0.000010
Jasper	42.3	24.5	1.04	0.940000
Jeff Davis	50.3	16.5	0.92	0.860000
Jefferson	55.2	14.2	4.16	0.000010
Jenkins	55	0.0	1.85	0.101000
Johnson	49.3	15.3	0.88	0.692000
Jones	44.1	36.0	2.19	0.000560
Lamar	48.3	37.5	0.41	0.236000
Lanier	50.2	21.9	9.22	0.000010
Laurens	54.7	17.2	2.00	0.000010
Lee	47.8	0.0	2.26	0.000370
Liberty	67.1	21.7	2.14	0.000010
Lincoln	46.7	0.0	0.38	0.370000
Long	62.5	0.0	1.40	0.310900
Lowndes	60.4	26.3	2.71	0.000010
Lumpkin	23.2	32.0	4.70	0.000060
McDuffie	56	23.4	3.44	0.043000
McIntosh	50.1	8.7	0.67	0.130500

County	Div-Ind©	Div-Law	RRI(B-W)	Significance
Macon	53.4	0.0	1.41	0.545000
Madison	37.4	33.7	24.55	0.000010
Marion	55.5	27.8	1.95	0.007100
Meriwether	53	17.1	0.91	0.789000
Miller	48.1	18.0	5.64	0.002840
Mitchell	56.8	25.5	2.49	0.000010
Monroe	44.2	34.0	2.14	0.003600
Montgomery	50.2	9.7	2.40	0.014000
Morgan	43.7	32.0	3.37	0.000010
Murray	32.9	0.0	0.41	0.357800
Muscogee	63.5	37.5	3.44	0.000010
Newton	60	20.2	2.91	0.000010
Oconee	33.4	44.4	3.17	0.000700
Oglethorpe	43.1	10.0	2.40	0.007250
Paulding	53.2	9.1	3.52	0.000010
Pickens	17.5	0.0	2.44	0.069000
Paulding	53.2	9.1	3.52	0.000010
Pickens	17.5	0.0	2.44	0.069000
Pierce	29.8	21.9	3.99	0.002700
Pike	24.7	19.8	0.16	0.000010
Polk	47.2	13.4	4.61	0.000010
Pulaski	52.2	13.3	3.27	0.000010
Putnam	51.3	36.3	1.79	0.013400
Rabun	24.1	0.0	0.49	0.470000
Randolph	51.5	16.5	8.62	0.000010
Richmond	58.7	44.3	3.19	0.000010
Rockdale	58.9	32.3	3.44	0.000010
Schley	41.7	0.0	0.66	0.586000
Screven	53.3	14.7	2.15	0.003100
Seminole	51.7	19.8	1.74	0.071000
Spalding	57.4	0.0	3.32	0.000010
Stephens	35.1	24.5	1.71	0.011700

County	Div-Ind©	Div-Law	RRI(B-W)	Significance
Stewart	66.8	23.1	2.45	0.382000
Sumter	58.6	39.9	5.12	0.000010
Talbot	53.6	27.8	0.70	0.487700
Taliaferro	56.8	48.0	0.53	0.517000
Tattnall	55.5	18.0	2.66	0.001100
Taylor	52.6	47.5	2.23	0.027000
Telfair	62.7	36.0	3.36	0.001800
Terrell	51.5	48.6	3.00	0.151000
Thomas	55	32.7	2.00	0.000060
Tift	61	33.2	1.71	0.000080
Toombs	56.9	27.2	2.46	0.000010
Towns	15.5	0.0	0.00	0.133000
Treutlen	49.9	0.0	4.34	0.049000
Troup	57.4	22.1	3.82	0.000010
Turner	56.2	37.5	0.88	0.782000
Twiggs	53.7	37.5	0.64	0.635000
Union	15.3	0.0	2.68	0.149000
Upson	49.5	40.0	1.97	0.000080
Walker	21.8	9.3	1.64	0.042500
Walton	46.2	3.3	3.86	0.000010
Ware	53.2	34.8	1.59	0.002500
Warren	51.5	29.8	0.00	0.000200
Washington	53.6	32.0	2.19	0.002000
Wayne	45.8	29.8	1.66	0.037800
Webster	45.3	0.0	0.91	0.379000
Wheeler	54.1	37.5	0.71	0.605000
White	20.2	0.0	2.01	0.119900
Whitfield	55.3	15.6	0.42	0.000010
Wilcox	62.4	24.5	1.17	0.862000
Wilkes	56.8	33.7	4.40	0.000800
Wilkinson	54	0.0	2.13	0.019000
Worth	45.3	33.2	1.17	0.436000