



VCU

Virginia Commonwealth University
VCU Scholars Compass

Theses and Dissertations

Graduate School

2023

Underrepresentation of Black Participants in Drug Court: Reasons Reported for Non-Admission in Six Jurisdictions

Kathryn J. Genthon
Virginia Commonwealth University

Follow this and additional works at: <https://scholarscompass.vcu.edu/etd>



Part of the [Criminology Commons](#), [Criminology and Criminal Justice Commons](#), [Other Public Affairs, Public Policy and Public Administration Commons](#), [Public Administration Commons](#), [Public Policy Commons](#), [Race and Ethnicity Commons](#), and the [Social Justice Commons](#)

© Kathryn Genthon

Downloaded from

<https://scholarscompass.vcu.edu/etd/7494>

This Dissertation is brought to you for free and open access by the Graduate School at VCU Scholars Compass. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of VCU Scholars Compass. For more information, please contact libcompass@vcu.edu.

© Kathryn J. Genthon 2023

All Rights Reserved

**Underrepresentation of Black Participants in Drug Court: Reasons Reported for
Non-Admission in Six Jurisdictions**

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of
Philosophy at Virginia Commonwealth University

by

KATHRYN J. GENTHON

Bachelor of Arts, College of William and Mary, 2008
Master of Science, Virginia Commonwealth University, 2013

Director: Dr. Amy K. Cook
Associate Professor, L. Douglas Wilder School of Government and Public Affairs, Virginia
Commonwealth University

Dissertation committee

Dr. Henry Brownstein, Distinguished Research Professor, Eberly College of Arts and Sciences,
West Virginia University

Dr. Jill A. Gordon, Assistant Vice Provost for Faculty Affairs, Virginia Commonwealth
University

Dr. Nancy A. Morris, Associate Professor, L. Douglas Wilder School of Government and Public
Affairs, Virginia Commonwealth University

Virginia Commonwealth University
Richmond, Virginia
September, 2023

Acknowledgement

I would like to thank my husband Cliff for his unwavering support throughout my time in the PhD program. I would also like to thank my daughter Camilla, who was born in my second year in the program and has been a constant source of motivation to keep working toward this degree. I would also like to thank my parents, Jan and Evan Lewis, for providing many types of assistance from childcare to emotional support throughout this process.

I am also grateful to Fred Cheesman and Douglas Marlowe for including me in the EIAT project and its subsequent articles and presentations, and to the folks at the National Association of Drug Court Professionals and National Center for State Courts for allowing me to use the EIAT pilot testing data in my dissertation.

A huge thank you to my dissertation chair, Amy Cook for keeping me on track and providing valuable feedback, and to Nancy Morris, Jill Gordon, and Henry Brownstein for their participation on my dissertation committee and their invaluable help in getting me to the finish line.

Thank you all!

Kat

Table of Contents

Acknowledgement	ii
Table of Contents	iii
List of Tables and Figures.....	v
Abstract	vi
VITA	vii
Chapter 1: Introduction and Statement of the Problem	1
Chapter 2: Literature Review	8
2.1 Drug Court Model	8
2.2 Cumulative Disadvantage	11
2.2.1 Origins of Cumulative Disadvantage	14
2.2.2 Youth and Cumulative Disadvantage	17
2.2.3 Police Contact and Arrest	19
2.2.4 Pretrial Detention	21
2.2.5 Adjudication and Sentencing	22
2.2.6 Cumulative Disadvantage Across Stages of Court Processes.....	24
2.3 Racial Disparities in Drug Court.....	28
2.4 Impact of and Possible Contributors to Racial Disparities	36
Chapter 3: Research Design and Methods	44
3.1 Purpose Statement.....	44
3.2 Research Questions	44
3.3 Hypotheses	45
3.4 Design	45
3.5 Instrument and Data	47
3.6 Sample Selection and Sample	47
3.7 Variables	49
3.8 Analysis.....	52
Chapter 4: Results	54
4.1 Representation at Arrest, Referral, and Admission	54
4.2 Likelihood of Admission by Demographic Characteristic	55
4.3 Reasons for Non-admission by Race	62
Chapter 5: Discussion and Conclusion	65
5.1 Summary of Findings.....	65
5.1.1 Race, Sex, and Age and Admission to Drug Court.....	65

5.1.2 Reasons for Non-Admission	67
5.2 Limitations	69
5.3 Policy Implications	71
5.3.1 The Importance of Equity in Drug Court Access	71
5.3.2 Recommendations.....	73
5.4 Directions for Future Research	77
Appendix A: EIAT Fields.....	79
Appendix B: Primary Reason for Non-admission Variables	84
References.....	86

List of Tables and Figures

Table 1. Number of Referrals and Admissions by Race and Drug Court (N=6)	49
Table 2. Admission to Drug Court by Race (N=1466).....	57
Table 3. Admission to Drug Court by Sex (N=1466).....	60
Table 4. Descriptive Statistics and Independent T-Test for Age by Admission Status (N=1462)	61
Table 5. Race and Reasons for Non-admission (N=927)	63
Table 6. Disaggregated Reasons for Offense-Related Denials (N = 927)	64
 Figure 1: Rates by Race at Arrest, Referral, and Admission	 54

Abstract

U NDERREPRESENTATION OF BLACK PARTICIPANTS IN DRUG COURT: REASONS REPORTED FOR NON-ADMISSION IN SIX JURISDICTIONS

by

Kathryn J. Genthon, M.S.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of
Philosophy at Virginia Commonwealth University

Virginia Commonwealth University, 2023

Major Director: Dr. Amy K. Cook

Associate Professor, L. Douglas Wilder School of Government and Public Affairs

Despite the beneficial impacts of drug court participation, access to these programs may not be equitable across racial groups. The reasons behind racial disparities in access to these programs are not well-documented in the current literature. This study investigates disparities in access to drug court and the possible reasons they occur. Chi-square tests are used to assess for disparities in admissions between Black and White individuals referred to drug court. Additional statistical analyses addressed the association of sex and age with admission to provide a broader picture of the impact of a variety of demographic characteristics on admission to drug court. Among individuals who were referred, but not admitted, to drug court, chi-square tests were performed to assess for racial disparities in the recorded reasons these individuals were not admitted. This study found that White individuals were more likely to be admitted to drug court than Black individuals, and women were more likely to be admitted than men. Among those not admitted, Black individuals were more likely to be denied admission due to a history of drug trafficking or distribution charges and the discretion of a team member or gatekeeper who determines eligibility. White individuals were more likely to be denied admission due to technical legal reasons and were more likely to decline to participate.

VITA

Kathryn Jean-Marie Genthon (née Lewis)

November 25, 1984
Alexandria, Virginia

EDUCATION

Virginia Commonwealth University	Richmond, VA
Ph.D., Public Policy and Administration	Expected: December 2023
Criminal Justice concentration	

Dissertation title: “Underrepresentation of Black Participants in Drug Court: Reasons Reported for Non-Admission in Six Jurisdictions.” Dr. Amy Cook, Chair.

Virginia Commonwealth University	Richmond, VA
Master of Science, Criminal Justice.	August 2013

The College of William and Mary	Williamsburg, VA
Bachelor of Arts, Psychology. Classical Civilizations minor.	May 2008

Junius H. Rose High School	Greenville, NC
	May 2003

PROFESSIONAL EXPERIENCE

Senior Court Research Associate

National Center for State Courts, Research Division	
Williamsburg, VA	April 2022 – Present

Senior Court Research Analyst

National Center for State Courts, Research Division	
Williamsburg, VA	February 2016 – April 2022

Court Research Analyst

National Center for State Courts, Research Division	
Williamsburg, VA	May 2014 – February 2016

SELECTED PUBLICATIONS AND PRESENTATIONS

Cheesman, F.L., Brown, A., & Genthon, K.J. (2019). Specialty Court Evaluation 201: Collecting and understanding data needed for creating matched-groups, measuring recidivism, and performance measurement. Presentation at the National Drug Court Professionals All Rise 2019 conference.

Cheesman, F.L., Genthon, K.J., & Marlowe, D.B. (2019). From a performance management to a performance evaluation tool: Conceptual development of the

- equity and inclusion assessment tool (EIAT). *Justice System Journal*, 40(3), 259-266.
- Cheesman, F. L., Marlowe, D. B., & Genthon, K. J. (2023). Racial differences in drug court referral, admission, and graduation rates: Findings from two states and eight counties, *Journal of Ethnicity in Criminal Justice*, 21(1), 80-102.
- Dancy, D.O., & Genthon, K.J. (2019). *The state court Violence Against Women Point of Contact: A guide for practitioners*. National Center for State Courts, Williamsburg, VA.
- Genthon, K.J., Barton, R., and Lewis, P. (2022). Mental health court performance measures: Practice with real training materials. Presentation at the National Drug Court Professionals All Rise 2022 conference.
- Genthon, K., & Robinson, D. (2022). *Collecting race & ethnicity data*. National Center for State Courts, Williamsburg, VA. www.courtstatistics.org/data/assetsets/pdf_file/0036/69678/Race_Ethnicity_Data_Collection.pdf
- Marlowe, D. & Genthon, K.J. (2022). Completed analyses of racial disparities in drug court referral, admission, and graduation rates. Presentation at the National Drug Court Professionals All Rise 2022 conference.
- Gibson, S., Harris, B., Waters, N., Genthon, K., Hamilton, M., & Robinson, D, eds. *CSP STAT*. www.courtstatistics.org/court-statistics/interactive-caseload-data-displays/csp-stat
- Miller, A.L., Hannaford-Agor, P., & Genthon, K. (2021). *An evaluation framework for allied legal professional programs: Assessing improvements in access to justice*. National Center for State Courts, Williamsburg, VA.
- National Center for State Courts (2023). *The Racial Justice Organizational Assessment Tool for Courts*. Williamsburg, VA: Author. ncsc.org/racialjusticeassessment
- Waters, N.L., & Genthon, K.J. (2016). Achieving timely resolution for criminal appeals in state courts: Why does timeliness matter? *Caseload Highlights*.

Chapter 1: Introduction and Statement of the Problem

Research indicates that drug courts are an effective alternative to incarceration or traditional community supervision that reduce recidivism and increase cost savings for many jurisdictions (e.g., Aos et al., 2001; Carey et al., 2011, 2012; Government Accountability Office [GAO], 2005; Lowencamp et al., 2005; Mackin et al., 2009; Marlowe et al., 2003; Mitchell et al., 2012; Shaffer, 2011). Participation in drug court also benefits program participants by connecting them with beneficial substance use, mental health, and other treatment services and often resulting in reduced or dismissed criminal charges, expunged criminal convictions, or reduced sentences (Bowers, 2008; Festinger et al., 2005; National Association of Drug Court Professionals, 2013, 2015). However, despite these societal and individual benefits, research suggests racial disparities in who is given the opportunity to take part in drug court (Marlowe et al., 2016; Sheeran & Heideman, 2021) and who successfully completes the program (Devall & Lanier, 2012; Gallagher et al., 2019, 2020; Ho et al., 2018; Howard, 2016; McKean & Warren-Gordon, 2011; Sheeran & Heideman, 2021). The purpose of this study is to examine differences in admission rates for drug court programs and to assess differences in the reported reasons for non-admission between White and Black individuals referred to drug courts in six jurisdictions. This introduction sets the stage for these analyses by documenting the development of and prior research on drug courts and the importance of racial equity in drug court access.

In the United States, the 1980's saw the expansion of the "War on Drugs", a criminal justice philosophy that emphasized incarceration and a "tough on crime" response to substance use (Marlowe, 2013). Although the idea of a war on drugs was first proffered by Richard Nixon in the early 1970s, it was not until the Reagan administration that the War on Drugs became a centerpiece of federal law enforcement efforts ("War on Drugs," 2020). The War on Drugs had the

goal of aggressively addressing the supply side of the drug issue by incarcerating and stigmatizing the distributors and users of illegal substances (Werb, 2018). It set out to accomplish these goals through the militarization of the police (Rosino & Hughey, 2018), a focus on the street arrests of low-level drug offenders (Mitchell & Caudy, 2017), and the implementation of strict sentencing policies like “three-strikes” sentencing laws and mandatory minimum sentences for drug crimes (Alexander, 2012). Although this effort is responsible for increasing the number of people incarcerated in the United States to historic and global highs and a disproportionately negative impact on Black communities (Alexander, 2012; Marlowe, 2013), it has not had the desired effect of reducing or eliminating the use of illegal substances (Werb, 2018), and has had only a minimal effect on criminal recidivism (Marlowe, 2013).

This emphasis on the criminalization of substance use set the stage for the development of drug courts in the 1990s. Drug court programs are a court-based policy response designed to address the “revolving door” problem of substance-using offenders repeatedly entering the criminal legal system despite experiencing traditional interventions like probation and incarceration (The National Center on Addiction and Substance Abuse at Columbia University [CASA], 2000). As Judge Herbert Klein, the Florida judge who was instrumental in designing and implementing the first drug court, wrote, “Putting more and more offenders on probation just perpetuates the problem. The same people are picked up again and again until they end up in the state penitentiary and take up space that should be used for violent offenders” (Drug Strategies, 1997, p. 6). Drug courts were developed with the goal of addressing the underlying problem of substance use disorders that was driving repeat criminal offending in this specific population of individuals involved with the criminal legal system, and thus reduce their rates of recidivism (the

commission of further crimes). In this manner, the most effective drug courts not only accept offenders who have been charged with or convicted of crimes that are directly related to drug use (e.g., possession or use of illegal or illicit substances), but also offenses that are indirectly related to substance use (e.g., theft to obtain money to buy drugs, forgery to obtain narcotic prescriptions illegally) (Carey et al., 2012).

Drug courts rely on the collaboration of several separate agencies within and outside of the criminal legal system to achieve successful results. Successful drug courts should achieve effective collaboration among the court, probation and other supervision services, law enforcement, and treatment providers from a range of service types (Bureau of Justice Assistance [BJA], 1997; NADCP, 2015). Treatment services, such as inpatient and outpatient substance use disorder treatment, mental health-specific treatment, and ancillary services are a crucial part of a successful drug court program, but they are also unique among drug court resources in that they are often the only component that is administered and tracked outside of a criminal justice agency, with private providers, community-run facilities, or state-run hospitals providing care (Carey et al., 2008, 2012; Shaffer, 2006; Wilson et al., 2006).

According to research into effective drug courts, they should not only provide substance use disorder treatment services, but should also provide services that address additional criminogenic needs. Criminogenic needs can be understood as risk factors that are correlated with criminal conduct (Latessa & Lowenkamp, 2005). As described by Andrews and Bonta (2017), these risk factors fall into six categories: pro-criminal or antisocial values, attitudes and beliefs; factors related to temperament or personality; pro-criminal associates; family factors; a history of antisocial behavior; and low levels of vocational, educational, or financial achievement. Drug court services that address criminogenic needs include clinical case management, housing assistance,

trauma-informed services, criminal thinking interventions, family and interpersonal counseling, and vocational and educational services (NADCP, 2015). Although not included among criminogenic needs, many drug courts also provide access to medical and dental treatment, prevention of health-risk behaviors, and overdose prevention and reversal services (NADCP, 2015). Drug courts that provide these services not only address the underlying substance abuse issue leading to criminal activity, but also any co-occurring mental health issues or other medical or life challenges that may prevent participants from successfully completing the drug court program or that may increase the likelihood of recidivism after completion of the drug court program (BJA, 1997; NADCP, 2015).

Despite evidence that participation in drug court is associated with reduced recidivism and other positive outcomes (e.g., Aos et al., 2001; Carey et al., 2011, 2012; GAO, 2005; Lowencamp et al., 2005; Mackin et al., 2009; Marlowe et al., 2003; Mitchell et al., 2012; Shaffer, 2011), drug court practitioners and researchers began to voice concerns that these benefits were not accruing equally for all sociodemographic groups. Of particular concern were suspected racial and ethnic disparities in drug court access and completion. In June 2010, the Board of Directors for the National Association of Drug Court Professionals (NADCP), “the premier training, membership, and advocacy organization for the treatment court model” (NADCP, n.d.), released a unanimous resolution to address these concerns (Marlowe, 2013; NADCP, 2013). This resolution directed “drug courts to examine whether unfair disparities exist in their programs for racial or ethnic minority participants, and if so, to take reasonable corrective measures to eliminate such disparities” (Marlowe, 2013, p. 40; NADCP, 2013, p. 12). The resolution emphasized the affirmative obligation of drug courts to continuously monitor their programs to ensure equitable access to the program and services within the program, and that successful completion rates do

not show racial or ethnic disparities. This concern over equitable drug court access and outcomes was also included as the focus of one of NADCP's *Adult Drug Court Best Practice Standards* which provide evidence-based guidance on the most effective drug court practices (NADCP, 2013). Standard II, entitled "Equity and Inclusion" addresses the need for equitable access, retention, treatment, incentives, sanctions, and dispositions, for all demographic groups and recommends that drug court staff receive training "on recognizing implicit cultural biases and correcting disparate impacts for members of groups that have historically experienced discrimination" (NADCP, 2013, p. 12).

Unfortunately, research conducted at the national level suggests that racial and ethnic disparities do exist in access to and successful completion of drug court. According to a 2014 national survey of all drug court coordinators in the U.S., Black individuals were underrepresented in drug courts by approximately 10 percentage points compared to their representation among those arrested for drug and other offenses (Marlowe et al., 2016). Furthermore, although Black individuals accounted for 30% of those arrested for drug offenses and 30% of the probation population, they only accounted for 17% of drug court participants. The same study reported graduation rates of 58% for non-Hispanic/Latinx White participants, compared to a 39% graduation rate for Black drug court participants (Marlowe et al., 2016).

These national-level results highlighted the need for individual drug courts to monitor their programs for inequitable access and outcomes. To assist drug courts in that effort, the National Center for State Courts (NCSC) developed a performance measure specifically addressing equitable representation among demographic groups, including age, gender, race, and ethnicity, at referral, admission, and program completion. Performance measurement is the process of regularly collecting and examining a program's outcome or output data throughout the year, and is

critical to performance management, which is the use of performance measure data to inform managerial decisions in a way that provides continual improvements to program outcomes and outputs (Cheesman, Broschious, et al., 2019). The equity performance measure, entitled “Access and Fairness” has been implemented in Kentucky, Maryland, Iowa, (Cheesman, Genthon, & Marlowe, 2019) and Wisconsin (Genthon et al., 2022).

The Access and Fairness measure provides drug courts with high-level guidance on collecting and analyzing sociodemographic data such as race, ethnicity, gender, and age at referral at the decision points of referral, admission, and completion. The Access and Fairness performance measure provided the basis for the development of the Equity and Inclusion Assessment Tool (EIAT), an Excel-based interactive workbook that gives drug courts a practical tool to assist in gathering and evaluating aggregate population and arrest data and individual-level data on referral, admission, and completion to assess for disproportionalities or disparities at successive decision points (Cheesman, Genthon, & Marlowe, 2019).

Using data collected from the pilot testing of the EIAT, this study employs cumulative disadvantage as a theoretical lens to explore whether race is a factor in admission to drug court. It is hypothesized that cumulative disadvantage associated with race plays a role in drug court admission determinations. Research shows that present offense severity and criminal history are factors that lead to a defendant being denied entry to drug court (Carey et al., 2012; Cissner et al., 2013; Ho et al., 2018; Marlowe et al., 2008; Rossman & Zweig, 2012; Saum et al., 2001; Saum & Hiller, 2008; Sheeran & Heideman, 2021). If, as the cumulative disadvantage literature suggests, Black defendants are often charged with more severe offenses than White defendants accused of similar crimes (Rehavi & Starr, 2014; Tsai Bishop et al., 2020), then those differences in severity may explain the underrepresentation of Black defendants in drug court admissions.

The cumulative disadvantage literature also indicates that racial disparities are found at points in the criminal legal system where legal actors have more discretion in decision-making (for example, pretrial detention and diversion decisions (Jones, 2013; Omori, 2019)). Team or gatekeeper discretion in admission decisions may similarly impact racial equity in drug courts.

The goal of this study is to assess the data gathered from the pilot testing of the EIAT to examine preliminary findings on disparities in drug court admission for Black and White individuals referred to drug court. Additionally, this study examines the reasons for denial to drug court by race. The study seeks to first determine whether the data indicate that there are racial disparities for drug court admission. If these disparities exist, the study will examine the reasons reported for failure to gain admission to determine if there is any relationship with race. Chapter 2 provides a review of the literature on drug courts, cumulative disadvantage across stages of the criminal legal system, and concludes with an examination of racial disparities in drug court.

Chapter 2: Literature Review

2.1 Drug Court Model

The overarching goal of drug courts is to reduce recidivism, or criminal reoffending. The drug court model was intended to address the substance use disorders that are the underlying cause of crimes that either involve substance use or are motivated by substance use (CASA, 2000). In 1998, as drug courts were becoming more prevalent nationally, 14.5 million arrests were made in the United States. Thirty percent of these were for “drug abuse” violations, which include manufacture, purchase, sale, or possession, or alcohol-related events, including vagrancy, driving while intoxicated, liquor law violations, and disorderly conduct. In 1996, 77% of the 500,000 people incarcerated in America’s local jails were there due to one of the following reasons: Having a history of illegal drug use (59%); violating drug laws (21%); committing a crime to get money to buy drugs (13%); having a history of alcohol abuse (15%); driving under the influence (8%); or shared some combination of those factors (CASA, 2000). Courts were also seeing an abundance of repeat offenders and often found themselves faced with two sentencing options: prison or probation (Koetzle et al., 2015).

Incarceration does not satisfactorily address the issues of substance use or recidivism. Some studies indicate that more than 95% of individuals involved in the legal system and who use substances return to using substances within three years after release from prison, with the majority of these relapsing within the first six to twelve months post-release (Marlowe et al., 2003). More significantly for the courts, in one study examining data from 1994, before the advent of drug courts, 66% of those convicted of drug offenses nationwide were re-arrested for a new crime within 3 years post-release from prison, with 47% being reconvicted for a new crime (Langan & Levin, 2002).

At the same time, research indicates that existing alternatives to incarceration at the time, like probation, did not provide the desired reduction in substance use and recidivism either. Several studies published during or examining data from the 1990s found that 50% to 70% of probationers did not adequately comply with the terms of their probation, including drug testing and attendance at drug treatment sessions (Glaze, 2002; Marlowe et al., 2003; Taxman et al., 1999; Young et al., 1991). The inability to keep offenders with substance use disorders in treatment long enough to receive a minimally effective dosage is a significant challenge faced by probation approaches (Marlowe et al., 2003).

With the recognition that substance use disorders contribute to criminal offending and that effective treatment of these disorders was not being accomplished by incarceration or probation alone, the judiciary began to take an active role in holding offenders accountable for attending treatment and providing a sentencing option that requires collaboration among several different agencies within the criminal legal system (Drug Strategies, 1997). Drug courts have been integral in addressing the “revolving door” problem of substance-using offenders who repeatedly enter the criminal legal system despite experiencing traditional interventions like probation and incarceration (CASA, 2000). As Judge Herbert Klein, the Florida judge who was instrumental in designing and implementing the first drug court, wrote,

Putting more and more offenders on probation just perpetuates the problem. The same people are picked up again and again until they end up in the state penitentiary and take up space that should be used for violent offenders. The Drug Court tackles the problem head-on. We offer meaningful diversion where drug abusers can get treatment as well as social, educational and vocational skills so they can find jobs. (Drug Strategies, 1997, p. 6)

While drug courts can differ from court to court based on local or state policies and procedures, some commonalities persist across locations. Drug court cases are commonly assigned to a separate drug court docket and are closed to the public (Castellano, 2011). The role of the drug court judge is different than that of a judge in the traditional court. Rather than adhering to an objective and independent role, the drug court judge becomes familiar with participants and their individual situations, offers encouragement for compliance, expresses optimism for participants' progress toward recovery, and allows participants to offer their version of events in the case of factual controversies (Castellano, 2011). The drug court judge is also the final arbiter of factual disputes and penalizes instances of noncompliance (BJA, 1997; NADCP, 2013). According to the 10 Key Components of Drug Courts, "Ongoing judicial supervision also communicates to participants—often for the first time—that someone in authority cares about them and is closely watching what they do" (BJA, 1997, p. 15).

Attorneys also play a different role in drug court than in a traditional court. Drug court is characterized by a non-adversarial process, in which the prosecutor and defense attorney are members of the drug court team and work together to promote public safety while protecting the defendants' right to due process (BJA, 1997). In fact, drug courts are defined by their collaborative approach to promoting offender accountability and rehabilitation. Probation, law enforcement, and treatment providers are also members of the drug court team in many jurisdictions, fostering a holistic approach to criminal justice where diverse interests can keep each other informed of the defendant's progress in their separate spheres. This enhanced communication allows these stakeholders to have increased awareness of a defendant's successes and failures and the ability to work together to tailor the defendant's treatment plan and sanctions or incentives to the defendant's needs (BJA, 1997).

Research on the drug court model indicates that these programs reduce recidivism when compared to traditional criminal legal system interventions (e.g., Aos et al., 2001; Carey et al., 2011, 2012; GAO, 2005; Lowencamp et al., 2005; Mackin et al., 2009; Marlowe et al., 2003; Mitchell et al., 2012; Shaffer, 2011). In fact, re-offense rates for drug court participants are between eight and twelve percentage points lower than rates for comparison groups who experienced more traditional legal system outcomes like incarceration or community supervision (Cissner et al., 2013; Gutierrez & Bourgon, 2009; Mitchell et al., 2012; Shaffer, 2011). Adherence to evidence-based practices that have been shown to be associated with improved outcomes for participants can enhance the effectiveness of drug courts in reducing recidivism and achieving cost-savings for the courts and the communities they serve (BJA, 1997; Cissner et al., 2013; NADCP, 2013, 2015; Rossman & Zweig, 2012; Shaffer, 2011).

Although the body of research on drug courts suggests that they are successful in reducing recidivism and achieving cost savings for communities, there is also evidence that access to and completion of drug court are subject to racial disparities, with Black individuals less likely to be admitted to drug court, and if admitted, less likely to successfully complete drug court (Marlowe et al., 2016). The next section will introduce cumulative disadvantage as a theoretical lens explaining the factors that influence the underrepresentation of Black individuals in drug courts.

2.2 Cumulative Disadvantage

The theory of cumulative disadvantage has been applied to several areas of social science (Diprete & Eirich, 2006) and posits that “the relative positions of specific groups or individuals diverge as preferential treatment, economic, social, and political resources and other tangible and intangible rewards or punishments differentially accumulate over time” (Kurlychek & Johnson, 2019, p. 292). This accumulation can occur over the life-course, or over shorter-term processes,

like the criminal legal system (Kutateladze et al., 2014). Cumulative disadvantage in the criminal legal system refers to the domino effect of negative, bias-related outcomes beginning with school disciplinary practices and continuing throughout distinct decision points within the criminal legal system (Kurlychek & Johnson, 2019). These outcomes, disproportionately negative for Black and other people of color, build upon each other to create successively more detrimental outcomes for these groups (Kurlychek & Johnson, 2019). The factors contributing to cumulative disadvantage are multi-faceted and interconnected. For example, in the United States, membership in a minority racial group is associated with an increased likelihood of experiencing poverty (Wooldredge et al., 2015), which is correlated with numerous negative outcomes, like exposure to substandard schools, poor nutrition, and exposure to violence (Kurlychek & Johnson, 2019).

The research on cumulative disadvantage and the effect of race and ethnicity on criminal legal system outcomes suffers from the siloed nature of the United States criminal legal system (Baumer, 2013; Kutateladze et al., 2014; Omori, 2019; Omori & Petersen, 2020). Most studies on cumulative disadvantage focus on a single decision point rather than assessing the cumulative effect of bias at the multiple successive points an individual experiences as they travel through the system (Kurlychek & Johnson, 2019; Kutateladze et al., 2014; Omori, 2019). Studies that focus on a single decision point do not capture the conditioning effects early decisions have on subsequent ones (Kutateladze et al., 2014).

These separate decision points are often interrelated and mutually dependent, with, for example, sentencing decisions being based on charging decisions and on criminal history (Kutateladze et al., 2014; Omori, 2019; Omori & Petersen, 2020). Incarceration can increase the likelihood of future recidivism (Cochran et al., 2014; Nagin et al., 2009). Inequitable school discipline can increase the likelihood of later defiant behavior and contact with the criminal legal

system (Ramey, 2016; Rocque & Paternoster, 2011; Skiba et al., 2002). In this way, cumulative disadvantage occurs not only in one journey through the criminal legal system, but also over a lifetime. Despite the interrelated nature of these factors, research in this area has disproportionately focused on individual decision-making at the sentencing stage (Baumer, 2013; Engen, 2009), which does not account for systemic or institutionalized policy practices (Omori & Petersen, 2020).

Individual decision-making does play a role in racially disparate outcomes in the criminal legal system. Racial stereotypes associate being Black with violent behavior and criminality (Eberhardt et al., 2004). People often also associate being Black with being guilty. In one study, people with stronger associations between "Black" and "guilty" were more likely to believe that ambiguous evidence was proof of guilt in cases with Black defendants (Levinson et al., 2010). Biased beliefs are also found in individuals who make potentially life altering decisions within the court system. For example, the Implicit Association Test (IAT) measures respondents' association of negative characteristics with Black individuals and positive characteristics with White ones. Results from the IAT indicated that White judges often displayed implicit bias against Black people (Rachlinski et al., 2009). In a simulated sentencing study, White judges who demonstrated an implicit bias against Black people gave harsher sentences when primed with language associated with Black people (Rachlinski et al., 2009). However, although individual decision-makers play a role in creating and exacerbating racial disparities, they do so within the structure of racialized organizations and are empowered by that connection (Omori, 2019; Ray, 2019). Interventions aimed at reducing individual bias are often found to be ineffective at making lasting change (Kovera, 2019). Rather than addressing the individual bias of decision-mak-

ers, current thought holds that addressing systemic issues is the more effective means of addressing disparate racial outcomes in the criminal legal system (Kovera, 2019; Omori, 2019; Omori & Petersen, 2020; Ray, 2019).

The following sections will review the literature on cumulative disadvantage, beginning with the theory's developmental stages and its application to criminology. Next, is a review of the literature examining racial disparities in the criminal legal system at single stages of the life-course (juvenile/youth matters) or single stages of the criminal legal system (police contact and arrest, pre-trial detention, and adjudication and sentencing). This paper will then provide a detailed review of a few studies that take a holistic view to cumulative disadvantage in the criminal legal system and examine multiple points of the process and how they are related to each other. Finally, these findings will be reviewed within the context of access to drug court.

2.2.1 Origins of Cumulative Disadvantage

The idea of cumulative advantage was first used by R.K. Merton (1988) to explain the way rewards are allocated to scientists. Merton (1968) initially calls this phenomenon "the Matthew effect" in reference to a quote from the Gospel according to St. Matthew: "To him who hath shall be given; from him who hath not shall be taken away that which he hath" (*King James Bible*, 2008, Matthew 25:29; Merton, 1968, p. 58). As a result of this effect, scientists who are already well-known in their field receive credit and adulation because of that name recognition, while the contributions of lesser-known scientists, even when listed as authors on the same paper as their better-known peers, are overlooked or mistakenly attributed to those peers (Merton, 1968, 1988).

In a follow-up to his 1968 essay published 20 years later, Merton (1988) refers to the Matthew effect by the term "cumulative advantage". He titled this later essay "The Matthew effect in science II: Cumulative advantage and the symbolism of intellectual property" and refers to the effect in the text as "the accumulation of advantage and disadvantage for scientists" (p. 609). DiPrete & Eirich (2006), note that although some studies use the term "cumulative advantage", while others use "cumulative disadvantage", these terms are simply different framings of the same phenomenon. "Cumulative advantage" is used to describe situations where positive outcomes are accrued, while "cumulative disadvantage" describes the accrual of negative outcomes. These two terms describe different sides of the same coin.

Sampson and Laub (1997) integrated several criminological theories with the theory of cumulative disadvantage to create a life-course, developmental theory of criminal behavior. As the authors described it, "The idea of cumulative disadvantage draws on a dynamic conceptualization of social control over the life course, integrated with the one theoretical perspective in criminology that is inherently developmental in nature - labeling theory" (Sampson & Laub, 1997, p. 3). Cumulative disadvantage draws inspiration from labeling theory, in which primary deviance elicits negative and stigmatizing societal reactions that contribute to the likelihood of secondary deviance (Lemert, 1951; Sampson & Laub, 1997). Labeling theory contends that social control efforts in response to criminal activity have stigmatizing and segregating effects on individuals who engage in criminal behavior (Paternoster & Iovanni, 1989; Sampson & Laub, 1997). According to Lemert (1972), primary deviance is not due to any inherent characteristic of an individual. Primary deviance leads to secondary deviance as, a "means of defense, attack, or adaptation to overt and covert problems created by the societal reaction to primary deviance" (p. 7). These problematic societal reactions result in exclusion from beneficial opportunities and

conventional routines, increased exposure to deviant subgroups, and an alteration of an individual's view of their identity. All of these factors may increase the likelihood of further deviant behavior (Lemert, 1972; Sampson & Laub, 1997).

Sampson and Laub (1997) noted that research on labeling theory at that time was primarily cross-sectional and looked at behavior within instead of across developmental stages. They argued that focus on the social-psychological explanations used in labeling theory underestimated the effects of social structural constraints and sought to “integrate the dynamic aspects of labeling theory with social control theory, and then apply this perspective to findings of stability produced by criminological research” (Sampson & Laub, 1997, p. 9). A central tenet of social control theory is the idea that an individual with a weak or broken bond with society is more likely to engage in criminal behavior (Sampson & Laub, 1997). Sampson and Laub (1997) integrated this tenet with the life course framework (Elder, 1985) by differentiating individuals' life course by age and identifying the varying social controls that apply at different life stages.

According to Sampson and Laub (1997), cumulative disadvantage is explained by a combination of the above theories. It draws upon a developmental approach to labeling theory and an age-graded conceptualization of informal social control theory. As delinquent behavior begins early in the life course, so too do attempts to repress it through social controls. Aggressive and delinquent behavior results in rejection by teachers and peers, parental hostility, punitive discipline, and sometimes criminal legal system involvement. The repressive effects of these responses accumulate over time and influence an individual's development by weakening social bonds and causing barriers to future opportunities due to stigmatization. Barriers to employment

further weaken social bonds, which in turn leads to an increased likelihood of more criminal behavior, as greater employment and family stability are linked to a lower likelihood of criminal activity (Laub & Sampson, 1993; Sampson & Laub, 1997).

Social context also influences cumulative disadvantage (Sampson & Laub, 1997). Contemporary studies indicated that the effects of cumulative disadvantage were greatest among boys from lower income families, particularly when police contact was involved (Hagan, 1991). Middle-class boys often escaped the consequences of stigmatization and therefore did not experience lifelong repercussions (Hagan, 1991; Sampson & Laub, 1997). The authors suggest that that these concepts are "most salient in explaining the structurally constrained life chances of the disadvantaged urban poor" (Sampson & Laub, 1997, p. 21). The authors also note that negative adolescent behavior is more likely to develop into negative adult behavior among disadvantaged economic and racial groups, as social advantage provides a buffer against the negative consequences of delinquent behavior (Sampson & Laub, 1997). The following sections of this paper will review the literature on racially disparate outcomes within the criminal legal system through a cumulative disadvantage lens.

2.2.2 Youth and Cumulative Disadvantage

Contributing factors to disproportionate contact with the criminal legal system by race begin early, with disparate discipline in schools by race (Ramey, 2016; Rocque & Paternoster, 2011; Skiba et al., 2002, 2011). When students receive harsher disciplinary actions, they are more likely to become involved with the criminal legal system later in life (Ramey, 2016). This phenomenon is called the "school-to-prison pipeline" (Skiba et al., 2002). The school-to-prison pipeline is an important consideration in a review of cumulative disadvantage in the criminal legal system because Black students are more likely to receive those harsh disciplinary actions

than White students (Forsyth et al., 2015; Krezmien et al., 2006; Ramey, 2016; Rocque & Paternoster, 2011; Skiba et al., 2002). In fact, Black students are more likely to be arrested or referred to law enforcement than White students (U.S. Department of Education Office for Civil Rights, 2014). Black students are also more likely to receive out of school suspensions or be expelled (Gregory & Weinstein, 2008; U.S. Department of Education Office for Civil Rights, 2014; Welch & Payne, 2010), even when controlling for differences in behavior (Rocque & Paternoster, 2011). This is likely due to increased monitoring and more severe disciplinary actions for similar infractions by teachers toward their Black and Hispanic/Latinx students (Amemiya et al., 2019; Morris, 2005; Okonofua & Eberhardt, 2015; Skiba et al., 2002). Teachers also form negative opinions about Black students more quickly than White students (Okonofua & Eberhardt, 2015). This disparate discipline begins in elementary school (Rocque & Paternoster, 2011) with some estimates placing infraction rates for Black students at two to three times higher than White students (Skiba et al., 2011).

Receiving more severe discipline contributes to cumulative disadvantage within the school context and across the life span. Students who receive an out-of-school suspension have decreased academic performance (Davis & Jordan, 1994). Since suspensions are disproportionately given to Black students (Gregory & Weinstein, 2008; U.S. Department of Education Office for Civil Rights, 2014; Welch & Payne, 2010), their performance is also disproportionately affected. In fact, 20% of the variance in the achievement gap between Black and White students can be explained by disparities in out-of-school suspensions (Morris & Perry, 2016). Disparate school disciplinary practices have an effect across the life course by increasing the likelihood of criminal legal system involvement (Ramey, 2016). Racial disparities in school discipline explain much of the difference in adult arrest rates by race (Barnes & Motz, 2018). There are several

possible explanations for the relationship between school discipline and arrest. First, youths who are harshly disciplined may internalize the "trouble-maker" label and act accordingly (Hirschfield, 2008). Youths who are suspended or expelled are often more likely to spend more time unsupervised, and that may allow for the opportunity to engage in criminal behavior (Hoeben & Weerman, 2016). Suspension and expulsion may also cause those affected to deidentify with school and instead engage with other youths with a similar experience (Unnever & Gabbidon, 2011).

Black and Hispanic/Latinx youth are more likely than White youths to face arrest (Fite et al., 2009; Huizinga et al., 2007; Tapia, 2011). Higher rates of arrest for Black and Hispanic/Latinx youths have contributed to their overrepresentation in correctional facilities (Stevens & Morash, 2015). Charging differences also begin early, with a greater likelihood of prosecutors charging Black youth as adults than their White counterparts (Zane et al., 2016). This decision deprives those youths of the rehabilitative treatment they would have received in the juvenile system (Zane et al., 2016). The disparities in sentencing continue even during sentencing to rehabilitative treatment as a juvenile. One study found that White juveniles were more likely to be sentenced to therapeutic programs, while Black juveniles were more likely to be sentenced to boot camp type programs with an emphasis on physical activity despite convincing evidence that such interventions do not impact the likelihood of recidivism (Fader et al., 2014). Racially disparate practices in arrest, charging, and sentencing that begin in childhood and adolescence continue for adults in the criminal legal system, as the next several sections will discuss.

2.2.3 Police Contact and Arrest

Whether investigating relatively minor illegal behavior, like traffic violations, or serious offenses involving violence, police officers are more likely to show leniency toward and use less

force with White suspects as compared to Black suspects (Kovera, 2019). A Bureau of Justice Statistics survey found that the police were more likely to stop White drivers for speeding, and more likely to stop Black drivers to check their records. Respondents also indicated that officers were nearly twice as likely to fail to provide a reason for stopping Black drivers than White drivers (Langton & Durose, 2013). Traffic stop data from 20 states indicate that police stopped Black drivers more frequently than White drivers relative to their representation among citizens of legal driving age (Pierson et al., 2020).

More geographically limited studies support these findings as well. Archival analyses of police data in North Carolina indicate that the likelihood of being stopped by police is higher for Black drivers than White or Hispanic/Latinx drivers (Baumgartner et al., 2018). This study also found that Black drivers were overrepresented in a database of traffic stops by 60 to 70% compared to their representation among the population of the area where the stop took place (Baumgartner et al., 2018). Other studies have indicated that disproportionate stopping of Black and Hispanic/Latinx drivers happened more often in the daylight than in twilight hours, when officers were better able to distinguish drivers' physical characteristics (Pierson et al., 2020; Ross et al., 2017).

People of color were also more likely to be searched during a traffic stop (Baumgartner et al., 2018; Langton & Durose, 2013). Similarly, Black people are more likely to be searched by police after being stopped on the street (Fagan et al., 2016). Notably, police searches of Black and Hispanic/Latinx individuals are particularly likely to occur in instances where the searched individual is unlikely to produce a weapon (Goff et al., 2016). This racial disparity in searches is not linked to an increased likelihood of people of color possessing contraband. In fact, research on these searches indicates that White individuals who were stopped and searched or frisked are

more likely to possess contraband than are people of color (Levchak, 2017) and searches of White individuals are more likely to result in an arrest (Gelman et al., 2007).

Arrest rates for drug offenses also differ by race (Brame et al., 2014; Piquero, 2015) despite research indicating that drug use rates do not significantly differ between races (Koch et al., 2016; Mitchell, 2020; Stringer & Holland, 2016). For example, Black individuals in New York City were eight times more likely than White individuals to be arrested for marijuana possession (Patten et al., 2019). Other studies found that racial disparities in drug arrests were not explained by factors like rates of drug offending or other types of offending, or residence in neighborhoods targeted for drug-focused policing (Beckett et al., 2006; Mitchell & Caudy, 2015, 2017). Explanations for this disparity include the idea that Black people are more likely to engage in drug interactions outdoors and are therefore more likely to be detected by law enforcement, and the differential enforcement of drugs more commonly associated with the Black community (for example, crack) and those associated with the White community (cocaine) (Beckett et al., 2006).

2.2.4 Pretrial Detention

Racial disparities exist in defendants' likelihood of being detained pretrial, with Black and Hispanic/Latinx defendants more likely to be incarcerated while awaiting trial (Kovera, 2019; Kutateladze et al., 2014; Omori, 2019; Omori & Petersen, 2020). One contributing factor is the ability to access bail (Arnold et al., 2018; Jones, 2013; Schlesinger, 2005, 2007; Sutton, 2013). Several studies determined that Black and Hispanic/Latinx defendants were less likely to receive bail as an option than White defendants (Schlesinger, 2005, 2007; Sutton, 2013). When bail was granted, Black and Hispanic/Latinx defendants were less likely to be able to pay it (Schlesinger, 2005, 2007). People of color are overrepresented among lower socioeconomic status groups, and as a result are more often unable to pay bail (Schlesinger, 2007; Wooldredge et

al., 2015). Additionally, the bail required of Black and Hispanic/Latinx defendants was often for higher amounts than that required of White defendants (Jones, 2013), even when controlling for legal characteristics, including those associated with risk of flight and dangerousness (Schlesinger, 2007) and charge severity (Sutton, 2013).

Several studies that evaluated racial differences at multiple stages of the court process found the greatest racial disparities at the pretrial detention stage, with bail playing an important role in creating these disparities (Donnelly & Macdonald, 2019; Omori, 2019; Omori & Petersen, 2020; Wooldredge et al., 2015). A possible explanation for this finding can be found in the way pretrial detention decisions are made (Jones, 2013; Omori, 2019). Pretrial detention is more influenced by discretion than other court stages (Jones, 2013; Omori, 2019). Sentencing is often determined through a more structured approach, while bail and detention decisions are made through less visible and formal legal standards (Jones, 2013; Omori, 2019). While factors like criminal history and current charge influence bail decisions, other more racialized factors like employment and ties to the community may also play a role (Omori, 2019).

2.2.5 Adjudication and Sentencing

Even though 94% to 97% of criminal cases are resolved through plea bargaining (Administrative Office of the U.S. Courts, 2016; Rosenmerkel et al., 2009), little research on racial disparities has been conducted in this area (Kutateladze et al., 2016). Kutzeladze et al. (2016) found that Black defendants were more likely to be offered pleas involving incarceration in jail or prison, while White defendants were more likely to receive pleas including community service, time served, or a fine. In cases involving misdemeanor marijuana offenses, prosecutors were more likely to offer charge reductions to White defendants (Shermer & Johnson, 2010). Black

defendants were less likely to accept the plea deals offered, possibly due to the less beneficial terms offered (Metcalf & Chiricos, 2018; Sutton, 2013).

Most of the research on racial disparities in the criminal legal system focuses on the sentencing stage (Kovera, 2019). The literature indicates that Black and Hispanic/Latinx defendants generally receive more punitive sentences than White defendants, even when controlling for legal factors that should influence sentencing decisions (Omori, 2019; Omori & Petersen, 2020; Spohn, 2000, 2015). Black and Hispanic/Latinx defendants in Manhattan were more likely to be sentenced to imprisonment than White defendants (Kutateladze et al., 2014). In Georgia, one study found that first-time Black offenders received longer sentences than first-time White offenders, even when controlling for socioeconomic status and crime severity (Burch, 2015).

Black defendants receive longer, more punitive sentences than their White counterparts, partly due to the increased likelihood of prosecutors charging Black defendants with offenses that carry mandatory minimum sentences (Fischman & Schanzenbach, 2012; Rehavi & Starr, 2014). Strict policies targeting repeat offenders also exacerbate racial disparities in imprisonment. For example, California implemented a three-strikes law that has disproportionately impacted its Black residents. Although Black people are only 7% of the state's population, they account for 25% of the prison population and 45% of those imprisoned under the three-strikes law (Ehlers et al., 2004).

There is not only a disparate effect for Black versus White defendants in sentencing. The effects are more severe for Black individuals who are more phenotypically African in their appearance, including skin color and facial features. Burch (2015) found that the disparity in sentencing between first-time Black and White offenders in Georgia was due mostly to more severe

sentencing of those Black people with darker skin. Black people with light skin received sentences similar to White defendants (Burch, 2015). Similarly, a study in Florida found that offenders with more African facial features received longer sentences than those with more European features (Blair et al., 2004). This finding also holds true for death penalty cases, with juries more likely to sentence defendants with more African features to death as compared to defendants with a more European appearance (Eberhardt et al., 2006).

2.2.6 Cumulative Disadvantage Across Stages of Court Processes

Although many studies indicate a racially disproportionate impact resulting from local, state, and federal drug policies, only recently have researchers begun to address the effects of the criminal legal system as a whole rather than at siloed decision points (Kutateladze et al., 2014; Omori, 2019). Studies that address these effects as a whole are key to understanding the full effects of cumulative disadvantage and accurately assessing the disparate impact of the criminal legal system on different racial groups (Kutateladze et al., 2014; Omori, 2019). When considering only a single stage of the criminal legal system, researchers may miss those accumulated, long-term effects and find no, contingent, or only small disparities in outcomes between racial groups (Baumer, 2013; Omori, 2019). By examining successive, linked stages, researchers can uncover the “social sifting” that happens in the earliest stages of the process (Hagan, 1974). As Omori (2019) states, “In a system that might ‘nickel and dime’ racial inequality, capturing this inequality must also be done at a systemic level, rather than at a single stage” (p. 288).

Studies that assess the effect of cumulative disadvantage commonly find that racial disparities at earlier phases of the court process have a negative effect on outcomes at later stages. Charges and plea decisions affect later decisions regarding sentence length if the defendant is

found guilty (Kovera, 2019; Tsai Bishop et al., 2020). In a study investigating the disproportionate representation of people of color in Massachusetts' state prisons, the authors determined that differential treatment in charging and sentencing was a contributing factor (Tsai Bishop et al., 2020). Black and Hispanic/Latinx defendants were less likely to have their cases resolved through less severe means, like continuances without finding or pretrial probation. These individuals also received longer sentences of incarceration than their White counterparts, even when accounting for charge severity at conviction, criminal history, and other variables that may have explained this outcome. The study indicated that disparities at the initial charging stage may account for these differences, as Black and Hispanic/Latinx defendants often faced more severe initial charges, despite ultimately being convicted of charges that did not differ in severity from their White counterparts. The authors concluded that "this evidence is consistent with racially disparate initial charging practices leading to weaker initial positions in the plea-bargaining process for Black [and Hispanic/Latinx] defendants, which then translate into longer incarceration sentences for similar offenses" (Tsai Bishop et al., 2020, p. 64).

Racial disparities in pretrial detention also have an impact on racial disparities in later stages of the court process. Omori and Petersen (2020) found that White non-Latinos were the least likely to be detained pretrial, convicted, and incarcerated, and Black Latinos experienced the greatest inequalities compared to White non-Latinos. Black non-Latinos also experienced inequalities compared to White non-Latinos, while White Latinos experienced few statistically significant differences from White non-Latinos. The authors assessed the role of three case characteristics in these unequal outcomes: prior criminal record, charging (crime type, offense severity, mandatory minimums), and pretrial detention (for the outcomes involving conviction and incarceration). Between half and three-quarters of the difference between White non-Latinos and

Black individuals (Latino or non-Latino) could be explained by these case characteristics. However, that influence differed by the case characteristic and the point of the criminal process.

Criminal history had the largest and most consistent impact at all stages, but pretrial detention also influenced differences in conviction, and charging affected differences in prison sentences.

Omori (2019) found that the pretrial detention stage accounted for the greatest disparity in their study of disparities in pretrial, adjudication, and sentencing. While White defendants had a 31% likelihood of being detained pretrial, Black defendants had a 39.8% likelihood of pretrial detention. In a follow-up analysis, the author assessed the effects of cumulative disadvantage by maintaining the case characteristics for Black defendants but treating them as if they were White in the analysis. If the case characteristics remained the same but the defendant was treated as White in the analysis, Black defendants saw a 32.8% likelihood of pretrial detention. People who were detained pretrial were more likely to plead guilty as part of a plea negotiation, possibly due to the incentive of settling a case quickly and exiting detention.

In the adjudication phase of the court process, diversion accounted for one of the largest areas of racial disparity (Omori, 2019). White defendants had a 14.2% likelihood of being diverted, compared to a 6.4% likelihood for Black defendants. As with pretrial detention and bail decisions, adjudication to diversionary programs is subject to a high level of discretion (Jones, 2013; Omori, 2019). These individuals are often evaluated for suitability using subjective measures of likelihood of success and social factors like employment, family stability, or housing, which may negatively affect Black defendants (Omori, 2019). Criminal history can also be an exclusionary factor in determining suitability for diversion programs (Omori, 2019).

Black defendants were the most likely to receive a sentence of incarceration in jail or prison, even when controlling for prior record and pretrial detention (Omori, 2019). Black defendants had a 37% likelihood of receiving a carceral sentence, compared to a 23% probability for White defendants. Black defendants also had a lower probability of being sentenced to probation compared to White defendants. Pretrial detention had a greater impact on sentencing outcomes than on adjudication outcomes. The probability of a prison sentence increased by around 20 percentage points if a person was detained pretrial (Omori, 2019). In this way, disparities at the pretrial detention stage extend to the sentencing stage.

Omori (2019) also found that White defendants with less severe charges were more likely to be adjudicated to diversion programs than their Black counterparts. This resulted in a situation where the group of White defendants who reached the sentencing phase had higher severity of offenses than the group of Black offenders who reached sentencing. Due to this disparate treatment at earlier stages of the process, findings of no to little difference in sentencing between Black and White in past studies may be due to a comparison of apples to oranges when it comes to charge severity between the groups. That is to say, Black offenders with less severe charges may be receiving similar sentences to White offenders with more severe charges.

With overrepresentation in police contacts and arrest and disproportionately negative and interrelated outcomes at subsequent court stages, it logically follows that Black individuals are also overrepresented in the prison system of the United States. Despite accounting for 13.6% of the U.S. population (U.S. Census Bureau, 2022), Black individuals account for 33% of those imprisoned (Carson, 2021). It is estimated that one in every four Black men will be incarcerated at some point in their life (Bonczar & Beck, 1997; Western, 2006).

According to Beck and Blumenstein (2018) racial disparities in arrest account for 70% to 75% of the racial disparities in incarceration. Court processes, including decisions regarding pre-trial detention, plea deals, charging, and sentencing also contribute to the disparity (Kovera, 2019). Being incarcerated increases the likelihood of future criminal offending, further supporting the cycle of cumulative disadvantage (Cochran et al., 2014; Nagin et al., 2009). Kovera (2019) writes, "At some point, the disparities become self-fulfilling as the increased rates of incarceration of minority people will result in increased offending among the same group, with disparities in imprisonment becoming a function of disparities in offending" (p. 1157).

2.3 Racial Disparities in Drug Court

Although the beneficial outcomes of drug court and the program practices that lead to them are well documented in the literature as reviewed in section 2.1 of this chapter, research indicates that these benefits are not equally accessible across racial groups. According to the NADCP publication *Painting the Current Picture* (Marlowe et al., 2016), which reports the results from a 2014 survey administered to state or territory level treatment coordinators, 40 US states or territories (75% of those surveyed) were able to provide statewide data on the race and ethnicity of people admitted to drug court, while 22 states and territories (41% of those surveyed) were able to provide data on successful completion by race and ethnicity. The results of an analysis of these compiled data included three groups who were represented in sufficient numbers within the data to generate results regarding disproportionality: people belonging to the White or Black racial groups, and people belonging to the Hispanic/Latinx ethnic group (Marlowe et al., 2016). These results indicated that White individuals were proportionally represented among drug court admissions (62%) given their representation among the general population (62%) and the population of those arrested for drug offenses (68%). However, White people were

overrepresented in drug court compared to their representation in the probation (54%), parole (43%), and incarcerated (jail: 47%; prison 32%) populations.

Black individuals were overrepresented in drug court (17%) compared to their representation within the general population (13%) but *under*represented in drug court when considering their representation among those arrested for drug offenses (30%). Black people were also underrepresented in drug court given their representation in the probation (30%), parole (39%), and incarcerated (jail 35%; prison 37%) populations (Marlowe et al., 2016). It is important to note that even though Black individuals were overrepresented among drug arrests, research indicates that the prevalence of drug use and distribution rates do not significantly differ between White and Black individuals (Koch et al., 2016; Mitchell, 2020; Stringer & Holland, 2016). Unfortunately, data were not available at the point of referral to drug court to see how that part of the process may have affected these results. Graduation rates also evinced disparities, with the graduation rate for Black participants at 39% compared to an overall graduation rate of 58% (Marlowe et al., 2016). Since the publication of *Painting the Current Picture*, some few studies have assessed racial equity in drug courts with mixed results. Of note, studies that found disparities did so by examining referral or admission rates, while the studies that did not find disparities were comparing the drug court population to the probation population.

Ho et al. (2018) studied disparities in treatment courts (including adult drug treatment courts, DUI courts, and reentry courts) by comparing the demographic composition (race and sex) of the treatment courts to the composition of the probation population in each jurisdiction. The authors also assessed differences in graduation rates among demographic groups, and what court practices were associated with reduced disparities among the groups. The data in this study was derived from 142 treatment courts (with 20,800 participants) who had undergone evaluation

between 2005 and 2016. 105 of these courts were adult drug courts, with more than 14,000 participants from those courts included in the study. Probation data came from records from the jurisdiction of each included treatment court and were from the same year the final evaluation report was written for each treatment court.

Ho et al., 2018 analyzed these data by comparing the percentages of Black and White participants in treatment court to those percentages in probation. They did the same with male and female participants and probationers. The authors found that Black individuals were fairly evenly represented in drug courts and the probation population, while White people were overrepresented in drug courts. They also found that men were underrepresented, and women were overrepresented in drug courts compared to the probation population. Key to this study is the assumption that differences in the probation population and the drug court population indicates a disparity (Ho et al., 2018). Ho et al. (2018) also calculated a “disparity index” to determine if there were differences in graduation rates based on race and sex. They reported a 36% graduation rate for Black participants and a 53% rate for White participants, and no disparities based on sex. The disparities for race persisted despite controlling for variables that influence graduation rates, like education, employment, prior arrests, age, and substances used (Ho et al., 2018).

Morgan et al. (2016) also compared the racial composition of treatment court participants to that of probationers. Their sample included 137 individuals sentenced to a treatment court (65 to reentry court, 49 to DWI court, and 23 to drug court). Another 137 individuals included in the study were sentenced to probation and comprised a control group of convenience selected by matching gender, offense, date, offense type, and placement date in probation or the treatment court. All data for the study came from the county’s probation database or the state Department

of Public Safety. Although the authors report that a chi-square analysis indicated that there were no differences in the racial composition of the drug court, they also note that all of the 23 drug court participants were White. Only two of the 23 probationers were Black, and the rest were White (Morgan et al., 2016).

Weinrath et al. (2018) conducted a study on access to drug treatment courts in Canada with a focus on equitable access for Indigenous offenders. The study assessed 288 referrals to the drug treatment court in Winnipeg, Manitoba. Data sources included aggregate provincial corrections data from a government report, local inmate admission data, and eight years of drug court data (2006 to 2014). The authors used *t* and chi-square tests to determine the significance of differences in the demographic composition of drug court admissions to provincial community and institutional corrections. They determined that gender, age, and Indigenous status did not influence drug court admission (Weinrath et al., 2018).

Yu and Dannerbeck (2020) conducted a statewide assessment of racial disparities and Risk-Need-Responsivity (RNR) factors in drug court admissions in Missouri that found racial disparities in drug court admissions. The data in their study came from Missouri's Judicial Information System, a statewide administrative dataset that included all individuals convicted of a felony and screened for drug court eligibility in Missouri from 2012 to 2015. The dataset also included information gathered from Risk and Needs Triage (RANT) screening, which included RNR factors. The study included 4,253 individuals, every White or Black person who completed the RANT as part of drug court eligibility screening from 2012 to 2015. Of these individuals, 3,159 were White and 1,094 were Black.

Yu and Dannerbeck (2020) used chi-square tests to examine the association between binary categorical variables, like race and admission, Mann-Whitney U tests for the analysis of

mean differences in continuous variables with a skewed distribution, and multiple logistic regression to assess the influence of RNR factors on admission. Admission (yes or no) was the dependent variable. Race, gender, age, and other RNR factors (ex. age of criminal onset, criminal history, DSM-5 diagnoses, and housing stability) were independent variables. These authors determined that White individuals referred to drug court were significantly more likely to be admitted than Black individuals (72% and 58%, respectively), even when controlling for RNR factors (Yu & Dannerbeck, 2020).

Although the focus of this paper is on adult drug courts, Bellas (2014) performed an assessment of disproportionate minority contact in Vermont's juvenile justice system in court and diversion referral decisions by assessing data from three of the state's 14 counties. The study compared legal outcomes for White juveniles ($N = 1,671$) and juveniles of color ($N=180$). Logistic regression models found that White teens arrested for drug offenses were 53.3% more likely to be referred to a juvenile drug court than teens of color arrested for drug offenses (Bellas, 2014).

Sheeran and Heideman (2021) conducted a study of referrals, admissions, and successful completion of the Milwaukee County Adult Drug Treatment Court (MCADTC). Their data came from the court's administrative database (of note for this study, the MCADTC has implemented the EIAT), and recidivism data came from court dockets. The study included admission as a dependent variable, and race, ethnicity, gender, age, risk level, prior criminal record, and current offense severity were included as independent variables. Logistic regression indicated that White individuals were 44% more likely to gain admission to the program than Black individuals (Sheeran & Heideman, 2021). A higher risk score and more prior charges also increased the likelihood of admission. Of particular relevance to the current study, Sheeran and Heideman (2021)

also analyzed the reasons individuals were denied admission to the program. and found that prior criminal record and current charge severity accounted for the primary reason Black individuals were not admitted.

Cheesman, Marlowe, and Genthon (2023) performed an analysis of data from the same EIAT pilot study used in this dissertation. The EIAT was developed by the National Center for State Courts (NCSC) in partnership with NADCP (Cheesman, Genthon, & Marlowe, 2019). The impetus for the development of the EIAT originated with a 2010 resolution by the NADCP Board of Directors directing drug courts to monitor for the existence of unfair disparities in their programs for members of underserved racial and ethnic groups and to take corrective measures to address those disparities where they were found (NADCP, 2013). Although the resolution focused on race and ethnicity, subsequent NADCP guidance evolved to include assigned sex at birth, gender identity, sexual orientation, and age as areas that should be monitored for disparities and subject to corrective actions if disparities are discovered (Cheesman, Genthon, & Marlowe, 2019; NADCP, 2013). The EIAT includes fields for all these demographic characteristics in line with this guidance.

Despite this resolution, little progress has been made by drug courts in monitoring for and addressing inequities in their programs (Marlowe et al., 2016). This is due mainly to the fact that many drug courts are unable to monitor for disparities because they do not have the ability to collect the necessary data or have access to the expertise to analyze the data they do collect (Marlowe et al., 2016). What evaluations of racial and ethnic differences do exist focus on differences in graduation rates rather than referral and admission (Devall & Lanier, 2012; Gallagher, 2013; Gallagher et al., 2019; Ho et al., 2018; Howard, 2016; McKean & Warren-Gordon, 2011; Sheeran & Heideman, 2021), and did not use methods that were easily replicable by

drug court staff (Cheesman, Genthon, & Marlowe, 2019). The EIAT was developed with the goal of assisting drug courts in ensuring that their programs are providing equivalent access to program participation and achieving equivalent retention in the program regardless of participants' race, ethnicity, assigned sex at birth, gender identity, and sexual orientation (Cheesman, Genthon, & Marlowe, 2019).

Cheesman et al. (2023) focused on state-level and site-level data and did not delve into the reasons for non-admission included in the EIAT. Cheesman et al. (2023) included aggregate data from all drug courts in two states, and individual-level data from eight drug court sites that took part in the EIAT pilot testing, although one state (and the three individual drug court sites within that state that also provided individual-level data) was unable to provide referral data. This study also included drug arrest data from the jurisdictions where each of the included drug courts was located and used those data to determine rates of referral per 1,000 drug arrests. The authors found that White individuals were nearly twice as likely to be referred to drug court than Black persons across all sites reporting referral data. In four of the drug courts that provided individual-level referral data, Black individuals were less likely to be referred to drug court than White individuals. In the remaining site, Black individuals were more likely to be referred than White individuals. White individuals were also generally more likely to be admitted to drug court once referred, and to complete drug court if admitted, though small numbers of Black individuals admitted may have affected the ability to reach statistical significance in some sites.

Using aggregate state-level data from two states, Cheesman et al. (2023) also assessed longitudinal trends in racial disparity. Although the authors hypothesized that racial differences in admission and graduation rates would lessen over time as drug courts became better prepared to address disparities through education, this did not hold true. In the southern state that provided

aggregate data, White individuals were more likely to be admitted to drug court in every year from 2006 to 2015. While completion rates did converge in more recent years in this state, this change was due to a decrease in completion rates for White participants rather than an increase in completion rates for Black participants (Cheesman et al., 2023).

In the midwestern state, Black individuals referred to drug court were more likely to be admitted than White individuals at the beginning of the time period (2010 and 2011). In 2012 and 2013, rates of admission were not significantly different between the racial groups, and from 2014 to 2016 admission rates for Black individuals were significantly lower than White individuals. In all years but 2012 (where there was no significant difference), completion rates were higher for White individuals than Black individuals (Cheesman et al., 2023). This dissertation is an extension of the findings from Cheesman et al. (2023), with a focus on the individual-level EIAT data and reasons for non-admission by race.

In summary, few extant studies were found that examined the equitable representation of Black individuals in adult drug treatment courts in the United States. This literature review has expanded that focus to include a study of equitable access for Indigenous people in a drug court in Canada (Weinrath et al., 2018) and equitable access for teenagers of color in Vermont's juvenile drug courts (Bell, 2014). Generally, these studies have had somewhat mixed findings. However, the two studies based in the United States that found no significant difference in access to drug court for Black and White individuals compared the racial composition of drug court to that of probation (Ho et al., 2018; Morgan, 2016). The studies that compared drug court referrals to the population, or to drug arrests (Cheesman et al., 2023) or that compared admission rates for Black individuals and White individuals (Bell, 2014; Sheeran & Heideman, 2021; Yu & Danerbeck, 2020) found cause for concern from an equity perspective.

2.4 Impact of and Possible Contributors to Racial Disparities

Equity concerns in access to drug court are an important issue because graduation from drug court has been linked to reduced future involvement in the criminal legal system (Cissner et al., 2013; Gottfredson et al., 2007; Rossman & Zweig, 2012) and therefore its associated negative effects, like incarceration and collateral consequences. The lower rates of admission and successful completion among Black individuals may be both influenced by and contribute to the cycle of disadvantage (Omori, 2019). The repercussions of cumulative disadvantage may bar Black defendants from drug court due to exclusionary criteria barring certain offenses or perceived suitability for the program (Carey et al., 2012; Cissner et al., 2013; Ho et al., 2018; Marlowe et al., 2008; NADCP, 2013; Rossman & Zweig, 2012; Saum et al., 2001; Saum & Hiller, 2008). Those repercussions may also increase the likelihood of Black participants being terminated from the program and therefore not receiving the benefits of successful completion, including reduced criminal offending and avoidance of collateral consequences (Bowers, 2008; Sheeran & Heideman, 2021).

Cumulative disadvantage plays a role in the referral and admission process in several ways. Research indicates that Black defendants are less likely to be diverted, or referred, to programs like drug court regardless of their charge severity (Nicosia et al., 2013; Omori, 2019). This problem is exacerbated by disparities at the charging stage, during which Black defendants are more likely to be charged with more severe offenses (Rehavi & Starr, 2014; Tsai Bishop et al., 2020). This creates a situation where Black defendants are doubly harmed by cumulative disadvantage in access to diversion - they are less likely to be diverted than people with charges of similar severity *and* more likely to receive more severe charges that may make them ineligible for diversion participation.

Although research on racial disparities in drug court primarily focuses on racial disparities occurring after participants are admitted to the program (Sheeran & Heideman, 2021), the existing literature on disparities in referral and admission suggest that criminal history, referral charge severity, and discretionary decisions about suitability play a role in reduced admission to drug court among Black defendants (NADCP, 2013; Omori, 2019; Sheeran & Heideman, 2021). These factors play a role in different stages of a drug court's eligibility determination process.

Drug courts assess eligibility in several ways, as described by the *Adult Drug Court Best Practice Standards: Volume I* (NADCP, 2013): clinical eligibility, suitability determinations, and legal eligibility. Clinical eligibility includes an assessment of a referred individual's risk and needs levels using a validated assessment tool. Drug courts that target high-risk/high-need offenders see a greater reduction in crime than drug courts serving low risk or low need participants (Cissner et al., 2013; Lowencamp et al., 2005; NADCP, 2013). They also achieve greater cost-savings compared to other interventions (Bhati et al., 2008; Carey et al., 2008; Downey & Roman, 2010; NADCP, 2013). A person is deemed "high risk" if they have an increased likelihood of reoffending or being unsuccessful in other, less intensive means of rehabilitation. A person is considered "high need" if they are found to be "addicted to or dependent on illicit drugs or alcohol" (NADCP, 2013, p. 6). Clinical eligibility determinations may also include an assessment of a referred individual's mental health diagnoses and physical health conditions, although these should not be used as exclusionary criteria unless the court does not have adequate resources to meet the individual's needs (NADCP, 2013). In terms of theory, cumulative disadvantage, as a factor that makes criminal history more severe and lessens the likelihood of a person being di-

verted to treatment for past offenses, should not impede clinical eligibility in drug courts that target high-risk and high-need individuals. Rather, cumulative disadvantage becomes an issue in considerations of legal eligibility and suitability.

Discretionary decisions regarding suitability for admission can also contribute to racial disparities in drug court admissions. It is important to note that the *Adult Drug Court Best Practice Standards: Volume I* (NADCP, 2013) discourages subjective determinations of suitability as a means of gauging eligibility, citing racial disparities as one reason for that guidance. However, these determinations persist (Sheeran & Heideman, 2021). In addition to determinations of suitability made by the drug court team, in some programs prosecutors may take on the role of “gatekeeper” for the program, wherein they have the final say on whether an individual is admitted to the program (Belenko et al., 2011; Marlowe, 2013). These determinations should only be based on objective, evidence-based criteria, and not the subjective impressions or beliefs of drug court staff or prosecutors. According to Marlowe, “Because they have the potential to systematically exclude eligible individuals from drug court for reasons that are empirically invalid, such practices should ordinarily be avoided” (Marlowe, 2012, p. 7).

Legal eligibility pertains to the referral offenses (the offense or offenses that resulted in the individual being referred to drug court) or criminal history offenses (past convictions) the drug court will accept (NADCP, 2013). Many drug courts do not allow participants with certain offenses (for example, violent or drug distribution offenses (Carey et al., 2012; Cissner et al., 2013; Ho et al., 2018; Marlowe et al., 2008; Rossman & Zweig, 2012; Saum et al., 2001; Saum & Hiller, 2008)). The *Adult Drug Court Best Practice Standards: Volume I* (NADCP, 2013) cautions that these exclusionary criteria are not supported by research. They may also be a contributing factor for racial disparities in admission to drug court (Marlowe, 2013).

One reason for the exclusion of individuals with a history of violent offenses from drug courts is the violent offender prohibition. (Prohibition of Participation by Violent Offenders, 2002). This prohibition disallows the use of federal funds to support programs that allow violent offenders. The statute defines a “violent offender” as,

. . . a person who

(1) is charged with or convicted of an offense, during the course of which offense of conduct –

(a) the person carried, possessed, or used a firearm or dangerous weapon;

(b) there occurred the death of or serious bodily injury to any person;
or

(c) there occurred the use of force against the person of another, without regard to whether any of the circumstance described in subparagraph (a) or (b) is an element of the offense or conduct of which or for which the person is charged or convicted; or

(2) has 1 or more prior convictions for a felony crime of violence involving the use or attempted use of force against a person with the intent to cause death or serious bodily harm. (Prohibition of Participation by Violent Offenders, 2002, 42 USC 3797u-2).

The influence of this prohibition is two-fold. First, the prohibition signals the federal guidance on who is appropriate for drug court participation. Second, there is a financial component involved. The federal government offers significant grant funding through the Drug Court

Discretionary Grant Program for state or locally administered drug courts. These grants cover research, development and enhancement, and training and technical assistance (Sacco, 2018). In 2022, the Bureau of Justice Assistance offered the following grants through the Drug Court Discretionary Grant Program: 11 awards of \$700,000 each for planning and implementation of a new drug court; 26 awards of \$750,000 each for enhancement of an operational drug court; and 2 awards of \$2,000,000 each for statewide improvement, enhancement, or expansion of drug court services (*BJA FY22 Adult Drug Court Discretionary Grant Program*, 2022). Other grant programs from the U.S. Department of Justice, the Office of National Drug Control Policy, and the Substance Abuse and Mental Health Administration can also be used to fund drug courts and are subject to the violent offender prohibition (Sacco, 2018).

A Congressional Research Service report notes that federal funds for veterans' treatment courts, which follow the drug court model but limit their participants to those with veteran status, are not subject to the violent offender prohibition (Sacco, 2018). The same report acknowledges research indicating that a criminal history including violent offenses does not impact outcomes for drug court participants (Sacco, 2018; Saum et al., 2001). It also notes that with high risk and high need offenders associated with larger cost savings and reductions in crime (Bhati et al., 2008; Carey et al., 2008; Cissner et al., 2013; Downey & Roman, 2010; Lowencamp et al., 2005; NADCP, 2013), because "more serious offenders are less likely than low-level or first-time offenders to abstain from crime . . . some argue that drug courts may be the best option for these individuals" (Sacco, 2018, p. 11).

The violent offender prohibition is part of the larger body of collateral consequences faced by people with violent offenses in their criminal histories. Employment restrictions, longer sentences of incarceration, and exclusions from potentially beneficial treatment programs like

drug court are all part of those consequences (O'Hear, 2020). In addition to the federal violent offender prohibition, as of 2019 ten states had statutes disallowing violent offenders from drug court programs (O'Hear, 2020). The offenses defined as "violent" differ from state to state. With these stakes, it is important to acknowledge the lack of clarity in the definition of what constitutes a violent offender. In fact, the broad nature of the federal and state definitions of "violent offender" result in some offenses being deemed violent although they do not fall under the umbrella of what most people would consider violent offenses. For example, several states define burglary, larceny, and some drug offenses as violent offenses (O'Hear, 2020).

Several studies have evaluated the outcomes for drug court participants with a history of violent offenses. Some of these studies indicate that people with violent offense histories had the same or improved outcomes when compared to those with no history of violent offenses (Carey et al., 2008; Saum et al., 2001; Saum & Hiller, 2008). Other studies found that drug courts that admitted people with a history of violent offenses saw slightly smaller overall effects (Mitchell et al., 2012; Shaffer, 2011). One proposed explanation for these mixed findings is that the drug courts that saw smaller effects when admitting participants with histories of violence were not providing the necessary services to meet the risk and needs level of these individuals (NADCP, 2013). The studies finding positive outcomes for individuals with a history of violent offenses note that the risk-needs responsivity principle provides context for these outcomes: High-risk and high-needs individuals benefit from the required treatment services and intensive supervision of drug court (Andrews et al., 2011; Marlowe et al., 2006). In other words, rather than offense type, the focus should be on risk level when determining whether violent offenders are appropriate for drug court.

Drug distribution charges or a history of this offense are also often deemed exclusionary (Cissner et al., 2013; Marlowe et al., 2008; NADCP, 2013). What little research exists on this topic suggests that individuals with a drug distribution offense in their criminal history or as a current charge have similar (Marlowe et al., 2008) or improved (Cissner et al., 2013) outcomes compared to those without the offenses. The *Adult Drug Court Best Practices Standards* (NADCP, 2013) suggest that the key consideration when considering individuals with a drug distribution charge or history is whether they were solely selling for financial reasons, or to support their own ability to use substances. In other words, the consideration of offenders with drug distribution offenses should be based on an assessment of need, not on the type of offense.

The discussion of eligibility exclusions for individuals charged with or with a history of violent and drug distribution offenses is key in any assessment of racial disparities in drug court admission. As Tonry and Melewski, (2008) write,

Black Americans suffer from imprisonment rates six to seven times higher than those of whites primarily for two reasons. Police arrest policies for drugs target a type of drug trafficking (street level transactions in inner-city areas) in which blacks are disproportionately involved. American sentencing laws and policies specify punishments that are both absolutely and relatively severe for violent, drug, and gun crimes for which blacks are more likely than whites to be arrested and prosecuted (pp. 30-31).

Studies suggest that despite the documented efficacy of drug courts in providing supervision, connecting participants to treatment, and thereby effecting behavioral changes that lead to reductions in recidivism, there are racial disparities in who is given the opportunity to take part in drug court (Cheesman et al., 2023; Ho et al., 2018; Marlowe et al., 2016; Sheeran & Heide-

man, 2021). If the above quote from Tonry and Melewski (2008) and the findings of the cumulative disadvantage literature hold true, and Black defendants are often charged with more severe offenses than White defendants accused of similar crimes, then those differences in severity may contribute to the possible underrepresentation of Black defendants in drug courts. The hypotheses and research design proposed in the following chapter seeks to determine whether these findings hold true in an analysis of data from multiple jurisdictions to further explore the stated reasons for excluding Black defendants from drug court participation.

Chapter 3: Research Design and Methods

3.1 Purpose Statement

The purpose of this study is to examine racial differences in admission to drug court programs and the reasons why these differences occur. Although prior research indicates that Black participants are not admitted to, and do not successfully complete, drug court at the same rates as their White counterparts (Cheesman et al., 2023; Marlowe et al., 2016), this author was only able to locate one currently published study that examined the reasons individuals are denied admission to drug court by racial group (i.e., Sheeran and Heideman, 2021). This study seeks to expand the literature on the reasons for racial differences in admission to drug court by using data gathered from pilot testing of the Equity and Inclusion Assessment Tool (EIAT) to examine between-race differences at multiple drug courts. Appendix A provides a table of variables and values included in the EIAT.

3.2 Research Questions

This study contains three research questions. The first examines admission to drug court by race, and the second two questions examine reasons for denied admission by race.

Research Question 1: Are Black participants underrepresented in drug court admissions when compared to their White counterparts?

Research Question 2: Are Black individuals referred to drug court more likely to be denied admission due to offense history or current offense type than White referrals?

Research Question 3: Are Black individuals referred to drug court more likely to be denied admission due to a discretionary decision by the drug court team or gatekeeper than White referrals?

3.3 Hypotheses

H1: Black individuals referred to drug court will be less likely than their White counterparts to gain admission to the program.

H2: Black individuals will be more likely to be denied entry to drug court than their White counterparts due to offense-related denials.

H3: Black individuals will be more likely to be denied entry to drug court than their White counterparts due to team or gatekeeper discretion.

The analyses included in this study will also examine the association of sex and age with drug court admission and reasons for non-admission to provide a more complete picture of the relationship of the available demographic characteristics from the EIAT on drug court admission.

3.4 Design

This study follows an observational design. The data used in the analyses come from six drug courts that participated in the pilot testing of the EIAT. The years represented in the data range from 2005 to 2019, and the amount and timeframe of the data reported varied by the court (as reported in Table 1), with one court reporting ten years' worth of data, and another reporting three months'. The data will be pooled into one time period and analyzed using cross-sectional analyses. The data will also be pooled from all court sites, and the analyses of differences in admission will be conducted at the court level and using the pooled data. Analyses of the reasons for denial of admission will only be conducted on the pooled data, due to the small number of cases at the court level per reason. Analyses will be conducted at the referral level, using referral level and site level co-variates.

The level of analysis is the referral to drug court, by individual. This means that each referral to drug court is captured in the data, and multiple referrals may apply to the same individual if that person was referred to the court multiple times during the study period. However, it is very unlikely that an individual would be referred and then not admitted for the same reason multiple times. Rather, any repeat individuals were likely denied program entry due to different reasons each time referred. For example, an individual may be referred to drug court, but not admitted because the program was at capacity and could not allow any more participants. When arrested for a new offense, that same individual could be referred to drug court again and deemed ineligible due to a lack of a substance use disorder diagnosis. Individuals may also be admitted to drug court, be unsuccessfully discharged from the program, and then referred to the program again upon a subsequent arrest. Or, an individual referred to drug court may decline to participate in the program upon their first referral, but be admitted to the program when referred after another offense. These recurring referrals are most likely to be present in the courts that provided multiple years of data.

All of the courts assigned identification numbers to their EIAT data. However, it is unclear if those numbers were assigned to each unique referral, or to each individual, who may be referred more than once. The court that provided the most data, in timeframe and in cases, was also the only one where multiple entries of the same identifier made it clear that some individuals were referred multiple times. Their data show that out of the 861 individuals referred to the court between January 2005 and October 2018, 48 individuals (5.57%) were referred more than once. Of these 48 repeat referrals, one person was referred three times, and one referred four times. The remaining 46 were each referred twice. Twenty-five of these 48 (52.08%) were admitted to

the drug court as a result of at least one of their referrals, and of these, two individuals were admitted for both their referrals.

3.5 Instrument and Data

The EIAT is Excel-based and does not require any additional software to use (Cheesman, Genthon, & Marlowe, 2019). It provides a means for drug courts without access to a case management system, or without the ability to customize their existing case management system to meet their needs, to record the demographic and program data of their referrals and participants (Cheesman, Genthon, & Marlowe, 2019). The tool provides a comparison of the demographic makeup of the drug court jurisdiction's general population, to drug arrests in that jurisdiction, to the drug court's referrals, to drug court's admissions, and finally, to successful completions from the drug court. It also uses the data entered to calculate transition probabilities, or the probability that an individual will progress from one stage to the next based on the demographic group in question (Cheesman, Genthon, & Marlowe, 2019). The EIAT creates accessible reports that allow drug court programs to assess the equitability of their program admissions and successful graduations across demographic categories (Cheesman, Genthon, & Marlowe, 2019). The data used in this study comes from pilot testing of the EIAT before the tool was made publicly available through the NADCP's National Drug Court Institute website (NDCI, *n.d.*). These data are not publicly available.

3.6 Sample Selection and Sample

Purposeful sampling was used to select the sites involved in the original pilot study. Many drug courts do not collect data on individuals referred to their programs. In order to maximize the results of the pilot study, the EIAT's developers chose to request data from courts that

had already been identified as a) collecting demographic data on referrals to their court or b) individual courts in states with aggregate demographic data for referrals *or* admissions in all drug courts statewide that would allow for high-level statewide analyses as well as detailed court-level analyses.

In 2019, 10 drug courts provided data for EIAT pilot testing. However, three of these courts were located in a single state that does not record referral data, although the courts in that state do record data on admissions and completions. The three sites from this state were excluded from these analyses, which focuses on the reasons referrals were not admitted to drug court. This resulted in a sample of seven courts that were able to provide information on referrals. Of these, one rural drug court had only White referrals during the study period and was therefore excluded from the study. This resulted in a final sample of six courts included in the pooled and court-specific analyses.

When requesting pilot testing data, the EIAT's authors asked for the courts to fill out an EIAT sheet with individual-level data for all referrals during a time period of their choosing, as long as it provided sufficient data to fill up at least one EIAT workbook (100 rows at the time of pilot testing). The responses to the pilot testing request included a range of timeframes. One court filled out multiple EIAT workbooks with more than 10 years 'worth of program referrals. Two only provided three months of referral data. The other courts fell somewhere in between these two extremes. The EIAT's developers selected sites that would provide a range of urbanicity, purposefully selecting sites from rural, suburban, and urban areas. Table 1 details the timeframes, geographic location, and urbanicity of the pilot testing sites, and the number of referrals and admissions reported for Black and White individuals for each jurisdiction.

Table 1. Number of Referrals and Admissions by Race and Drug Court (N=6) ¹

State Geographic Location	Drug Court Urbanicity	Time Frame	White Referrals	Black Referrals	White Admissions	Black Admissions
Southern	Urban	July 2015- December 2015	83	14	44	2
Northern Central (1)	Urban	January 2016 – December 2017	189	126	86	43
Northeastern	Urban	November 2016 – January 2017	41	54	10	10
Southern	Suburban	July 2015 – June 2016	93	5	50	3
Northern Central (1)	Rural	January 2015 – April 2019	77	17	57	4
Northern Central (2)	Rural	January 2005 – October 2018	723	44	222	8

The analyses include six sites in four states: two drug courts in the same Southern state, two drug courts in the first Northern Central state, and one in the second Northern Central state, and one drug court in a Northeastern state.

3.7 Variables

The primary independent variable is race, and all referrals are either “White or Caucasian” or “Black or African American” (0=White or Caucasian, 1=Black or African American). It

¹ Two states were in the “Northern Central” geographic area. They are distinguished by a (1) or (2)

is not known if race information was reported by the individual or coded by another person.

While there were a small number of referrals who did not fall into the “White” or “Black” racial categories, these groups are too small for a meaningful analysis and have been removed from the data to be used for the analysis.² Ethnicity data were not sufficiently reliable to include in the analyses, and the manner of recording these data resulted in additional exclusions from the data. These data were frequently conflated with race, meaning that some courts recorded race *or* Hispanic/Latinx ethnicity, but not both. Cases where race was not recorded were excluded from the analysis. These included 126 people of Hispanic/Latinx ethnicity, but no recorded race, and 7 people who were not of Hispanic/Latinx ethnicity and had no recorded race. Additional independent variables will include sex (0 = male, 1 = female) and age. These additional variables are included to provide a more nuanced view of the influence of multiple demographic characteristics on drug court admission in lieu of a regression analysis.

Sites are named using their regional location and degree of urbanicity and identified by a series of dichotomized variables that are coded 0 if the site is not located in the location identified by the variable name and 1 if it is (for example, in the variable named “SouthSuburb” 0 = not the southern suburban drug court, 1 = the southern suburban drug court).

The dependent variables include admission to drug court (0 = not admitted, 1 = admitted) and the reasons the referred individual was denied admission, if applicable. These variables were created by combining multiple response options from the “Primary Reason for Non-Admission” EIAT field into separate binary variables. The binary variable categories were initially based on the larger variables categories described in the Equity and Inclusion Assessment Tool User

² These entries comprised two American Indian or Alaska Native individuals, ten Asian or Pacific Islander individuals, and two individuals of unspecified multiple races.

Guide (NCSC, 2020), and were further refined after evaluation of the open text descriptions accompanying a response of “Other (please specify)”.

The author created several binary variables that reflected different types of denial of admission, including clinical denial, offense-related denial, legal denial, participant declined, and team/gatekeeper discretion. All were coded such that 1 reflects denial for that specific reason, and 0 all other denials.

Clinical denial indicates the individual’s risk or needs level is not appropriate for drug court, or that another court-based treatment program (e.g., mental health court, another treatment court, or a non-custodial rehabilitative program) was deemed more appropriate for their needs. Offense-related denial indicates the individual was denied admission to drug court due to the type or severity of the offense for which they were referred to drug court, or for an offense in their criminal history.

Legal denial indicates the individual cannot take part in drug court due to legal issues that make them unsuited for drug court, including having the charges against them dropped or pleading not guilty, outstanding warrants in other jurisdictions, residency outside the court’s geographic jurisdiction, or previous participation in the drug court or another diversion program.

Participant declined indicates the participant either states that they do not want to participate, cannot participate due to resources issues, or does not follow through with participation (for example, does not appear for the intake interview).

Team or gatekeeper discretion is a new variable created for this study that only includes “other” text responses to the “Primary Reason for Non-Admission” field in the EIAT. This is an important factor to note for this variable. This variable alone was not based on any of the prede-

terminated options included in the EIAT's dropdown menu for "Primary Reason for Non-Admission." Team or gatekeeper discretion was not an option in the EIAT because discretionary decisions with no underlying identified reason are discouraged since they do not rely on objective criteria to determine drug court eligibility and may be based on suitability determinations (Marlowe, 2012). However, every drug court that provided data in the EIAT pilot testing study indicated in "other" text that some participants were denied admission due to a decision made by the drug court team, judge, or a prosecutor without providing the underlying reason for that decision. Those "other" responses were used to create this variable. Examples of these "other" responses include: "DA determination"; "Not approved by team"; "DA objects to circumstances of case"; "Judge's decision"; "Team decision".

Appendix B contains a table with the EIAT reasons for non-admission values mapped to the categories used in this analysis.

3.8 Analysis

To set the stage for the subsequent analyses, arrest data from Cheesman et al. (2023, p. 87) was used in conjunction with EIAT data to develop a figure showing the racial composition of the combined arrest data for the sites at arrest and the pooled sample at referral and admission. The succeeding analyses include descriptive statistics for the race, sex, and age variables for the pooled sample, accompanied by bivariate statistical tests to identify any differences in likelihood of admission associated with any of these characteristics. Chi-square tests were conducted to identify any association between sex and admission likelihood, and between race and admission likelihood, since both analyses use two categorical variables (Meier et al., 2012). The analysis of age and likelihood of admission to drug court uses an independent t-test since age is a continuous variable, and admission a categorical one (Meier et al., 2012). Those same descriptive analyses

and tests were applied to the disaggregated data for each site and the pooled data from all included sites to investigate possible differences in drug court admission associated with race, sex, or age overall and at the site-level. Next, chi-square tests were conducted using race and recorded reason for drug court admission to investigate bivariate associations between these variables. Finally, chi-square tests were performed on the disaggregated offense-related reasons for non-admission to determine if any difference existed there.

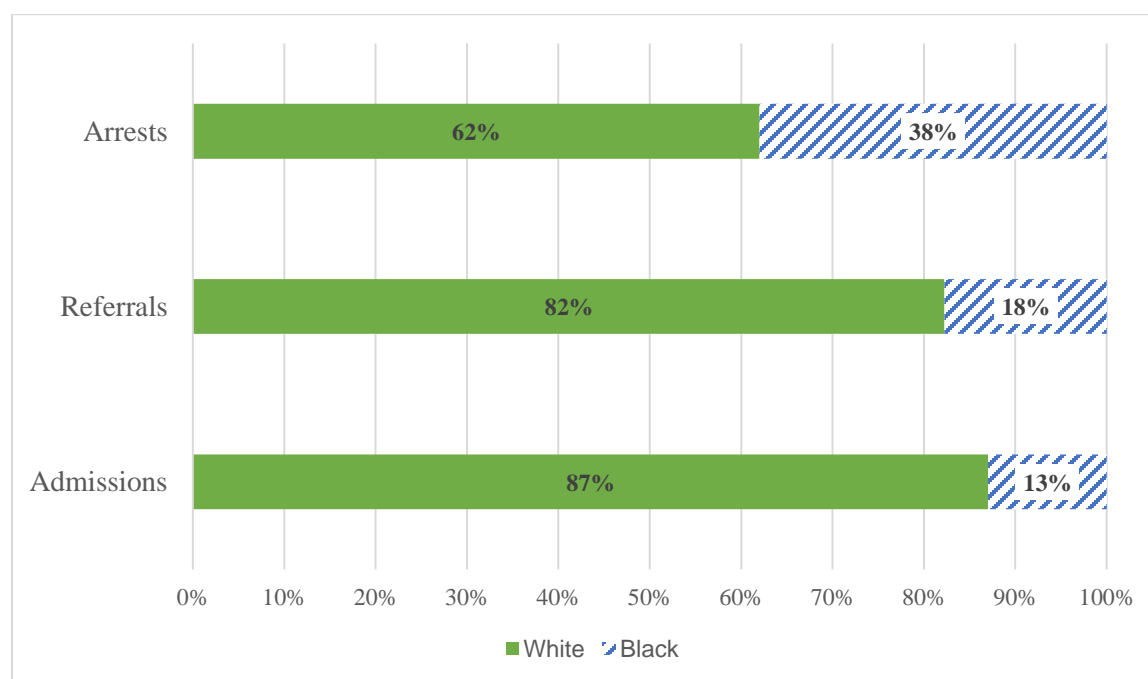
Chapter 4: Results

4.1 Representation at Arrest, Referral, and Admission

Figure 1 provides some of the broader context in which it is important to understand this study's findings. Using the arrest data from Cheesman et al. (2023, p. 87) for drug arrests, and EIAT data for referrals and admissions for the jurisdictions included in this study, Figure 1 displays the rates of arrest, referral, and admission for White and Black individuals in the drug court sites included in this study. The representation of White individuals increases at each successive phase, as the representation of Black individuals decreases.

Although this study focuses on drug court admissions, following the tenets of cumulative disadvantage theory, it is important to acknowledge that single points in the criminal legal system do not exist in a vacuum. Therefore, this figure includes arrest and referral as well as admission to display how earlier points in the process may also contribute to racial disparities in drug court.

Figure 1: Rates by Race at Arrest, Referral, and Admission



4.2 Likelihood of Admission by Demographic Characteristic

The majority of the participants referred to drug court in the pooled sample ($N=1466$) were White (82.3%) and male (73.7%), with an average age of 34 and a range of 18 to 69 years of age. Drug court admissions were similarly mostly White (87.0%) and male (65.68%), with an average age of 34 and a range of 18 to 67 years of age.

Table 2 provides descriptive statistics on Black and White individuals referred to drug court and their admission status. Race was significantly associated with admission to drug court in the pooled sample at an α level of .001, with White individuals referred to drug court disproportionately represented among those admitted, $X^2(1, N= 1466) = 13.17, p < .001$, accounting for 82.26% of those referred, and 87.00% of those admitted. Table 2 also includes the results of a chi-square test for each included site and for the pooled sample. The Southern Suburban site had an expected count of less than 5, and do not have X^2 or p reported, although their data was included in the pooled sample, so they are included in the descriptive section of the table. In three out of the five sites with individual results included in the table, race was significantly associated with admission to drug court, with White referrals represented in greater than expected numbers among those admitted to drug court.

In the Southern Urban site, race was significantly associated with admission at an α level of .01, with White individuals more likely than Black individuals to be admitted to drug court, $X^2(1, N= 97) = 7.21, p = .007$. Although Black individuals accounted for 14.43% of the total referrals to that court, they were only 4.35% of those admitted. Conversely, White individuals accounted for 85.57% of those referred and 95.65% of those admitted.

This pattern continued in the Northern Central (1) Urban drug court, significant at an α of .05. Black individuals were less likely than White individuals to be admitted to the drug court, $X^2(1, N= 315) = 4.05, p = .044$. Black individuals accounted for 40.00% of the total referrals to that court, but 33.33% of those admitted. White individuals accounted for 60.00% of those referred and 66.67% of those admitted.

Race was also associated with admission in the Northern Central (1) Rural court at $\alpha=.001, X^2(1, N= 94) = 15.59, p < .001$. There, Black individuals were, again, less likely than White individuals to be admitted to the drug court. Black individuals accounted for 18.09% of those referred to drug court, and 6.56% of those admitted. White individuals accounted for 81.91% of referrals and 93.44% of admissions.

In the Northeastern Urban court, there was no significant difference at in admissions by race at $\alpha=.05, X^2(1, N= 95) = .48, p =.487$, with Black individuals accounting for 56.84% of referrals and 50.00% of admissions, and White individuals accounting for 43.16% of referrals and 50.00% of admissions.

There was also no significant difference in admissions by race in the Northern Central (2) Rural court $\alpha=.05, X^2(1, N= 767) = 3.10, p =.078$. There, Black individuals accounted for 5.74% of those referred 3.48% of those admitted, while White individuals accounted for 94.26% of those referred and 96.52% of those admitted.

Table 2. Admission to Drug Court by Race (N=1466)

	Not Admitted		Admitted		X^2	p	Total Referrals	
	N	%	N	%			N	%
Southern Urban	51	100.00	46	100.00	7.21	.007	97	100.00
Black	12	23.53	2	4.35			14	14.43
White	39	76.47	44	95.65			83	85.57
Northern Central (1) Urban	186	100.00	129	100.00	4.05	.044	315	100.00
Black	83	44.62	43	33.33			126	40.00
White	103	55.38	86	66.67			189	60.00
Northeastern Urban	75	100.00	20	100.00	.48	.487	95	100.00
Black	44	58.67	10	50.00			54	56.84
White	31	41.34	10	50.00			41	43.16
Southern Suburban	45	100.00	53	100.00	N/A	N/A	98	100.00
Black	2	4.44	3	5.66			5	5.10
White	43	95.56	50	94.34			93	94.90
Northern Central (1) Rural	33	100.00	61	100.00	15.59	<.001	94	100.00
Black	13	39.39	4	6.56			17	18.09
White	20	60.61	57	93.44			77	81.91
Northern Central (2) Rural	537	100.00	230	100.00	3.10	.078	767	100.00
Black	36	6.70	8	3.48			44	5.74
White	501	93.30	222	96.52			723	94.26
Pooled Sample	927	100.00	539	100.00	13.17	<.001	1466	100.00
Black	190	20.50	70	13.00			260	17.74
White	737	79.50	469	87.00			1206	82.26

Table 3 provides a similar overview of the descriptive statistics and chi-square tests for the association of sex and admission to drug court. The Northeastern Urban site had an expected count of less than 5, and do not have X^2 or p reported, although their data was included in the pooled sample, and they are included in the descriptive section of the table. In three out of the five sites with individual results included in the table, sex was significantly associated with admission to drug court with female referrals represented in greater than expected numbers among those admitted to drug court. In the pooled sample, female referrals accounted for 26.33% of those referred to drug court, but 34.32% of those admitted, $X^2(1, N= 1466) = 28.07, p < .001$.

In the Southern Urban site, there was no significant difference at in admissions by sex at $\alpha=.05$, $X^2(1, N= 97) = 2.74, p = .098$, with women accounting for 32.99% of referrals and 41.30% of admissions, and men accounting for 67.01% of referrals and 58.70% of admissions.

There was no significant difference at $\alpha=.05$, $X^2(1, N= 315) = 1.08, p = .299$, in the Northern Central (1) Urban drug court either. In this court, women were 24.13% of those referred and 27.13% of those admitted, while men were 75.87% of those referred and 78.00% of those admitted.

In the Southern Suburban court, the differences among men and women in admission were significant at an α of .05, $X^2(1, N= 98) = 4.69, p = .030$. Men were less likely than women to be admitted to the drug court. Women accounted for 42.86% of the total referrals to that court, and 52.83% of those admitted. Men accounted for 57.14% of those referred and 47.17% of those admitted.

In the Northern Central (1) Rural drug court, sex was significantly associated with admission at an α level of .05, $X^2(1, N= 94) = 4.20, p = .041$, with women again more likely than men to be admitted to drug court. Although men accounted for 75.53% of the total referrals to that

court, they were only 68.85% of those admitted. Conversely, women accounted for 24.47% of those referred and 31.15% of those admitted.

Sex was also associated with admission in the Northern Central (2) Rural court at $\alpha=.001$, $X^2(1, N= 767) = 16.59, p < .001$. There, men were, again, less likely than women to be admitted to the drug court. Men accounted for 73.79% of those referred to drug court, and 63.91% of those admitted. Women accounted for 26.21% of referrals and 36.09% of admissions.

Table 3. Admission to Drug Court by Sex (N=1466)

	Not Admitted		Admitted		X^2	p	Total Referrals	
	N	%	N	%			N	%
Southern Urban	51	100.00	46	100.00	2.74	.098	97	100.00
Female	13	25.49	19	41.30			32	32.99
Male	38	74.51	27	58.70			65	67.01
Northern Central (1) Urban	186	100.00	129	100.00	1.08	.299	315	100.00
Female	41	22.04	35	27.13			76	24.13
Male	145	77.96	94	78.00			239	75.87
Northeastern Urban	75	100.00	20	100.00	N/A	N/A	95	100.00
Female	11	14.67	1	5.00			12	12.63
Male	64	85.33	19	95.00			83	87.37
Southern Suburban	45	100.00	53	100.00	4.69	.030	98	100.00
Female	14	31.11	28	52.83			42	42.86
Male	31	68.89	25	47.17			56	57.14
Northern Central (1) Rural	33	100.00	61	100.00	4.20	.041	94	100.00
Female	4	12.12	19	31.15			23	24.47
Male	29	87.88	42	68.85			71	75.53
Northern Central (2) Rural	537	100.00	230	100.00	16.59	<.001	767	100.00
Female	118	21.97	83	36.09			201	26.21
Male	419	78.03	147	63.91			566	73.79
Pooled Sample	927	100.00	539	100.00	28.07	<.001	1466	100.00
Female	201	21.68	185	34.32			386	26.33
Male	726	78.32	354	65.68			1080	73.67

Of the demographic characteristics included in this study, age had the least association with drug court admission. As shown in Table 4, a series of two-tailed t-tests indicate that age was significantly and positively correlated with admission in only the Southern Suburban drug court at an α level of .05, $t(44)=2.35$, $p = .021$. Age was not significantly correlated with admission in the pooled sample.

Table 4. Descriptive Statistics and Independent T-Test for Age by Admission Status (N=1462)

	Not Admitted (N = 538)			Admitted (N = 924)			<i>t</i>	<i>p</i>	Total Referrals	
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>			<i>M</i>	<i>SD</i>
Northern Central Urban (N = 315)	186	33.88	10.47	129	32.09	9.53	1.55	.123	33.15	10.12
Northern Central Rural (1) (N = 94)	33	32.64	10.07	61	32.02	8.16	.32	.747	32.23	8.83
Southern Urban (N = 97)	51	33.24	9.51	46	32.15	8.13	.60	.550	32.72	8.85
Northeastern Urban (N = 95)	75	34.39	11.17	20	38.25	14.64	-1.28	.203	35.20	12.00
Southern Suburban (N = 98)	45	34.22	9.80	53	29.94	8.23	2.35	.021	31.91	9.19
Northern Central Rural (2) (N = 763)	534	34.28	11.50	229	35.59	11.1	-1.46	.144	34.67	11.38
Pooled Sample (N=1462)	538	33.60	10.29	924	34.09	11.02	.85	.055	33.91	10.76

4.3 Reasons for Non-admission by Race

Table 5 presents the descriptive statistics and chi-square results for race and reasons for non-admission. The chi-square tests presented include all 190 Black individual and 737 White individuals who were not admitted to drug court. However, chi-square analyses were not performed for two of the reasons for non-admission found in the data. First, twenty-six individuals who were not admitted to the program because the program was at capacity were not included in a separate chi-square test. These individuals comprised twenty-four White individuals and 1 Black individual from the Northern Central Rural (2) drug court, and 1 White individual from the Southern Suburban drug court. Second, 8 additional White individuals from the Northern Central Rural (2) were not included in a separate chi-square test because they were not admitted due to an unknown reason related to administrative ineligibility according to the text response provided by the court.

Three reasons for non-admission were significantly associated with race at an α level of .05: team or gatekeeper discretion, $X^2(1, N= 927) = 23.20, p < .001$; legal reasons, $X^2(1, N= 927) = 3.97, p = .046$, and the participant declining to participate in the program, $X^2(1, N= 927) = 8.63, p = .003$. Black individuals were more likely to be denied admission to drug court due to team or gatekeeper discretion (significant at $\alpha = .001$), with 21.05% of Black individuals denied entry for this reason, compared to 8.68% of White individuals. White individuals were significantly (at $\alpha = .05$) more likely to be denied drug court admission for legal reasons (16.96% of White individuals, compared to 11.05% of Black individuals). White individuals were also significantly (at $\alpha = .01$) more likely to decline to participate in the program, with this reason accounting for 26.59% of White individuals who did not enter drug court, compared to 16.32% of Black individuals.

Table 5. Race and Reasons for Non-admission (N=927)

	Black (N=190; 20.50%)		White (N=737; 79.50%)		X ²	p	Total Referrals	
	N	%	N	%			N	%
Offense-Related								
Yes	57	30.00	186	25.24	1.77	.183	243	26.21
No	133	70.00	551	74.76			684	73.79
Team or Gatekeeper Discretion								
Yes	40	21.05	64	8.68	23.20	<.001	104	11.22
No	150	78.95	673	91.32			823	88.78
Clinical								
Yes	40	21.05	133	18.05	.90	.343	173	18.66
No	150	78.95	604	81.95			754	81.34
Legal								
Yes	21	11.05	125	16.96	3.97	.046	146	15.75
No	169	88.95	612	83.04			781	84.25
Participant Declined								
Yes	31	16.32	196	26.59	8.63	.003	227	24.49
No	159	83.68	541	73.41			700	75.51

Although there was no significant difference in denial of admission for offense-related reasons between Black and White participants, $X^2(1, N= 927) = 1.77, p = .183$, the data allowed for a more nuanced analysis of those data. Table 6 displays these reasons and assesses for any differences between the racial groups and these reasons for denial. The reasons include: offense

history, meaning that the person was denied admission because of their past offenses, not including violent or drug trafficking offenses; current offense, meaning that the offense that resulted in their referral to drug court was the reasons they were deemed ineligible; history of violent offense, meaning that they were denied entry specifically because of a violent offense history; and history of drug trafficking/distribution, meaning that a history of this type of offense precluded their admission to drug court. Of these disaggregated offense-related reasons for denial of admission, only a history of drug trafficking/distribution was significant, $X^2(1, N= 927) = 5.29, p = .021$, with Black individuals more likely to be denied admission for this reason.

Table 6. Disaggregated Reasons for Offense-Related Denials (N = 927)

	Black (N = 190, 20.5%)		White (N = 737, 79.5%)		X^2	p	Total
	N	%	N	%			
Offense History							
Yes	37	19.47	128	17.37	.458	.499	165
No	153	80.53	609	82.63			762
Current Offense							
Yes	20	10.53	58	7.87	1.38	.240	78
No	170	89.47	679	92.13			849
History of violent offense							
Yes	21	11.05	83	11.26	.007	.935	104
No	169	88.95	654	88.74			823
History of drug trafficking/distribution							
Yes	12	6.32	21	2.85	5.29	.021	33
No	178	93.68	716	97.15			894

Chapter 5: Discussion and Conclusion

5.1 Summary of Findings

This study proposed three hypotheses regarding the association of race and admission to drug court. First, that Black individuals referred to drug court would be less likely than their White counterparts to gain admission to the program. Second, that Black individuals would be more likely to be denied entry to drug court than their White counterparts due to offense-related denials. Third, that Black individuals would be more likely to be denied entry to drug court than their White counterparts due to team or gatekeeper discretion. The first hypothesis was supplemented by additional analyses of sex and age, the only other usable demographic characteristics in the EIAT, to provide a more nuanced picture of the association of these characteristics with admission likelihood. This section will review the findings related to each of these hypotheses in the context of the existing literature.

5.1.1 Race, Sex, and Age and Admission to Drug Court

Race was significantly associated with likelihood of admission to drug court for the pooled EIAT data and three of the five courts with high enough expected counts to perform chi-square tests. Specifically, White individuals referred to the programs were significantly more likely to gain admission than Black individuals in the pooled sample and all three courts. These findings are consistent with the existing literature on race and drug court admission (Bellas, 2014; Marlowe et al., 2016; Sheeran & Heideman, 2012; Yu & Dannerbeck, 2020), including a previous study using aggregate statewide EIAT pilot testing data (Cheeseman et al., 2023).

Sex was also significantly associated with likelihood of admission, with females more likely to be admitted than males, even though the majority of referrals and admissions to drug court were male. That is to say, it appears that even though females make up a smaller proportion

of the referrals to drug court than males (26.3% and 73.7% respectively), when they are referred they are more likely to be admitted than males. Other studies of demographic representation in drug courts found a similar result (Ho et al., 2018; Yu & Dannerbeck, 2020). The Federal Bureau of Investigation (FBI) (2019b) reports that in 2019, the most recent year for which they have published these data, women accounted for 25.4% of drug abuse violations, which may explain their lower representation among drug court referrals. Age was not significantly associated with likelihood of admission to drug court in the pooled sample, and in all but one of the drug court sites.

Although Black persons and female persons make up the smaller portion of their respective demographic categories, it is important to note that Black people are underrepresented in comparison to their representation among the arrest population, while women are not (FBI, 2019b). This, and the general lack of association between age and admission to drug court, suggest that of the demographic characteristics included in this study, race is the key area where a policy response is needed to address inequity.

However, the overrepresentation of women among the drug court population raises questions about the cause. It is possible that men are more likely to be denied admission to drug court because they are more likely to have a history of violent offenses since men are overrepresented among arrests for violent offenses (FBI, 2019b). Another possible explanation lies in chivalry theory, where because women are generally viewed as less dangerous, the women who *are* arrested for drug offenses may tend to engage in riskier substance use-driven behavior (Lal et al., 2015) and have more severe criminal behavioral histories than the men (Herzog & Oreg, 2008). If this is true, these women may be more likely to meet risk and need eligibility criteria than their

male counterparts. Another possibility lies in a form of “cherry-picking” in drug court admissions. Women may be perceived as more likely to successfully complete the program and are therefore admitted to help increase or maintain graduation rates. These possibilities call for further investigation.

Notably, although race and sex were significantly associated with likelihood of admission in the pooled sample and three sites each, they were not significantly associated in two of the individual sites. This pattern emphasizes the importance of site-specific factors in these findings. Drug courts vary widely on many factors, including their policies, team composition, participant capacity, eligibility criteria, and length of time the program has been in operation. The courts are also located in diverse areas, from a southern rural town to a large, diverse northeastern city. Any of these factors may play a role in the existence or lack of racial disparities in each court. Future research with additional participating courts and the collection of data regarding court- and locality-specific features can help to identify the effect of these factors on racial disparities in access.

5.1.2 Reasons for Non-Admission

While there are a small number of studies assessing the representation of racial groups in drug court, the author was unable to locate any other studies that assess the reasons for disparities across multiple sites, and only one study assessing these reasons at a single site (Sheeran & Heideman, 2021). The current study’s most important contribution to the body of literature is, therefore, the ability to look at reasons for non-admission by race across six drug court sites.

This study found that, contrary to the second hypothesis, Black individuals were not more likely to be denied admission due to an offense-related reason. This finding is inconsistent with Sheeran and Heideman (2021), who found that prior criminal record and current offense were the primary reasons Black individuals were not admitted to the site in their study. This finding also

means that the offense type-related aspect of the cumulative disadvantage literature is generally not supported in the case of drug court admissions in these six courts. However, Black individuals were more likely to be denied entry to drug court due to one sub-type of offense-related offenses: a history of drug trafficking or distribution offenses.

According to the theory of cumulative disadvantage, the finding that Black individuals were more likely to be denied admission to drug court due to a history of drug trafficking or distribution offenses may be explained by differences in policing and charging practices for drug offenses. Increased surveillance may increase the likelihood of a Black person having drug-related activity detected by the police (Beckett et al., 2006; Fagan et al., 2016). This disparity is furthered by inequitable charging and plea-bargaining practices, wherein Black defendants are charged with more severe offenses and are not given the opportunity to plead those charges down to the same extent as their White counterparts (Metcalf & Chiricos, 2018; Sutton, 2013).

It is also important to note that research indicates that individuals with a current or past drug distribution or trafficking offense showed similar (Marlowe et al., 2008) or improved (Cissner et al., 2013) outcomes in drug court compared to those without the offenses. In fact, the *Adult Drug Court Best Practices Standards* (NADCP, 2013) recommend that the consideration of the individual's substance use disorder treatment needs be prioritized over a distribution or trafficking offense history. People who sold drugs to support their own substance use disorder, for example, are appropriate for drug court, whereas someone who does not have a substance use disorder and sells drugs for monetary reasons only would not be an appropriate drug court candidate because they do not have a substance use disorder. The key factor here is the need, not the offense.

The third hypothesis, that Black individuals would be more likely to be denied entry due to team or gatekeeper discretion, was supported by the data. This finding is consistent with the cumulative disadvantage framework, which notes that points in the process where there is more discretion result in decreased racial equity. Studies of cumulative disadvantage in the criminal legal system as a whole found that diversion and pretrial decisions, which are generally less transparent and have less formalized criteria than, for example, sentencing, are areas of racial disparity (Jones, 2013; Omori, 2019). Similarly, in these courts Black people were disproportionately negatively affected in cases where there was more room for discretion in decision-making due to a lack of transparency and clearly defined and documented criteria inherent in discretionary decisions.

5.2 Limitations

While the EIAT dataset is a valuable addition to the research on equitable access to drug court, there are important limitations associated with its use in these analyses. The EIAT was designed to help drug court staff collect data on and assess equitable access to their program. For the purposes of this study, the EIAT is a secondary dataset, and was not developed with the needs of a research study as a primary goal. The values provided for some of the key dependent variables (reasons for non-admission) are based on the practical operations of a drug court, and not on theory. Thus, some of these variables may serve more as proxy measures than direct applications of theory.

An additional concern due to the use of secondary data is omitted variable bias. There is a lack of contextual information that would help to more clearly explore the relationship between cumulative disadvantage and admission to and successful completion of drug court. For example, a full criminal history of each individual in the dataset would allow for an in-depth exploration of

the effects of cumulative disadvantage across time and its ultimate effect on drug court admission and completion. Another key factor not included in this dataset is socioeconomic status, or a reasonable proxy measure. Without a way to measure participants' socioeconomic status, it is impossible to unpack the intersecting influence of race and income.

Another limitation is that these data are too limited to provide a representative national drug court sample. Rather, they are the result of purposeful sampling of drug courts that have these data available to share. The EIAT tool is designed to help courts track these data. As more drug courts implement the EIAT the amount of demographic data available on drug court referrals will increase, allowing for more generalizable analyses to take place. It is also important to note that the courts included in this dataset were chosen precisely because they collect comprehensive data, including race, on their participants. Their ability to take part in this pilot test may in itself make them different from other drug courts. There were also issues with the reliability and consistency of the data within and between sites. Some sites did not track race and ethnicity as distinct identities, meaning that the ethnicity data was not included in the analysis, and a number of Latinx people were excluded from the analysis because they did not have race data.

There were not enough data collected during the EIAT pilot testing to sustain a multivariate analysis that did not suffer from omitted variable bias, and thus provide biased estimates of race. Binary logistic regression would be a valuable analytic technique for future research using expanded EIAT data since the dependent variables are binomial (admission, yes or no; was the individual reason reported for non-admission, yes or no), and use a mixture of categorical (race, sex) and continuous (age) dependent variables (Long, 1997). The mixed effects approach would be appropriate because the data uses each referral to drug court as the unit of count but is clus-

tered by drug court site and thus includes both fixed and random effects (Allison, 1999). Unfortunately, the small number of clusters precluded this approach in the current study, as Maas and Hox (2005) recommend at least 50 clusters, and only six were available here.

Despite its limitations, this dataset represents the only multi-site source for comparable information about drug court referrals currently available, and as such is uniquely suited for this analysis. The findings of this study will help to inform future, more rigorous, primary data collection and analysis efforts. These large-scale, multi-site data collection efforts require the dedication of significant resources, and the results of this study will help to focus those efforts and make the case for their funding. Future research can also address many of these limitations.

5.3 Policy Implications

Beyond supporting the existing literature pointing to racial inequities in drug court, this study provides an important starting point for a focused policy response to the reasons driving racial disparities in drug court. The following sections will discuss the broader policy implications and importance of equitable access to drug courts and provide specific recommendations for policy changes within drug courts.

5.3.1 The Importance of Equity in Drug Court Access

Before a discussion of specific recommendations, it is important to review why equity in drug court access is important from a policy perspective. The importance of equity in the courts in general was taken up by the Conference of Chief Justices (CCJ) and the Conference of State Court Administrators (COSCA) (2020) in their *Resolution 1: In support of racial equality and justice for all*. In this resolution, CCJ and COSCA highlight the importance of respect and equal justice under the law regardless of race. With drug courts providing a variety of positive outcomes for legal system-involved individuals like expunged records, reduced or no charges, and

access to a variety of treatment resources, including employment and education, (BJA, 1997; Heck, 2006; NADCP, 2013; NADCP, 2015) racial disparities in access to these programs do not meet the goal of providing for equal justice under the law. Racial disparities in drug court result in improved outcomes for one racial group at the expense of another.

Resolution 1 (CCJ & COSCA, 2020) also notes that racial disparities in the criminal legal system can result in a state where “too many persons, especially persons of color, lack confidence in the fairness of courts and the criminal justice system” (CCJ & COSCA, 2020, p. 1). This lack of confidence in the legal system can impact the perception of procedural fairness in the courts, and lowered perception of procedural fairness can have long-reaching effects. In recent years, treatment courts have focused on procedural fairness and therapeutic jurisprudence as a way to reduce recidivism in specific populations (Kaiser & Holtfretter, 2016). Perceptions of procedural fairness can affect individuals’ views of the legitimacy of institutions, which in turn may affect their likelihood of compliance with the authority of those institutions. Compliance with the dictates of institutions, willing acceptance of those dictates, and perceptions of those institutions as legitimate are important considerations in the court context, since the courts rely on those factors to encourage adherence to their decisions (Rottman, 2005).

Issues of acceptance, compliance, trust, and legitimacy are important in a court context. The courts rely on their perceived legitimacy to increase compliance with their orders (Rottman, 2005; Tyler, 2008). Voice, neutrality, respect, and trust are key components of a fair court process (Burke & Leben, 2008). In fact, when the components of procedural fairness were present, people were more likely to accept unfavorable outcomes in cases where the decision went against the individual’s desires (Tyler & Mentovich, 2011). Although an individual may not be happy if they, for example, lose a small claims case, they are more likely to accept and abide by

the court's decision if they feel that their case was handled fairly. This is true even in instances where a judge carefully observes the legal aspects of a case resulting in a legally fair negative outcome. One explanation for this finding is the idea that a focus on procedural fairness minimizes the win or lose mentality of the court experience and diverts attention to the procedures themselves and how they support goal of a just outcome rather than a "win" (Tyler, 2008). The procedural fairness literature suggests that a linkage exists between perceptions of procedural fairness and long-term recidivism (e.g., Tyler et al., 2007; Tyler & Huo, 2002). Research has also indicated that perceptions of procedural fairness favorably affect short-term drug court outcomes, and that drug court itself reduces recidivism (Cissner et al., 2013; Guterrez & Bourgon, 2009; Koetzle et al., 2015; Mitchell et al., 2012; Shaffer, 2011).

Courts can increase perceptions of procedural fairness by actively monitoring for and addressing racial disparities when they occur. The following recommendations will assist courts in actively guarding against these disparities.

5.3.2 Recommendations

The following recommendations can assist drug courts in diagnosing and addressing racial disparities in their programs. These recommendations prioritize transparent, objective, and data-driven decision-making, accurate and complete collection of drug court admission data, effective data governance, and routine analysis of these data.

5.3.2.1 Follow data-driven decision-making practices and prioritize data collection and transparency in admission decisions.

Drug court staff and policymakers should not assume that Black individuals are underrepresented in drug courts due to a reluctance to participate. The results of this study suggest that the opposite is true, and White individuals are significantly more likely to decline to participate. For

this reason, policymakers should assess the decision-making processes and admission criteria in their drug courts for all individuals, regardless of race. Discretionary decision-making in admission determinations is a key area for review and reform.

The recording of reasons for non-admission can also identify instances where there is no reason other than discretion recorded as a cause for denial of admission. These instances should serve as red flags from both a policy and equity perspective. The appearance of discretionary reasons in the data may indicate that suitability determinations may be occurring instead of determinations based on objective criteria, or that an individual legal actor is acting as a gatekeeper without communicating their criteria to the drug court team. Whatever the mechanism, these discretionary decisions appear to disproportionately affect Black individuals.

Drug court staff must explicitly define and record the reasons individuals were not admitted to their programs. Any instances of discretionary decisions in the data should be investigated to see if there is an underlying objective reason for denial, and if there is not, the individual's denial should be reconsidered. If discretionary decisions are due to a team decision, the court should review their policies to determine if they are making suitability determinations. These subjective decisions are discouraged by the *Adult Drug Court Best Practice Standards*, which state that eligibility criteria should be based on empirical evidence (NADCP, 2013). NADCP (2013) further requires that "the Drug Court team does not apply subjective criteria or personal impressions to determine participants' suitability for the program" (p. 5).

Discretionary decisions may also appear in the data when an individual gatekeeper is making suitability determinations or failing to communicate their objective reasoning for non-admission to the drug court team. For example, several of the text responses included in the team

or gatekeeper discretion category in the analysis noted that the judge or prosecutor denied admission without providing further detail about why. These instances increase the risk of suitability determinations, and act as a “black box” point in the process where racial bias may play a role in determinations.

The issue of prosecutors in particular failing to share their reasons for non-admission has come up in discussions of the EIAT with drug court team members (Marlowe & Genthon, 2022). Prosecutors should not act as gatekeepers with the power to decide who does and does not enter drug court based solely on their determination without the reasoning shared with the drug court team. Rather, the eligibility determination process should be a collaborative effort, with the drug court team aware of the reasoning for non-admission, and any decision made based on documented and objective eligibility criteria (Marlowe & Genthon, 2022).

5.3.2.2 Collect accurate and complete race and ethnicity data.

The accurate and complete collection and recording of demographic characteristics and reasons for non-admission must be a priority for drug courts. Without this information, policy-makers can only address inequity based on their assumptions as to the cause. Both race and ethnicity data should be recorded instead of conflating race and ethnicity. Drug courts should follow the best practices for race and ethnicity data collection and data governance described by the Racial Justice Organizational Assessment Tool for Courts (National Center for State Courts, 2023) and the Court Statistics Project (Genthon & Robinson, 2022).

These best practices as described in the Racial Justice Organizational Assessment Tool for Courts (2023) are as follows:

- 1) Collect or have routine access to individual-level race and ethnicity data rather than only aggregate data.

- 2) Ensure that the race and ethnicity categories collected are compatible with a comprehensive set of high-level categories, such as those used in the National Open Data Standards (NODS) (2019) and recommended by the Court Statistics Project (Genthon & Robinson, 2022).
- 3) Allow respondents to select all racial and ethnic categories that apply. Do not use a “multiracial” or “more than one race” option. Do not conflate race and ethnicity.
- 4) Identify, understand, and record the method used for collecting these data. Race and ethnicity data can be based on the perception of an observer or the self-identification of the individual in question. Know which one the data represents and understand why it matters. Identify and record the agency from which the data was received, if applicable.
- 5) Go beyond the high-level categories used by NODS and collect more detailed data applicable to the court’s jurisdiction like tribal affiliation, national origin, ethnic group (beyond Hispanic/Latinx), or cultural group. These categories should fall within the higher-level categories.
- 6) Ensure data quality and completeness through routine review of the data.
- 7) Analyze the data routinely to assess for racial or ethnic disparities.

This data framework can be integrated into an existing case management system, or the court can use a tool like the EIAT, which was developed to assist courts in accurately and reliably collecting these and other demographic data.

5.3.2.3 Train courts on using the EIAT and performing deeper dives on their own data.

Drugs courts vary widely from jurisdiction to jurisdiction in their policies, processes, population, and staff characteristics (like training and diversity). For this reason, generalized findings about disparities and studies done at a single drug court cannot necessarily apply to other individual drug courts. It is imperative for each court to examine their own data to determine whether disparities are occurring in referrals, admission, or completion.

The EIAT was designed to be a diagnostic tool to help courts pinpoint where in their process disparities are occurring, and to provide a general idea as to *why* they are occurring. However, courts will need to collect and access additional data to delve into the more complex reasons *why* a disparity may be occurring. For example, although the EIAT has categories that capture offense-based reasons for denial, the tool is not meant to capture an individual's entire criminal history. Ultimately, though, that level of detail may be required to tease out the underlying reasons a disparity is occurring.

The NADCP and NCSC have been working to train drug courts on the use of the EIAT, and they will continue to do so. Courts should also receive training on how to perform deeper data dives when a disparity has been uncovered by the EIAT.

5.4 Directions for Future Research

In the time since pilot testing of the EIAT, additional drug courts have implemented the EIAT as part of their data collection. As time has passed and more courts have implemented the tool, the amount of data available for analysis has increased. Future research will attempt to collect EIAT data from these courts, accompanied by additional participant data, like risk assess-

ment results, criminal history, and current offense. These data will be analyzed using binary logistic regression to account for the site-specific characteristics (fixed effects) and the individual referrals within each site (random effects).

Although not a main focus of this study, the finding that women are more likely to be admitted to drug court is an interesting one. Future research could use the EIAT data to see if there are differences in the reasons men and women are denied admission to drug courts. There also appeared to be few studies of equity in drug courts based on sex. This area of inquiry can be developed through descriptive or qualitative studies to begin delving into this issue.

In conclusion, this study found that Black individuals were less likely to be admitted to drug court than White individuals in three out of five of the courts included in the analysis, and in the pooled sample. In an accompanying assessment of sex and age, it was determined that sex is also associated with admission likelihood, with women more likely to be admitted in three out of five courts included in the analysis and in the pooled sample. Age was only significantly associated with admission in one of the six courts and was not significant in the pooled sample. As equity in access to drug court is key to fairness in the justice system, these disparities should be addressed through further research and policy change.

Appendix A: EIAT Fields

Field	Definition	Entry Options
Name, Case Number, or ID Number	A unique identifier for each individual	<i>Open Text</i>
Client DOB	The individual's date of birth in mm/dd/yyyy format	<i>Open Date</i>
Date of Referral or Admission	The date the individual was referred to or admitted to drug court in mm/dd/yyyy format	<i>Open Date</i>
Client Age at Referral or Admission	An auto-calculated field using <i>Client DOB</i> and <i>Date of Referral or Admission</i> to provide age at referral or admission	<i>Auto-calculated age in years</i>
Sex at Birth	The individual's assigned sex at birth	Male Female
Day-to-Day Life Gender (Pick from List)	The individual's description of their gender identity	Male Female Sometimes M, sometimes F Other than M or F
Gender Category (Auto-filled)	An auto-calculated field using <i>Sex at Birth</i> and <i>Day-to-Day Life Gender</i> to determine gender identity	Male Female Transgender Male Transgender Female Gender Fluid Agender
Sexual Orientation	The individual's sexual orientation	Straight or Heterosexual Bisexual Gay or Lesbian Unsure

Race 1	The individual's racial identity	White or Caucasian Black or African-American American Indian or Alaska Native Asian Pacific Islander Other
Race 2 (if Blended Race)	The individual's racial identity (if more than one apply)	White or Caucasian Black or African-American American Indian or Alaska Native Asian Pacific Islander Other
Race Classification (Auto-filled)	An auto-calculated field using Race 1 and Race2 to determine racial identity	White or Caucasian Black or African-American American Indian or Alaska Native Asian Pacific Islander Blended Race Other
Specify If Other Race	Open text descriptor of the individual's racial identity if "other race" selected	<i>Open Text</i>
Ethnicity	The individual's ethnic identity	Hispanic/Latinx Not Hispanic/Latinx
Admitted to Drug Court?	Whether the individual was admitted to drug court	Yes No

Primary Reason for Non-Admission	The primary reason the individual was denied entry to drug court, if applicable	<p> Declined to Participate Not a Resident of Juris. Charges dropped or found not guilty Pending charges in another court or jurisdiction Outstanding Warrant(s) Offense Involved Weapon Offense Involved Drug Dist./Traf. Offense Involved Violent Crime Offense Involved Sex Offense Offense Involved Prostitution History of Weapon History of Prostitution History of Drug Dist./Traf. History of Violent Crime History of Sex Offense Not High Crim. Risk Criminogenic risk level is too high No Substance Use Diagnosis Severe Mental Illness Not motivated or ready for treatment Serious medical illness Referred to Mental Health Court Referred to other Treatment Court (e.g., Veterans, DWI, Hybrid, Co-Occurring Courts) Referred to another Non-Custodial Rehabilitative Program Previous Participation in Drug Court Previous Participation in Other Diversion Program Unable to pay fines, fees, costs Needed treatment resources not available (please specify) Lack of Housing Resources No Transportation Other (please specify) </p>
Specify if <i>Other Reason</i>	Open text descriptor of the primary reason for non-admission if “Other” selected	<i>Open Text</i>

Date of Admission (mm/dd/yyyy)	The date the individual was admitted to drug court, if applicable, in mm/dd/yyyy format	<i>Open Date</i>
Successful Completion?	If the individual successfully completed drug court	Yes No
Unsuccessful Discharge Date	The date the individual was discharged unsuccessfully, if applicable, in mm/dd/yyyy format	<i>Open Date</i>
Unsuc. Dischg. Age in Days (Auto-filled)	An auto-calculated field using <i>Date of Admission</i> and <i>Unsuccessful Discharge Date</i> to provide age at unsuccessful discharge	<i>Auto-calculated time from admission to unsuccessful discharge in days</i>
Primary Reason for Unsuccessful Discharge	The primary reason the individual did not successfully complete drug court, if applicable	New Offense During Program: Drug Possession New Offense During Program: Not Drug Possession Absconded Voluntary Withdrawal Administrative Discharge (later determined not to be eligible; e.g., other pending charge; lives out of jurisdiction) Multiple Positive Drug Tests Failure to Comply with rules of supervision (please specify rule). Lack of attendance in treatment Poor attitude, low motivation, not ready for treatment Needed treatment resources not available (please specify) Transferred to Mental Health Court Transferred to Another Treatment Court Death or serious medical illness or injury Other (please specify)

Specify Rule or Other Reason (If Applicable)	Open text descriptor of the primary reason for unsuccessful discharge if “Other”, “Failure to Comply with rules of supervision” or “Needed treatment resources not available” selected	<i>Open Text</i>
Successful Discharge Date	The date the individual was discharged successfully, if applicable, in mm/dd/yyyy format	<i>Open Date</i>

It is important to note that some of these variables are undergoing revision as the authors move forward with the EIAT. The sexual orientation and gender identity variables are subject to problems that the authors plan to rectify. The authors are also developing guidance for drug court personnel on the best way to obtain this information without causing harm to the participants. At this time, no drug courts have been able to provide sexual orientation or gender identity data, and these variables will not be included in the analyses for this study. Although outcomes for people of diverse sexual orientations and gender identities, along with their intersection with race, are important consideration and should be considered in future studies race alone is the focus of this paper. The lack of sexual orientation and gender identity data will not adversely affect this study.

Appendix B: Primary Reason for Non-admission Variables

“Primary Reason for Non-Admission” Value	EIAT Category	Dummy-Coded Variable
Declined to Participate	Participant Related	Declined/Did not follow through
Not a Resident of Juris.	Participant Related	Legal Denial
Charges dropped or found not guilty	Legal	<i>Did not occur in data</i>
Pending charges in another court or jurisdiction	Legal	Legal Denial
Outstanding Warrant(s)	Legal	Legal Denial
Offense Involved Weapon	Present Offense	Offense-Related Denial
Offense Involved Drug Dist./Traf.	Present Offense	Offense-Related Denial
Offense Involved Violent Crime	Present Offense	Offense-Related Denial
Offense Involved Sex Offense	Present Offense	Offense-Related Denial
Offense Involved Prostitution	Present Offense	<i>Did not occur in data</i>
History of Weapon	Offense History	Offense-Related Denial
History of Prostitution	Offense History	<i>Did not occur in data</i>
History of Drug Dist./Traf.	Offense History	Offense-Related Denial
History of Violent Crime	Offense History	Offense-Related Denial
History of Sex Offense	Offense History	Offense-Related Denial
Not High Crim. Risk	Clinical	Clinical Denial
Criminogenic risk level is too high	Clinical	Clinical Denial
No Substance Use Diagnosis	Clinical	Clinical Denial
Severe Mental Illness	Clinical	Clinical Denial

Not motivated or ready for treatment	Clinical	<i>Did not occur in data</i>
Serious medical illness	Clinical	Clinical Denial
Referred to Mental Health Court	Clinical	Other Referral
Referred to other Treatment Court (e.g., Veterans, DWI, Hybrid, Co-Occurring Courts)	Clinical	Other Referral
Referred to another Non-Custodial Rehabilitative Program	Clinical	Other Referral
Previous Participation in Drug Court	Legal	Legal Denial
Previous Participation in Other Diversion Program	Legal	Legal Denial
Unable to pay fines, fees, costs	Participant-Related	<i>Did not occur in data</i>
Needed treatment resources not available (please specify)	Participant-Related	Clinical Denial
Lack of Housing Resources	Participant-Related	<i>Did not occur in data</i>
No Transportation	Participant-Related	Declined/Did not follow through

References

- Administrative Office of the U.S. Courts. (2016). *Table D-4—U.S. District Courts—Criminal statistical tables for the federal judiciary*. <https://www.uscourts.gov/statistics/table/d-4/statistical-tables-federal-judiciary/2016/06/30>
- Alexander, M. (2012). *The new Jim Crow: Mass incarceration in the age of colorblindness*. New Press.
- Allison, P.D. (1999). *Logistic regression using the SAS system: Theory and application*. SAS Institute.
- Amemiya, J., Mortenson, E., & Wang, M. T. (2019). Minor infractions are not minor: School infractions for minor misconduct may increase adolescents' defiant behavior and contribute to racial disparities in school discipline. *American Psychologist*, 75(1), 23–36. <https://doi.org/10.1037/amp0000475>
- Andrews, D. A., Bonta, J., & Wormith, J. S. (2011). The risk-need-responsivity (RNR) model: Does adding the good lives model contribute to effective crime prevention? *Criminal Justice and Behavior*, 38(7), 736–755. <https://doi.org/10.1177/0093854811406356>
- Aos, S., Phipps, P., Barnoski, R., & Lieb, R. (2001). *The comparative costs and benefits of programs to reduce recidivism*. <https://www.wsipp.wa.gov/ReportFile/756>
- Arnold, D., Dobbie, W., & Yang, C. S. (2018). Racial bias in bail decisions. *Quarterly Journal of Economics*, 133(4), 1885–1932. <https://doi.org/10.1093/qje/qjy012>
- Barnes, J. C., & Motz, R. T. (2018). Reducing racial inequalities in adulthood arrest by reducing inequalities in school discipline: Evidence from the school-to-prison pipeline. *Developmental Psychology*, 54(12), 2328–2340. <https://doi.org/10.1037/dev0000613>

- Baumer, E. P. (2013). Reassessing and redirecting research on race and sentencing. *Justice Quarterly*, 30(2), 231–261. <https://doi.org/10.1080/07418825.2012.682602>
- Baumgartner, F. R., Epp, D. A., & Shoub, K. (2018). *Suspect citizens: What 20 million traffic stops tell us about policing and race*. Cambridge University Press.
- Beck, A. J., & Blumstein, A. (2018). Racial disproportionality in U.S. state prisons: Accounting for the effects of racial and ethnic differences in criminal involvement, arrests, sentencing, and time served. *Journal of Quantitative Criminology*, 34(3), 853–883. <https://doi.org/10.1007/s10940-017-9357-6>
- Beckett, K., Nyrop, K., & Pfingst, L. (2006). Race, drugs, and policing: Understanding disparities in drug delivery arrests. *Criminology*, 44(1), 105–137. <https://doi.org/10.1111/j.1745-9125.2006.00044.x>
- Belenko, S., Fabrikant, N., & Wolff, N. (2011). The long road to treatment: Models of screening and admission into drug courts. *Criminal Justice and Behavior*, 38(12), 1222–1243. <https://doi.org/10.1177/0093854811424690>
- Bellas, M.L. (2014). *Disproportionate minority contact assessment: Court and diversion referral decisions in Vermont's juvenile justice system*. Vermont Center for Justice Research. http://www.crgvt.org/uploads/5/2/2/2/52222091/dmc_assessment_2014.pdf
- Bhati, A. S., Roman, J. K., & Chalfin, A. (2008). *To treat or not to treat: Evidence on the prospects of expanding treatment to drug-involved offenders*. <https://www.ojp.gov/pdffiles1/nij/grants/222908.pdf>
- Blair, I., Judd, C. M., & Chapleau, K. M. (2004). The influence of Afrocentric facial features in criminal sentencing. *Psychological Science*, 15(10), 674–679. <https://doi.org/10.1111/j.0956-7976.2004.00739.x>

Bonczar, T. P., & Beck, A. J. (1997). *Lifetime likelihood of going to state or federal prison.*

<https://bjs.ojp.gov/content/pub/pdf/Llgsfp.pdf>

Bonta, J., & Andrews, D. A. (2017). *The psychology of criminal conduct* (6th ed.). Routledge.

Bowers, J. (2008). Contraindicated drug courts. *UCLA Law Review*, 55, 783–835.

<http://www.casacolumbta.org/absolutenm/>

Brame, R., Bushway, S. D., Paternoster, R., & Turner, M. G. (2014). Demographic patterns of cumulative arrest prevalence by ages 18 and 23. *Crime and Delinquency*, 60(3), 471–486.

<https://doi.org/10.1177/0011128713514801>

Burch, T. (2015). Skin color and the criminal justice system: Beyond Black-White disparities in sentencing. *Journal of Empirical Legal Studies*, 12(3), 395–420.

<https://doi.org/10.1111/jels.12077>

Bureau of Justice Assistance. (2022). *BJA FY22 Adult Drug Court Discretionary Grant Program*. U.S. Department of Justice.

<https://bja.ojp.gov/funding/O-BJA-2022-171041.pdf>

Bureau of Justice Assistance. (1997). *Defining drug courts: The key components.*

http://www.ndci.org/sites/default/files/nadcp/Key_Components.pdf

Burke, K. & Leben, S. (2008). Procedural justice and the courts. *Court Review*, 44(1/2), 4-25.

Carey, S. M., Finigan, M. W., & Pukstas, K. (2008). *Exploring the key components of drug courts: A comparative study of 18 adult drug courts on practices, outcomes, and costs.*

www.npcresearch.com

Carey, S. M., Mackin, J. R., & Finigan, M. W. (2012). What works? The ten key components of drug court: Research-based best practices. *Drug Court Review*, 8(1), 6–42.

- Carey, S. M., Mark, S., & Waller, B. A. (2011). *Oregon drug court cost study: Statewide costs and promising practices*. https://npcresearch.com/wp-content/uploads/ORDC_BJA_Cost_and_Best_Practices_Final_Rerelease_03112.pdf
- Carson, E. A. (2021). *Prisoners in 2020*. <https://bjs.ojp.gov/content/pub/pdf/p20st.pdf>
- Castellano, U. (2011). Problem-solving courts: Theory and practice. *Sociology Compass*, 5(11), 957–967. <https://doi.org/10.1111/j.1751-9020.2011.00422.x>
- Cheesman, F. L., Broschious, C. E., & Kleiman, M. (2019). A framework for managing drug court performance. *Drug Court Review*, 63–89. <https://www.researchgate.net/publication/336743599>
- Cheesman, F. L., Genthon, K., & Marlowe, D. B. (2019). From a performance measure to a performance evaluation tool: Conceptual Development of the Equity and Inclusion Assessment Tool (EIAT). *Justice System Journal*, 40(3), 259–266. <https://doi.org/10.1080/0098261X.2019.1656421>
- Cheesman, F. L., Marlowe, D. B., & Genthon, K. J. (2023). Racial differences in drug court referral, admission, and graduation rates: Findings from two states and eight counties. *Journal of Ethnicity in Criminal Justice*, 21(1), 80-102. <https://doi.org/10.1080/15377938.2023.2193952>
- Cissner, A. B., Rempel, M., Franklin, A. W., Roman, J. K., Bieler, S., Cohen, R., & Cadoret, C. R. (2013). *A statewide evaluation of New York's adult drug courts: Identifying which policies work best*. <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412867-A-Statewide-Evaluation-of-New-York-s-Adult-Drug-Courts.pdf>

- Cochran, J. C., Mears, D. P., & Bales, W. D. (2014). Assessing the Effectiveness of Correctional Sanctions. *Journal of Quantitative Criminology*, 30(2), 317–347.
<https://doi.org/10.1007/s10940-013-9205-2>
- Conference of Chief Justices and Conference of State Court Administrators. *Resolution 1: In support of racial equality and justice for all*. https://ccj.ncsc.org/data/assets/pdf_file/0029/42869/07302020-Racial-Equality-and-Justice-for-All.pdf
- Davis, J. E., & Jordan, W. J. (1994). The effects of school context, structure, and experiences on African American males in middle and high schools. *The Journal of Negro Education*, 63(4), 570–587. <https://doi.org/10.2307/2967296>
- Devall, K. E., & Lanier, C. L. (2012). Successful completion: An examination of factors influencing drug court completion for white and non-white male Participants. *Substance Use and Misuse*, 47(10), 1106–1116. <https://doi.org/10.3109/10826084.2012.680171>
- Diprete, T. A., & Eirich, G. M. (2006). Cumulative advantage as a mechanism for inequality: A review of theoretical and empirical developments. *Annual Review of Sociology*, 32, 271–297. <https://doi.org/10.1146/annurev.soc.32.061604.123127>
- Donnelly, E. A., & Macdonald, J. M. (2019). The downstream effects of bail and pretrial detention on racial disparities in incarceration. *The Journal of Criminal Law & Criminology*, 108(4), 775–813.
- Downey, P. M., & Roman, J. K. (2010). *A Bayesian meta-analysis of drug court cost-effectiveness*. https://ntcrc.org/wp-content/uploads/2021/11/A_Bayesian_Meta-Analysis_of_Drug_Court_Cost_Effectiveness.pdf
- Drug Strategies. (1997). *Cutting crime: Drug courts in action*.
<http://www.drugstrategies.com/wp-content/uploads/2014/05/CuttingCrime97.pdf>

- Eberhardt, J. L., Davies, P. G., Purdie-Vaughns, V. J., & Lynn Johnson, S. (2006). Looking death-worthy: Perceived stereotypicality of Black defendants predicts capital-sentencing outcomes Outcomes. *Psychological Science*, 17(5), 383–386.
<https://doi.org/10.1111/j.1467-9280.2006.01716.x>
- Eberhardt, J. L., Purdie, V. J., Goff, P. A., & Davies, P. G. (2004). Seeing Black: Race, crime, and visual processing. *Journal of Personality and Social Psychology*, 87(6), 876–893.
<https://doi.org/10.1037/0022-3514.87.6.876>
- Ehlers, S., Schiraldi, V., & Zidenberg, J. (2004). *Still striking out: Ten years of California's three strikes*. https://justicepolicy.org/wp-content/uploads/justicepolicy/documents/04-03_rep_castillstrikingout_ac.pdf
- Elder, G. H. (1985). Perspectives on the life course. In G. H. Elder (Ed.), *Life course dynamics* (pp. 23–49). Cornell University Press.
- Engen, R. L. (2009). Assessing determinate and presumptive sentencing – Making research relevant. *Criminology and Public Policy*, 8(2), 323–336.
- Fader, J. J., Kurlychek, M. C., & Morgan, K. A. (2014). The color of juvenile justice: Racial disparities in dispositional decisions. *Social Science Research*, 44, 126–140.
<https://doi.org/10.1016/j.ssresearch.2013.11.006>
- Fagan, J., Braga, A. A., Brunson, R. K., & Pattavina, A. (2016). Stops and stares: Street stops, surveillance, and race in the new policing. *Fordham Urban Law Journal*, 43, 539–614.
- Federal Bureau of Investigation. (2019a). Table 42: Arrests by sex, 2019. *Crime in the United States*. <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-42>

Federal Bureau of Investigation. (2019b). Table 43: Arrests by race and ethnicity, 2019. *Crime in the United States*.

<https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-43>

Festinger, D. S., Dematteo, D. S., Marlowe, D. B., & Lee, P. A. (2005). Expungement of arrest records in drug court: Do clients know what they're missing? *Drug Court Review*, 5(1), 1–21.

Fischman, J. B., & Schanzenbach, M. M. (2012). Racial disparities under the federal sentencing guidelines: The role of judicial discretion and mandatory minimums. *Journal of Empirical Legal Studies*, 9(4), 729–764.

<https://doi.org/10.1111/j.1740-1461.2012.01266.x>

Fite, P. J., Wynn, P., & Pardini, D. A. (2009). Explaining discrepancies in arrest rates between Black and White male juveniles. *Journal of Consulting and Clinical Psychology*, 77(5), 916–927. <https://doi.org/10.1037/a0016626>

Forsyth, C. J., Biggar, R. W., Forsyth, Y. A., & Howat, H. (2015). The punishment gap: Racial/ethnic comparisons in school infractions by objective and subjective definitions. *Deviant Behavior*, 36(4), 276–287. <https://doi.org/10.1080/01639625.2014.935623>

Gallagher, J. R. (2013). Drug court graduation rates: Implications for policy advocacy and future research. *Alcoholism Treatment Quarterly*, 31(2), 241–253.

<https://doi.org/10.1080/07347324.2013.772019>

Gallagher, J. R., Nordberg, A., & Dibley, A. R. (2019). Improving graduation rates for African Americans in drug court: Importance of human relationships and barriers to gaining and sustaining employment. *Journal of Ethnicity in Substance Abuse*, 18(3), 387–401.

<https://doi.org/10.1080/15332640.2017.1381661>

- Gallagher, J. R., Wahler, E. A., & Lefebvre, E. (2020). Further evidence of racial disparities in drug court outcomes: Enhancing service-delivery to reduce criminal recidivism rates for non-White participants. *Journal of Social Service Research*, 46(3), 406–415.
<https://doi.org/10.1080/01488376.2019.1575325>
- Gelman, A., Fagan, J., & Kiss, A. (2007). An analysis of the New York City police department’s “stop-and-frisk” policy in the context of claims of racial bias. *Journal of the American Statistical Association*, 102(479), 813–823.
<https://doi.org/10.1198/016214506000001040>
- Glaze, L. E. (2002). *Probation and parole in the United States, 2001*. <https://www.bjs.gov/content/pub/pdf/ppus01.pdf>
- Genthon, K. J., Bailey, E., Hamilton, M., Wylie, L., & Vandenberg Van Zee, S. (2022). *Wisconsin statewide drug and hybrid court performance measures mental health track supplement*.
<https://www.wicourts.gov/courts/programs/problemsolving/docs/hybridcourtperfmeasuresmentalhealth.pdf>
- Genthon, K.J., & Robinson, D. (2022). *Collecting race and ethnicity data: Court Statistics Project data governance special topic*. https://www.courtstatistics.org/data/assetsets/pdf_file/0036/69678/Race_Ethnicity_Data_Collection.pdf
- Goff, P. A., Lloyd, T., Geller, A., Raphael, S., & Glaser, J. (2016). *The science of justice: Race, arrests, and police use of force*. <https://policingequity.org/what-we-do/research/the-science-of-justice-race-arrests-and-police-use-of-force>
- Gottfredson, D. C., Kearley, B. W., Najaka, S. S., & Rocha, C. M. (2007). An Analysis of Mediators. *Journal Of Research in Crime And Delinquency*, 3–35.

Government Accountability Office. (2005). *Adult drug courts: Evidence indicates recidivism reductions and mixed results for other outcomes.*

www.gao.gov/cgi-bin/getrpt?GAO-05-219

Gregory, A., & Weinstein, R. S. (2008). The discipline gap and African Americans: Defiance or cooperation in the high school classroom. *Journal of School Psychology, 46*(4), 455–475.

<https://doi.org/10.1016/j.jsp.2007.09.001>

Gutierrez, L., & Bourgon, G. (2009). *Drug treatment courts: A quantitative review of study and treatment quality.*

<https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/2009-04-dtc/2009-04-dtc-eng.pdf>

Hagan, J. (1974). Parameters of criminal prosecution: An application of path analysis to a problem of criminal justice. *Journal of Criminal Law and Criminology, 65*(4), 536–544.

<https://scholarlycommons.law.northwestern.edu/jclc>

Hagan, J. (1991). Destiny and drift: Subcultural preferences, status attainments, and the risks and rewards of youth. *American Sociological Review, 56*, 567–582.

<https://doi.org/10.2307/2096080>

Herzog, S. & Oreg, S. (2008). Chivalry and the moderating effect of ambivalent sexism: Individual differences in crime seriousness judgments. *Law & Society Review, 42*(1), 45–

74. <https://doi.org/10.1111/j.1540-5893.2008.00334.x>

Hirschfield, P. J. (2008). Preparing for prison? The criminalization of school discipline in the USA. *Theoretical Criminology, 12*(1), 79–101.

<https://doi.org/10.1177/1362480607085795>

- Ho, T., Carey, S. M., & Malsch, A. M. (2018). Racial and gender disparities in treatment courts: Do they exist and is there anything we can do to change them? *Journal for Advancing Justice, 1*, 5–34. <https://advancejustice.org/wp-content/uploads/2018/06/AJ-Journal.pdf>
- Hoeben, E. M., & Weerman, F. M. (2016). Why is involvement in unstructured socializing related to adolescent delinquency? *Criminology, 54*(2), 242–281.
<https://doi.org/10.1111/1745-9125.12105>
- Howard, D. (2016). Race, neighborhood, and drug court graduation. *Justice Quarterly, 33*(1), 159–184. <https://doi.org/10.1080/07418825.2014.908938>
- Huizinga, D., Thornberry, T., Knight, K., & Lovegrove, P. (2007). *Disproportionate minority contact in the juvenile justice system: A study of differential minority arrest/referral to court in three cities*. <https://www.ncjrs.gov/pdffiles1/ojjdp/grants/219743.pdf>
- Jones, C. E. (2013). “Give us free”: Addressing racial disparities in bail determinations. *Legislation and Public Policy, 16*(4), 919–961.
- Kaiser, K.A., Holtfretter, K. (2015). An integrated theory of specialized court programs: Using procedural justice and therapeutic jurisprudence to promote offender compliance and rehabilitation. *Criminal Justice and Behavior, 43*(1), 45-62.
<https://doi.org/10.1177/0093854815609642>
- King James Bible*. (2008). Oxford University Press.
- Koch, D. W., Lee, J., & Lee, K. (2016). Coloring the War on Drugs: Arrest disparities in Black, Brown, and White. *Race and Social Problems, 8*(4), 313–325.
<https://doi.org/10.1007/s12552-016-9185-6>
- Koetzle, D., Listwan, S. J., Guastaferrro, W. P., & Kobus, K. (2015). Treating high-risk offenders in the community: The potential of drug courts. *International Journal of Offender*

- Therapy and Comparative Criminology*. <https://doi.org/10.1177/0306624X13515635>
- Kovera, M. B. (2019). Racial disparities in the criminal justice system: Prevalence, causes, and a search for solutions. *Journal of Social Issues*, 75(4), 1139–1164.
<https://doi.org/10.1111/josi.12355>
- Krezmien, M. P., Leone, P. E., & Achilles, G. M. (2006). Suspension, race, and disability: Analysis of statewide practices and reporting. *Journal of Emotional and Behavioral Disorders*, 14(4), 217–226. <https://doi.org/10.1177/10634266060140040501>
- Kurlychek, M. C., & Johnson, B. D. (2019). Cumulative disadvantage in the American criminal justice system. *Annual Review of Criminology*, 2, 291–319.
<https://doi.org/10.1146/annurev-criminol>
- Kutateladze, B. L., Andiloro, N. R., & Johnson, B. D. (2016). Opening Pandora's box: How does defendant race influence plea bargaining? *Justice Quarterly*, 33(3), 398–426.
<https://doi.org/10.1080/07418825.2014.915340>
- Kutateladze, B. L., Andiloro, N. R., Johnson, B. D., & Spohn, C. C. (2014). Cumulative disadvantage: Examining racial and ethnic disparity in prosecution and sentencing. *Criminology*, 52(3), 514–551. <https://doi.org/10.1111/crim.2014.52.issue-3/issuetoc>
- Lal, R. Deb, K.S., & Kedia, S. (2015). Substance use in women: Current status and future directions. *Indian Journal of Psychology*, 57(Suppl2), 275-285.
<https://doi.org/10.4103/0019-5545.161491>
- Langan, P. A., & Levin, D. J. (2002). *Recidivism of prisoners released in 1994*. Bureau of Justice Statistics. <https://bjs.ojp.gov/content/pub/pdf/rpr94.pdf>
- Langton, L., & Durose, Ma. (2013). *Police behavior during traffic and street stops, 2011*. Bureau of Justice Statistics. <https://bjs.ojp.gov/content/pub/pdf/pbtss11.pdf>

- Latessa, E. J., & Lowenkamp, C. (2005). What are criminogenic needs and why are they important? *For the Record*, 4, 15-16.
- Laub, J. H., & Sampson, R. J. (1993). Turning points in the life course: Why change matters to the study of crime. *Criminology*, 31(3), 301–326.
<https://doi.org/10.1111/j.1745-9125.1993.tb01132.x>
- Lemert, E. (1951). *Social Pathology*. McGraw-Hill.
- Lemert, E. (1972). *Human Deviance, Social Problems, and Social Control* (2nd ed.). Prentice Hall.
- Levchak, P. J. (2017). Do precinct characteristics influence stop-and-frisk in New York City? A multi-level analysis of post-stop outcomes. *Justice Quarterly*, 34(3), 377–406.
<https://doi.org/10.1080/07418825.2016.1162320>
- Levinson, J. D., Cai, H., & Young, D. (2010). Guilty by implicit racial bias: The Guilty/Not Guilty Implicit Association Test. *Ohio State Journal of Criminal Law*, 8, 187–208.
- Long, S.J. (1997). *Regression models for categorical and limited dependent variables*. Sage Publications, Inc.
- Lowenkamp, C. T., Holsinger, A. M., & Latessa, E. J. (2005). Are drug courts effective: A meta-analytic review. *Journal of Community Corrections*, 15(1), 5–11.
- Maas, C.J.M., Hox, J.J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology* 1(3), 86-92. <https://doi.org/10.1027/1614-2241.1.3.86>
- Mackin, J. R., Carey, S. M., & Finigan, M. W. (2009). *Maryland problem-solving courts evaluation, phase III: Integration of results from process, outcome, and cost studies conducted 2007-2009*.

<https://www.courts.state.md.us/sites/default/files/import/opsc/dtc/pdfs/evaluationsreports/marylandphaseiiiintegratedfinalreport1209.pdf>

Marlowe, D. B. (2012). Targeting the right participants for adult drug courts. In *National Drug Court Institute* (Vol. 7, Issue 1).

https://www.ndci.org/wp-content/uploads/Targeting_Part_I.pdf

Marlowe, D. B. (2013). Achieving racial and ethnic fairness in drug courts. *Court Review: The Journal of the American Judges Association*, 49, 40–47.

<https://doi.org/10.1007/s11292-012-9143-2>

Marlowe, D. B., DeMatteo, D. S., & Festinger, D. S. (2003). A sober assessment of drug courts. *Federal Sentencing Reporter*, 16(2), 153–160.

Marlowe, D. B., Festinger, D. S., Dugosh, K. L., Arabia, P. L., & Kirby, K. C. (2008). An effectiveness trial of contingency management in a felony preadjudication drug court. *Journal of Applied Behavior Analysis*, 41(4), 565–577.

<https://doi.org/10.1901/jaba.2008.41-565>

Marlowe, D. B., Festinger, D. S., Lee, P. A., Dugosh, K. L., & Benasutti, K. M. (2006). Matching judicial supervision to clients' risk status in drug court. *Crime & Delinquency*, 52(1), 52–76.

Marlowe, D.B. & Genthon, K.J. (2022). *Racial differences in drug court referral, admission, and graduation rates: Using the Equity and Inclusion Assessment Tool (EIAT)*. RISE22 Conference, Nashville, TN, United States.

Marlowe, D. B., Hardin, C. D., & Fox, C. L. (2016). *Painting the current picture: A national report on drug courts and other problem-solving courts in the United States*.

<https://www.ndci.org/wp-content/uploads/2016/05/Painting-the-Current-Picture-2016.pdf>

- McKean, J., & Warren-Gordon, K. (2011). Racial differences in graduation rates from adult drug treatment courts. *Journal of Ethnicity in Criminal Justice*, 9(1), 41–55.
<https://doi.org/10.1080/15377938.2011.535469>
- Meier, K.J., Brudney, J.L., & Bohte, J. (2012). *Applied statistics for public and nonprofit administration* (8th edition). Cengage Learning.
- Merton, R. K. (1968). The Matthew effect in science. *American Association for the Advancement of Science*, 159(3810), 56–63.
- Merton, R. K. (1988). The Matthew effect in science, II: Cumulative advantage and the symbolism of intellectual property. *Isis*, 79(4), 606–623.
- Metcalf, C., & Chiricos, T. (2018). Race, plea, and charge reduction: An assessment of racial disparities in the plea process. *Justice Quarterly*, 35(2), 223–253.
<https://doi.org/10.1080/07418825.2017.1304564>
- Mitchell, O. (2020). Racial disparities in drug sanctions: Sources and solutions. In J. Avery & J. Cooper (Eds.), *Bias and the law* (pp. 141–159). Lexington Books.
- Mitchell, O., & Caudy, M. S. (2015). Examining racial disparities in drug arrests. *Justice Quarterly*, 32(2), 288–313. <https://doi.org/10.1080/07418825.2012.761721>
- Mitchell, O., & Caudy, M. S. (2017). Race differences in drug offending and drug distribution arrests. *Crime & Delinquency*, 63(2), 91–112.
<https://doi.org/10.1177/0011128714568427>
- Mitchell, O., Wilson, D. B., Eggers, A., & MacKenzie, D. L. (2012). Assessing the effectiveness of drug courts on recidivism: A meta-analytic review of traditional and non-traditional drug courts. *Journal of Criminal Justice*, 40(1), 60–71.
<https://doi.org/10.1016/j.jcrimjus.2011.11.009>

- Morgan, R.D., Mitchell, S.M., Thoen, M.A., Campion, K., Bolaños, A.D., Sustaíta, M.A., & Henderson, S. (2016). Specialty courts: Who's in and are they working? *Psychological Services*, 13(3), 246-253. <http://doi.org/10.1037/ser0000085>
- Morris, E. W. (2005). Tuck in that shirt! Race, class, gender, and discipline in an urban school. *Sociological Perspectives*, 48(1), 25–48. <https://doi.org/10.1525/sop.2005.48.1.25>
- Morris, E. W., & Perry, B. L. (2016). The punishment gap: School suspension and racial disparities in achievement. *Social Problems*, 63(1), 68–86. <https://doi.org/10.1093/socpro/spv026>
- Nagin, D. S., Cullen, F. T., & Jonson, C. L. (2009). Imprisonment and reoffending. *Crime and Justice: Review of Research*, 38(1), 115–200. <https://doi.org/10.1086/599202>
- National Association of Drug Court Professionals. (n.d.). *About NADCP*. <https://www.nadcp.org/about/>
- National Association of Drug Court Professionals. (2013). *Adult drug court best practice standards: Volume I*. <https://www.nadcp.org/wp-content/uploads/2018/12/Adult-Drug-Court-Best-Practice-Standards-Volume-I-Text-Revision-December-2018-1.pdf>
- National Association of Drug Court Professionals. (2015). *Adult drug court best practice standards: Volume II*. <https://www.nadcp.org/wp-content/uploads/2018/12/Adult-Drug-Court-Best-Practice-Standards-Volume-2-Text-Revision-December-2018-1.pdf>
- National Center for State Courts. (2019). *National open data standards*. <https://www.ncsc.org/consulting-and-research/areas-of-expertise/data/national-open-court-data-standards-nods>

- National Center for State Courts. (2023). *The racial justice organizational assessment tool for courts*. <https://www.ncsc.org/consulting-and-research/areas-of-expertise/racial-justice/racialjusticeassessment>
- Nicosia, N., MacDonald, J. M., & Arkes, J. (2013). Disparities in criminal court referrals to drug treatment and prison for minority men. *American Journal of Public Health, 103*(6).
<https://doi.org/10.2105/AJPH.2013.301222>
- O'Hear, M. (2020). Managing the risk of violent recidivism: Lessons from legal responses to sexual offenses. *Boston University Law Review, 100*(1), 133–196.
- Okonofua, J. A., & Eberhardt, J. L. (2015). Two strikes: Race and the disciplining of young students. *Psychological Science, 26*(5), 617–624.
<https://doi.org/10.1177/0956797615570365>
- Omori, M. (2019). “Nickel and dimed” for drug crime: Unpacking the process of cumulative racial inequality. *Sociological Quarterly, 60*(2), 287–313.
<https://doi.org/10.1080/00380253.2018.1526049>
- Omori, M., & Petersen, N. (2020). Institutionalizing inequality in the courts: Decomposing racial and ethnic disparities in detention, conviction, and sentencing. *Criminology, 58*, 678–713. <https://doi.org/10.1111/1745-9125.12257>
- Paternoster, R., & Iovanni, L. (1989). The labeling perspective and delinquency: An elaboration of the theory and an assessment of the evidence. *Justice Quarterly, 6*(3), 359–394.
<https://doi.org/10.1080/07418828900090261>
- Patten, M., Bond, E., Low-Weiner, C., Hood, Q. O., Lu, O., Tomascak, S., Agboh, D., & Chauhan, P. (2019). *Trends in marijuana enforcement in New York State, 1990 to 2017*.
<https://datacollaborativeforjustice.org/wp-content/uploads/2020/04/Marijuana-Report.pdf>

- Pierson, E., Simoiu, C., Overgoor, J., Corbett-Davies, S., Jenson, D., Shoemaker, A., Ramachandran, V., Barghouty, P., Phillips, C., Shroff, R., & Goel, S. (2020). A large-scale analysis of racial disparities in police stops across the United States. *Nature Human Behaviour*, 4(7), 736–745. <https://doi.org/10.1038/s41562-020-0858-1>
- Piquero, A. R. (2015). Understanding race/ethnicity differences in offending across the life course: Gaps and opportunities. *Journal of Developmental and Life-Course Criminology*, 1(1), 21–32. <https://doi.org/10.1007/s40865-015-0004-3>
- Prohibition of participation by violent offenders, Pub. L. No. 90–351, 116, Stat. 1795 (2002). <https://uscode.house.gov/statviewer.htm?volume=116&page=1795#>
- Rachlinski, J. J., Wistrich, A. J., Lynn Johnson, S., & Guthrie, C. (2009). Does unconscious racial bias affect trial judges. *Notre Dame Law Review*, 84, 1195–1246. <https://scholarship.law.nd.edu/ndlr/vol84/iss3/4/>
- Ramey, D. M. (2016). The influence of early school punishment and therapy/medication on social control experiences during young adulthood. *Criminology*, 54(1), 113–141. <https://doi.org/10.1111/crim.2016.54.issue-I/issuetoc>
- Ray, V. (2019). A Theory of Racialized Organizations. *American Sociological Review*, 84(1), 26–53. <https://doi.org/10.1177/0003122418822335>
- Rehavi, M. M., & Starr, S. B. (2014). Racial disparity in federal criminal sentences. *Journal of Political Economy*, 122(6), 1320–1354. <https://doi.org/10.1086/677255>
- Rocque, M., & Paternoster, R. (2011). Understanding the antecedents of the school-to-jail link: The relationship between race and school discipline. *Journal of Criminal Law and Criminology*, 101(2), 633–665. <http://pier.econ.uperm.edtj/>
- Rosenmerkel, S., Durose, M., & Farole, D. (2009). *Felony Sentences in State Courts, 2006 –*

- Statistical Tables*. <https://bjs.ojp.gov/content/pub/pdf/fssc06st.pdf>
- Rosino, M. L., & Hughey, M. W. (2018). The War on Drugs, racial meanings, and structural racism: A holistic and reproductive approach. *American Journal of Economics and Sociology*, 77(3–4), 849–892. <https://doi.org/10.1111/ajes.12228>
- Ross, M. B., Fazzalaro, J., Barone, K., & Kalinowski, J. (2017). *State of Connecticut traffic stop data analysis and findings, 2015–2016*. www.ctrp3.org
- Rossman, S. B., & Zweig, J. M. (2012). *What have we learned from the multisite adult drug court evaluation? Implications for policy and practice*. <https://research2practice.org/news/pdfs/MultisiteAdultDrugCourtEvaluationNADCP.pdf>
- Rottman, D.B. (2005). Trust and confidence in the California courts. Retrieved from https://www.courts.ca.gov/documents/4_37pubtrust1.pdf
- Sacco, L. N. (2018). *Federal support for drug courts: In brief*. <https://crsreports.congress.gov/product/pdf/R/R44467>
- Sampson, R. J., & Laub, J. H. (1997). A life-course theory of cumulative disadvantage and the stability of delinquency. *Developmental Theories of Crime and Delinquency*, 7, 133–161. <https://doi.org/10.4324/9780203793350-4>
- Saum, C. A., & Hiller, M. L. (2008). Should violent offenders be excluded from drug court participation? An examination of the recidivism of violent and nonviolent drug court participants. *Criminal Justice Review*, 33(3), 291–307. <https://doi.org/10.1177/0734016808322267>
- Saum, C. A., Scarpetti, F. R., & Robbins, C. A. (2001). Violent offenders in drug court. *Journal of Drug Issues*, 31(1), 107–128.
- Schlesinger, T. (2005). Racial and ethnic disparity in pretrial criminal processing. *Justice*

- Quarterly*, 22(2), 170–192. <https://doi.org/10.1080/07418820500088929>
- Schlesinger, T. (2007). The cumulative effects of racial disparities in criminal processing. *Journal of the Institute of Justice and International Studies*, 7, 268–278.
- Shaffer, D. K. (2006). *Reconsidering drug court effectiveness: A meta-analytic review* [University of Nevada]. https://etd.ohiolink.edu/apexprod/rws_olink/r/1501/10?clear=10&p10_accession_num=ucin1152549096
- Shaffer, D. K. (2011). Looking inside the black box of drug courts: A meta-analytic review. *Justice Quarterly*. <https://doi.org/10.1080/07418825.2010.525222>
- Sheeran, A. M., & Heideman, A. J. (2021). The effects of race and ethnicity on admission, graduation, and recidivism in the Milwaukee County adult drug treatment court. *Social Sciences*, 10(7), 261. <https://doi.org/10.3390/socsci10070261>
- Shermer, L. O., & Johnson, B. D. (2010). Criminal prosecutions: Examining prosecutorial discretion and charge reductions in U.S. federal district courts. *Justice Quarterly*, 27(3), 394–430. <https://doi.org/10.1080/07418820902856972>
- Skiba, R. J., Horner, R. H., Chung, C.-G., Rausch, M. K., May, S. L., & Tobin, T. (2011). Race is not neutral: A national investigation of African American and Latino disproportionality in school discipline. *School Psychology Review*, 40(1), 85–107. <https://doi.org/10.1080/02796015.2011.12087730>
- Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *The Urban Review*, 34(4), 317–342. <https://doi.org/10.1023/A:1021320817372>
- Spohn, C. C. (2000). Thirty years of sentencing reform: The quest for a racially neutral sentencing process. *Criminal Justice*, 3, 427–501.

Spohn, C. C. (2015). Race, crime, and punishment in the twentieth and twenty-first centuries.

Crime & Punishment, 44, 49–97.

Stevens, T., & Morash, M. (2015). Racial/ethnic disparities in boys 'probability of arrest and court actions in 1980 and 2000: The disproportionate impact of “getting tough” on crime.

Youth Violence and Juvenile Justice, 13(1), 77–95.

<https://doi.org/10.1177/1541204013515280>

Stringer, R. J., & Holland, M. M. (2016). It's not all black and white: A propensity score matched, multilevel examination of racial drug sentencing disparities. *Journal of Ethnicity in Criminal Justice*, 14(4), 327–347.

<https://doi.org/10.1080/15377938.2016.1187239>

Sutton, J. R. (2013). Structural bias in the sentencing of felony defendants. *Social Science Research*, 42(5), 1207–1221. <https://doi.org/10.1016/j.ssresearch.2013.04.003>

Tapia, M. (2011). Gang membership and race as risk factors for juvenile arrest. *Journal of Research in Crime and Delinquency*, 48(3), 364–395.

<https://doi.org/10.1177/0022427810393013>

Taxman, F. S., Soule, D., & Gelb, A. (1999). Graduated sanctions: Stepping into accountable systems and offenders. *Prison Journal*, 79(2), 182–204.

<https://doi.org/https://doi.org/10.1177/0032885599079002004>

The National Center on Addiction and Substance Abuse at Columbia University. (2000). *No place to hide: Substance abuse in mid-sized cities and rural America*. <http://www.centeronaddiction.org/addiction-research/reports/no-place-to-hide-substance-abuse-rural-America>

- Tonry, M., & Melewsiki, M. (2008). The malign effects of drug and crime control policies on Black Americans. *Crime and Justice*, 1, 1–44. https://scholarship.law.umn.edu/faculty_articles/499/
- Tsai Bishop, E., Hopkins, B., Obiofuma, C., & Owusu, F. (2020). *Racial Disparities in the Massachusetts Criminal System*. <https://hls.harvard.edu/content/uploads/2020/11/Massachusetts-Racial-Disparity-Report-FINAL.pdf>
- Tyler, T.R. (2008). Procedural justice and the courts. *Court Review*, 44(1/2), 26-31.
- Tyler, T.R. & Huo, Y.J. (2002). *Trust in the law: Encouraging public cooperation with the police and courts*. Russel Sage Foundation.
- Tyler, T.R. & Mentovich, A. (2011). Mechanisms of legal effect: Theories of procedural justice. *PHLR Methods Monograph Series*.
- Tyler, T.R., Sherman, L., Strang, H., Barnes, G.C. & Woods, D. (2007). Reintegrative shaming, procedural justice, and recidivism: The engagement of offenders' psychological mechanisms in the Canberra RISE drinking-and-driving experiment. *Law & Society Review*, 41(3), 553-585.
- Unnever, J. D., & Gabbidon, S. L. (2011). *A theory of African American offending: Race, racism, and crime*. Routledge.
- U.S. Census Bureau. (2022). *QuickFacts: United States*. <https://www.census.gov/quickfacts/fact/table/US/IPE120220>
- U.S. Department of Education Office for Civil Rights. (2014). *Civil rights data collection. Data snapshot: School discipline*. <https://ocrdata.ed.gov/assets/downloads/CRDC-School-Discipline-Snapshot.pdf>
- War on Drugs. (2020). In *Encyclopedia Britannica*.

<https://www.britannica.com/topic/war-on-drugs>

- Weinrath, M., Gorkoff, K., Watts, J., Smee, C., Allard, Z., Bellan, M., Lumsden, S., & Cattini, M. (2018). Accessing drug treatment courts: Do age, race or gender matter? *Australian & New Zealand Journal of Criminology*, 51(4), 619–637. <https://doi.org/10.1177/0004865818757586>
- Welch, K., & Payne, A. A. (2010). Racial threat and punitive school discipline. *Social Problems*, 57(1), 25–48. <https://doi.org/10.1525/sp.2010.57.1.25>
- Werb, D. (2018). Post-war prevention: Emerging frameworks to prevent drug use after the War on Drugs. *International Journal of Drug Policy*, 51, 160–164. <https://doi.org/10.1016/j.drugpo.2017.06.012>
- Western, B. (2006). *Punishment and inequality in America*. Russell Sage Foundation.
- Wilson, D. B., Mitchell, O., & MacKenzie, D. L. (2006). A systematic review of drug court effects on recidivism. *Journal of Experimental Criminology*, 2(4), 459–487. <https://doi.org/10.1007/s11292-006-9019-4>
- Wooldredge, J., Frank, J., Goulette, N., & Travis, L. (2015). Is the impact of cumulative disadvantage on sentencing greater for Black defendants? *Criminology & Public Policy*, 14(2), 187–223. <https://doi.org/10.1111/1745-9133.12124>
- Young, D., Usdane, Ma., & Torres, L. (1991). *Alcohol, drugs, and crime: Vera's final report on New York State's interagency initiative*. https://storage.googleapis.com/vera-web-assets/downloads/Publications/alcohol-drugs-and-crime-veras-final-report-on-new-york-states-interagency-initiative/legacy_downloads/1604.pdf

- Yu, M., & Dannerbeck, A. (2020). Who is admitted into a drug treatment court? Comparing Caucasians and African Americans residing in a midwest state. *Ewha Journal of Social Sciences*, 36(2), 133–162.
- Zane, S. N., Welsh, B. C., & Drakulich, K. M. (2016). Assessing the impact of race on the juvenile waiver decision: A systematic review and meta-analysis. *Journal of Criminal Justice*, 46, 106–117. <https://doi.org/10.1016/j.jcrimjus.2016.03.006>