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From Re-Carceration to De-Carceration: An Analysis of Alternative Measures to Recidivism

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From Re-Carceration to De-Carceration: An Analysis of Alternative Measures to Recidivism

by

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Under the Direction of Daniel S. Pasciuti, PhD

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ABSTRACT

Across criminal justice research, there is one key measure that is central to evaluating sentencing policies, rehabilitation programs, and the impact of criminal justice interventions: recidivism. Despite its prevalence, recidivism exhibits alarming inadequacies as a measure of post-release success through methodological inconsistencies, a theoretical misunderstanding of rehabilitation, and the reinforcement of systemic challenges. Relying on it as a success measure greatly impairs effective decision-making within the criminal justice system. In response, scholars have made calls to action to implement criminal desistance as an alternative. Theories of criminal desistance offer a refreshing new perspective on post-release success, focusing on the gradual process individuals undertake toward the cessation of criminal activity and utilizing a wider array of data across multiple life domains. In this exploratory analysis, I create a quantitative measure of criminal desistance and test it against traditional recidivism measures to evaluate its theoretical and quantitative capabilities.

INDEX WORDS: Criminal desistance, Recidivism, Post-release success, Criminal justice, Comparative analysis, Exploratory analysis

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DEDICATION

There is nothing that I have achieved throughout my life that has not been because of my mother. Thank you, Mom, for providing me with so much love and nourishment. Thank you for constantly pushing me and guiding me to make the best decisions for myself. Thank you for supporting me in everything I do. And thank you for being the best mother a son could ask for, love you always. Thank you, also, to my father, sister, and all my incredible friends for giving me motivation, confidence, love, advice, and so much more. No one can succeed alone, and I am forever grateful for the many people I have in my life who have and will continue to help me achieve my dreams.

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1 INTRODUCTION

The United States holds close to 25% of the world's prisoners (Travis et al., 2014). As of 2022, an estimated 5,407,300 persons were under the supervision of adult correctional systems (Buehler & Kluckow, 2024) with over 75 million Americans having an arrest or criminal record of some kind (National Academies of Sciences, Engineering, and Medicine, 2022). The criminal legal system, a term referring to the various institutions, agencies, and official actors responsible for implementing and enforcing criminal law within the United States, has an irrefutable and vast impact on American society (National Academies of Sciences, Engineering, and Medicine, 2022). For this reason, effective research surrounding the criminal legal system is imperative to bringing about necessary change and weakening its grasp on American society.

Despite this pressing need for effective research, the reality of the criminal legal system presents an unsettling paradox rooted in the reliance on one key metric – recidivism. Defined as a relapse into criminal behavior, recidivism is one of the most widely used measures in criminal justice research in terms of ‘success’ – i.e. not returning to criminality (Devers, 2011). Measures of recidivism are central to evaluating sentencing policies, rehabilitation programs, post-release success, and the impact of criminal justice interventions (National Academies of Sciences, Engineering, and Medicine, 2022). However, despite its centrality to criminal justice outcomes, measures of recidivism are methodologically inconsistent, theoretically inaccurate, and tend to reproduce systemic biases. This thesis contends that relying on recidivism as the sole measure of rehabilitative success hinders informed decision-making, mischaracterizes the impact of

incarceration, and contributes to systemic issues within the criminal legal system (National Academies of Sciences, Engineering, and Medicine, 2022).

The concept of recidivism is not just a reflection of individual failure but is deeply tied to the structural dynamics of the prison industrial complex. The focus on recidivism allows the prison system to frame individuals as inherently criminal, rather than addressing the broader social, economic, and racial conditions that lead to repeated incarceration. In this way, the measurement of recidivism presents incarceration as an ongoing necessity by being used as a self-perpetuating mechanism that sustains the prison-industrial complex (PIC), a term that describes the criminal legal system as a profit-driven enterprise made up of a variety of social and political institutions to suit the interests of the state and private corporations (Davis, 2003).

Because of these issues, I argue that it is crucial to explore alternative approaches that offer a more methodologically sound, nuanced and comprehensive understanding of the post-release success. Researchers have pointed to criminal desistance as a promising path, providing a framework that considers the complexity and gradual nature of behavioral change among individuals with a history of criminal conduct (Devers, 2011; National Academies of Sciences, Engineering, and Medicine, 2022). Criminal desistance refers to the process towards the cessation of crime by those with a previous pattern of offending. It is an ongoing process and often involves some false stops and starts. Unlike recidivism, which focuses on negative, binary outcomes and imposes a rigid, unrealistic, and often unforgiving perspective on rehabilitation, desistance prioritizes the examination of the *process* of incremental positive developments across a range of life domains (National Academies of Sciences, Engineering, and Medicine, 2022).

In this thesis, my research question asks how a newly created scale of desistance compares to traditional recidivism measures when evaluating the association between family

structure and criminal behavior following a young adult's first conviction. To begin, I argue that recidivism presents fundamental issues across three key areas: (1) functionally, it perpetuates systemic challenges (including systemic racism); (2) methodologically, it lacks consistency across criminal justice research; and (3) theoretically, it misrepresents the rehabilitative process. To substantiate this argument, I will first define recidivism within the context of the extant literature; then discuss the origins and history of policing within the United States to elucidate its link to systemic racism, then examine how recidivism is used across research, and finally analyze theories of post-release success and how other measures better encapsulate these theories.

This study is an exploratory analysis that seeks to quantitatively test possible alternatives to recidivism and answer the question of whether there are better measures available within the current data the field collects. Using data from the National Longitudinal Survey of Youth 1997-2010, I plan to create, evaluate, and compare a scale of criminal desistance to a traditionally created recidivism metric. This research into alternative measures aims to enrich our understanding of post-release success as well as align with a more just and humane vision of the criminal legal system. This shift fosters social reintegration, supports prison abolition, and contributes to a more equitable society.

2 LITERATURE REVIEW

2.1 What is Recidivism

Since the 1960s, recidivism has been one of the most widely used measures in criminal justice research (National Academies of Sciences, Engineering, and Medicine, 2022).

Recidivism, referring to the relapse into criminal behavior, attempts to measure the likelihood that previously incarcerated individuals will re-offend and possibly be reconvicted or incarcerated (National Academies of Sciences, Engineering, and Medicine, 2022). Recidivism is used to evaluate the outcomes of the criminal legal system. However, the specific uses of the measure range from program evaluation to program monitoring, performance measurement, research on post-release success, and forecasting prison populations (National Academies of Sciences, Engineering, and Medicine, 2022).

The impact of recidivism, a measure that is foundational in criminal justice research, cannot be understated. In the last 60 years, incarceration in the U.S. has yielded unprecedented growth, housing nearly a quarter of the world's prisoners within its borders. Almost 1 in every 100 adults in the U.S. is currently imprisoned, which is five to ten times higher than rates in similar democracies (Travis et al., 2014). Most notable, however, is the disproportionate impact incarceration has had on Persons of Color, especially Black men. During the rise of mass incarceration, Black people were about six to seven times more likely than white people to be incarcerated (Western & Muller, 2013). Furthermore, Black women, despite making up a small percentage of the total prison population, have experienced the greatest rise in incarceration, increasing by a staggering 78% from 1990 to 1995 (Davis, 2003). While Black incarceration has fallen somewhat from its peak in 2002, where 1 in 3 Black men would be incarcerated during their life, today to 1 in 5 are still likely to be incarcerated during their life (Robey et al., 2023).

Additionally, American Indians and Latinos are incarcerated at 4.2 times and 2.4 times the rate of whites, respectively (Ghandnoosh, 2023).

Research conducted on the Criminal Legal System is crucial in improving the lives of the 2.2 million adults currently caught within its grasp (Travis et al., 2014). The use of recidivism to evaluate the success of the criminal justice system and the success of individuals after their release poses a systemic issue; the measure used to evaluate one of the largest institutions in America is, at its core, deeply flawed. The consequences of this predicament encapsulate years of misinformed policy decisions regarding sentencing and the creation and maintenance of educational, rehabilitative, and reentry programs (King & Elderbroom, 2014).

2.2 Historical Context

2.2.1 Origins of Modern-Day Policing

The commonly taught history of policing in the United States begins with the establishment of the London Metropolitan Police Service (MPS) in 1829. This is seen as the model for modern police forces in the U.S. MPS broke from earlier forms of law enforcement, such as constabularies and night watches, to form an organized creation of police forces in response to the rapid and diverse population growth in urban centers (Brucato, 2020).

Criminologists often discuss this historical trajectory of policing and punishment through the identification of four major eras; (1) political era, (2) reform era, (3) community-based policing era, and (4) the emerging intelligence-based policing (Treverton et al., 2011). This Eurocentric narrative takes on a race-blind approach, disregarding the foundational role ethnicity and race has played in the development of the Criminal Legal System (Brucato, 2020).

Ben Brucato (2020) argues for a heterodox history of policing that must “center an analysis of racial capitalism, and to account for the role police have played in constructing race

itself as well as in racialized class formation and class control” (Brucato, 2020, pg. 119). This history begins over a century before the establishment of the MPS with the foundation of the first slave patrols in the south. By 1837, the Charleston slave patrol had nearly 100 members, far more than any northern police force had at the time (Walker & Katz 2018). These patrols were created in response to concerns about slave revolts and runaway slaves, marking them as the first modern police forces in the U.S (Brucato, 2020). Slave patrols continued to grow and target Black people by relentlessly enforcing slave codes, checking documents, catching runaways, and guarding against slave revolts until the end of the Civil War where they evolved into militias during Reconstruction (Durr, 2015).

During this time, a major shift occurred in the way in which the world viewed and implemented punishment as a means of social control. Sociologist and leading proponent of prison abolition, Dr. Angela Davis, writes:

Imprisonment itself was new neither to the United States nor to the world, but until the creation of this new institution called the penitentiary, it served as a prelude to punishment. People who were to be subjected to some form of corporal punishment were detained in prison until the execution of punishment. With the penitentiary, incarceration became the punishment itself (Davis, 2003, pg. 26).

In the post-Civil War South, as reconstruction began, the ramifications of emancipation took root in penal punishment. In other words, white elites turned to this newly envisioned “penitentiary” as a way to continue to subjugate and extract labor from Black Americans and “legally” circumvent the 13th amendment. Criminality was increasingly linked to race, providing the basis of the Jim Crow era which codified racial segregation by law (Byfield, 2019). During this time, the post-slave-patrol militia transitioned into more organized police units (Durr, 2015).

By criminalizing Black and Brown bodies, the South was able to transition from enslavement to the new Convict Lease System, which sentenced individuals convicted of a crime to forced labor, into a new system that allowed for the extraction of low-cost, unregulated labor (Davis, 2003). Before 1865, 99% of prisoners within Alabama were white, yet the following decade saw a significant shift towards a majority Black population within prisons (Davis, 2003).

Police units continued to proliferate throughout the course of the Jim Crow era, lasting until the signing of the Civil Rights Act of 1964 (Byfield, 2019). While segregation and discrimination were no longer “legal,” police forces continued targeting Black and Brown neighborhoods. At the same time, the government began increasingly pushing tough on crime rhetoric and greatly increased spending on prisons and police, leading to the rise of mass incarceration in the 1970’s and onward (Alexander, 2010). During this boom in incarceration, African Americans were about six to seven times more likely than whites to be incarcerated (Western & Muller, 2013). As a result of mass incarceration, the racial composition of the penal system, over time, nearly reversed from its longstanding white majority, turning to a 60% majority of Black and Hispanic individuals by 2011 (Travis et al., 2014). Today, nearly a third of young Black men have been entrapped within in the criminal justice system, either behind bars or on probation or parole (Roberts, 2004). These rates are so high that Black men born since the beginning of mass incarceration are more likely to have served time in prison than to have completed college with a four-year degree (Travis et al., 2014).

2.2.2 Recidivism and Systemic Racism

Today, the criminal legal system in the United States is a complex network of institutions that aligns the interests of the state, private corporations, and elites, facilitating the perpetual extraction of capital through the criminalization and incarceration of Black and Brown bodies

(Davis, 2003). This phenomenon is encapsulated in the concept of the prison industrial complex (PIC), which helps frame the criminal legal system as a profit-driven enterprise founded upon the exploitation and subjugation of minority populations in the same way its predecessor, enslavement, did (Davis, 2003). The implicit drive for profit is clear through the framework of the “growth machine” (Logan & Molotch, 1987). In this sense, stakeholders like private prison corporations, construction firms, and local economies reliant on prisons create an ecosystem that profits from increased incarceration, i.e., ‘the carceral growth machine’. Thus, the current state of the prison system is marked by an endless cycle of growth, extracting its profits largely through Black and Brown bodies (Wacquant, 2001). Understanding how the PIC evolved out of enslavement and how it functions within society becomes clear through the intersection of two key theoretical frameworks: systemic racism and racial capitalism.

Systemic racism describes the structural presence of racism built into the very fabric of society. It goes beyond individual prejudice, operating through laws, policies, and practices that disproportionately affect marginalized racial groups, particularly Black and Brown communities. Systemic racism also highlights the interplay between institutions that create a racialized social order that is ongoing, dynamic, and normative (Bonilla-Silva, 1997). Pairing this framework with Black Marxism elucidates the realities of racial capitalism. Building on the work of W.E.B. Dubois, Cedric Robinson (2019) argues the "tendency of European civilization...not to homogenize [groups of peoples] but to differentiate" — differentiation which led to racial hierarchization and, consequently, exploitation, expropriation, and expatriation. American racial formations began through the extraction of free labor through enslavement (Davis, 2003; Robinson, 2019). After the abolition of slavery, racial capitalism needed new ways to exploit

Black labor, and the criminal legal system became a key tool for maintaining racial hierarchies (Davis, 2003).

Through the criminalization of Black and Brown bodies, the legitimization of racism through science, the codification of racism into law, and normalization of racism into social practices, a self-perpetuating system of oppression was created. In other words, today, the PIC is arguably the most prominent tool of racial inequality within the U.S. through mass incarceration (Van Cleve & Meyers, 2015).

2.3 Understanding Recidivism

Recidivism, a measure thought to be integral to researching post-release success, is often measured and used as a tool to justify the continued expansion of the prison system (Alexander, 2010; Klingele, 2019). The concept of recidivism is not just a reflection of individual failure but is deeply tied to the structural dynamics of the prison industrial complex. The focus on recidivism allows the prison system to frame individuals as inherently criminal, rather than addressing the broader social, economic, and racial conditions that lead to repeated incarceration. In this way, the measurement of recidivism becomes a self-reinforcing mechanism that sustains the PIC by presenting incarceration as an ongoing necessity (Davis, 2003).

Moreover, the focus on recidivism aligns with the economic interests of the prison-industrial complex (the carceral growth machine). By emphasizing individual behavior, this obscures the systemic forces - such as the intersections between racial capitalism, poverty, and lack of access to education or healthcare - that drive recidivism, reinforcing the PIC's control over marginalized communities.

2.3.1 How Is Recidivism Measured?

While there is significant variety in the ways in which recidivism is measured within criminal justice research, one constant is that recidivism is always quantified as a binary variable. This means that, statistically, recidivism is reported as either a 0 or a 1, with 0 meaning the individual did not recidivate and 1 meaning the individual did recidivate. What actually constitutes an individual “recidivating” is, however, less consistent. Researchers, depending on the scope of their study, use different criteria to define a recidivism event including rearrest, reconviction, and reincarceration (e.g., Gehring, 2000; Jancic, 1998; Travis et al., 2014; National Academies of Sciences, Engineering, and Medicine, 2022).

Table 1 Recidivism Measures

Major Aspects	Definition/Measurement	Different Versions/Variations
Definition of Recidivism	Refers to an individual’s return to criminal behavior after prior involvement with the system.	<ul style="list-style-type: none"> - Re-arrest - Re-conviction - Re-incarceration - Parole/probation revocation (technical or new offense violations)
Data Sources	The origin of the information used to measure recidivism.	<ul style="list-style-type: none"> - Self-reported data: Collected via surveys or interviews; may capture unreported crimes but is prone to recall bias. - Administrative data: Derived from official criminal justice records; reflects formal system interactions but can include measurement errors.
Follow-Up Periods	The time frame over which recidivism is tracked.	<ul style="list-style-type: none"> - Short-term (e.g., 6 months) - Medium-term (e.g., 1–3 years) - Long-term (e.g., 5+ years)
Type of Offense Measured	Specifies which types of offenses or violations count toward recidivism.	<ul style="list-style-type: none"> - Any crime - Specific crimes (e.g., violent offenses, property crimes) - Technical violations (e.g., missing probation meetings, failed drug tests)

Rearrest is understood as a new arrest that occurs after a criminal conviction, reconviction occurs when an individual is found guilty of a new criminal offense, and reincarceration is defined as the recommitment of an individual back into custody. Additionally, each of these commonly used measures of recidivism can be further specified into subgroups depending on the theoretical need (National Academies of Sciences, Engineering, and Medicine, 2022).

Another important factor in defining a recidivism metric is the follow-up period. This period, or the time between an individual's release from custody and the recidivist event, is an important aspect of recidivism research. Similarly, to the other defining characteristics of recidivism, the length of follow-up varies drastically from study to study, typically ranging anywhere from one to ten years. The exact length of the follow-up period is determined by each study's budget, feasibility and outcome aims (National Academies of Sciences, Engineering, and Medicine, 2022). However, a three-year follow-up is most common, which itself may be a concern as it may not actually be enough time to capture a recidivism event (National Academies of Sciences, Engineering, and Medicine, 2022).

The last major factor within a recidivism metric is the source of the data. Recidivism research typically pulls from either administrative data or self-report data, with administrative being the most common. Administrative data derived from the operational databases of criminal legal agencies (National Academies of Sciences, Engineering, and Medicine, 2022). An important factor of this data is that it only reports direct interactions between individuals and the criminal legal system, which is distinctly different from unreported criminal behavior (National Academies of Sciences, Engineering, and Medicine, 2022). Self-report data, on the other hand, is

typically a more accurate measure of criminal behavior, but is more difficult to obtain and can suffer from recall bias (National Academies of Sciences, Engineering, and Medicine, 2022).

2.3.2 Critiques of Recidivism

One of the major challenges for recidivism measures is the fundamental lack of understanding of the rehabilitative process. Because recidivism is a binary measure, it understands rehabilitation as a singular event. Recidivism decides the success of individuals based simply on whether they were involved in a recidivist event in the given time frame. In reality, however, human behavioral change is a process, full of setbacks and improvements (Klinge, 2019). By characterizing rehabilitation as a singular event, research using recidivism misrepresents post-release outcomes and lacks any sort of nuance about an individual's rehabilitative change (National Academies of Sciences, Engineering, and Medicine, 2022).

In addition to a fundamental misunderstanding, recidivism exhibits great methodological inconsistency. As discussed in section 2.3.1, the criterion for what is considered recidivism, data collection, and follow-up periods can all vary drastically depending on the researchers themselves, the theoretical aims of the study, or the feasibility of various methods (National Academies of Sciences, Engineering, and Medicine, 2022). These discrepancies can lead to confusion and misinterpretation of data, making it challenging to compare outcomes across different settings or to assess the effectiveness of policies and programs aimed at reducing recidivism (National Academies of Sciences, Engineering, and Medicine, 2022).

Moreover, additional challenges arise because of the difficulty of accurately measuring recidivism. Measuring recidivism relies heavily on administrative data which is commonly known to have errors. Administrative data indicates the interaction between an individual and the criminal legal system, which can introduce systematic, non-additive errors (National

Academies of Sciences, Engineering, and Medicine, 2022). In the book *The Limits of Recidivism: Measuring Success After Prison* (2022), the Committee on Evaluating Success Among People Released from Prison writes:

Administrative data may underreport offending and reoffending based on a number of factors, including victims' willingness to report offenses to the police, the rate at which crimes go unsolved, the extent of police presence, and the scope of community supervision. Discretionary policing activities and the intensity of supervision may lead to over-reporting of criminal legal system outcomes relative to underlying offense behavior. Failure to distinguish between a parole revocation that occurs because of a new offense and a technical violation may lead to an overestimate of criminal behavior if violations of supervision, such as drug test failures, are included as criminal behaviors (43).

Recidivism also fails to specify the type of offenses it measures. Researchers can employ any number of constraints on what offenses they include: all crimes, specific crimes, or technical violations (National Academies of Sciences, Engineering, and Medicine, 2022). These decisions can be extremely important as different crimes entail entirely different reasoning, circumstances, decision making, etc. For example, individuals recidivating through a violent offense are unlikely to have the same reasonings for returning to crime as in individual recidivating through a small monetary crime.

Despite these large discrepancies across the various ways in which recidivism is measured, obtained, and operationalized, the metric is often reported devoid of all these necessary details. Moreover, it misunderstands the rehabilitative process and perpetuates the prison industrial

complex. The many limitations and downfalls of recidivism have far-reaching consequences for both policy and practice within the criminal legal system.

2.4 Towards Desistance

In its totality, recidivism is highly unsophisticated, shallow, inconsistent, and inaccurate (Gehring, 2000). By reducing complex behavioral changes to a binary outcome, recidivism-based research often leads to policies that fail to support genuine rehabilitation and reintegration. For instance, the use of recidivism rates as a measure of program success tends to prioritize short-term, punitive interventions over long-term, supportive approaches that address the underlying causes of criminal behavior, such as mental health issues, substance abuse, and socioeconomic instability (Klinge, 2019). Additionally, methodological inconsistencies across studies complicate the comparison of results, resulting in conflicting findings that may mislead policymakers. This inconsistency undermines the ability to evaluate programs and interventions accurately, potentially leading to ineffective or even harmful policies based on flawed data (National Academies of Sciences, Engineering, and Medicine, 2022).

Furthermore, the heavy reliance on administrative data introduces biases that disproportionately affect marginalized communities. Administrative data often reflects discretionary policing practices, heightened supervision in certain communities, and variations in enforcement. Consequently, recidivism measures may overstate criminality among individuals in over-policed communities, reinforcing stereotypes and contributing to a cycle of stigmatization and re-incarceration (National Academies of Sciences, Engineering, and Medicine, 2022). This systemic bias perpetuates racial and socioeconomic disparities within the criminal justice system, as people from marginalized backgrounds are more likely to be classified as “recidivists” due to structural inequalities rather than actual differences in behavior (National Academies of

Sciences, Engineering, and Medicine, 2022). Ultimately, the reliance on recidivism as a primary measure sustains a punitive system that prioritizes control and surveillance over meaningful support, limiting opportunities for individuals to successfully reintegrate and reinforcing the conditions that lead to repeated justice system involvement.

2.4.1 Understanding Desistance

Where does one go from here? An alternative for evaluating post-release success is criminal desistance, which refers to the process of ceasing criminal behavior in an individual who has committed a crime in the past, and theories around desistance seek to understand why and how this occurs (Devers, 2011; National Academies of Sciences, Engineering, and Medicine, 2022). Rather than viewing rehabilitation as a single event like recidivism, desistance tracks minute, positive outcomes across multiple life domains (National Academies of Sciences, Engineering, and Medicine, 2022). Measures of desistance analyze an array of quantitative and qualitative data to give a complete picture of the progress one has made since entering the criminal justice system (Klinge, 2019). Through this deeper understanding, we are better able to understand criminal behavior, giving individuals more grace in working toward social integration and decarceration.

2.4.2 Theories of Desistance

Researchers and theorists suggest that desistance is a process marked by an incremental and multifaceted decline in the rate of offenses as a product of social and developmental processes. Desistance itself is categorized into three subcomponents: De-escalation, deceleration, and cessation. These terms trace the post-release process that involves a reduction in the severity of the crime, a slowing down of the frequency of offending, and/or the eventual stop or “reaching

a ceiling” of criminal activity altogether (Devers, 2011; National Academies of Sciences, Engineering, and Medicine, 2022).

Desistance theories are often closely aligned with developmental and life course theories, both of which seek to understand changes in criminal behavior over time. Life course theories in criminology, for example, examine how individual and environmental factors influence the beginning, continuation, and eventual cessation of criminal activity (Devers, 2011). Unlike traditional criminological theories that focus on why individuals start committing crimes, desistance theories aim to explain how and why individuals stop offending. The frameworks are therefore interwoven, as they both consider stages of the criminal life course from onset to desistance (Sampson & Laub, 1993).

One widely cited approach to desistance is rational choice theory, which proposes that individuals make calculated decisions to refrain from crime based on an assessment of the costs and benefits. Rational choice theory suggests that as individuals mature, the perceived costs of criminal behavior increase - such as losing employment, family relationships, or community respect - leading to decisions to desist (Cornish & Clarke, 1986). This perspective sees desistance as a process driven by rational considerations of personal gain and loss.

Another theoretical approach, learning theory, posits that criminal behavior is learned through interactions with others and influenced by exposure to criminal environments. In terms of desistance, learning theory implies that as individuals change their social environments or are exposed to new, prosocial influences, they can “unlearn” criminal behavior and adopt new norms that encourage law-abiding behavior (Akers, 1998). Desistance from this perspective is

facilitated by shifts in social learning, where individuals increasingly engage in prosocial relationships and environments that reinforce lawful behavior.

The developmental model emphasizes age-related changes and transitions, suggesting that as people age, they undergo natural psychological and social changes that influence their behavior. This model underscores that desistance is part of the broader developmental process, often associated with achieving life milestones like stable employment, marriage, or parenthood, which promote stability and discourage criminal behavior (Farrington, 2003). According to this model, criminal behavior naturally declines as individuals take on adult roles that encourage desistance.

The criminal propensity model (or “static” model) differs from other approaches by proposing that certain individuals possess stable traits that predispose them to crime, regardless of their environment. According to this view, desistance occurs not through significant internal change but rather through the stabilization of behavior over time as external pressures, such as law enforcement or social sanctions, increase (Gottfredson & Hirschi, 1990).

The most influential framework within desistance research is Sampson and Laub’s age-graded theory of informal social control. This theory posits that strong social bonds, such as attachment to family, employment, and community, play a critical role in both the onset and cessation of criminal behavior (Sampson & Laub, 1993). Sampson and Laub’s work demonstrate that certain life events, or “turning points,” such as marriage or stable employment, can create stakes in conformity that increase individuals' commitments to law-abiding behavior. Their model emphasizes that while desistance is influenced by social structure, individual agency and

choice play key roles in how these bonds develop, making desistance a dynamic process (Devers, 2011).

These theories together illustrate the multidimensional nature of desistance, integrating rational choices, learned behaviors, developmental transitions, and social bonds to explain the pathways that individuals take to cease offending (Bushway et al., 2003). Each perspective provides a unique lens on the process of desistance, contributing to a more comprehensive understanding of how and why individuals move away from criminal behavior. Using these frameworks of desistance and life course theories gives us several key domains to the reintegration process. In total, key markers of success include age, educational attainment, employment, housing, mental health, substance use, marriage, and social relationships (National Academies of Sciences, Engineering, and Medicine, 2022).

2.4.3 Creating New Measures

This study aims to develop multiple scaled variables based on a diverse range of data tied to theories and predictors of criminal desistance, with the goal of providing a more positive and accurate reflection of post-prison success. Traditional measures, such as recidivism rates, often present a narrow view of success or failure, missing important aspects of gradual behavioral change and the varied paths individuals take toward reintegration (Klinge, 2019). By incorporating incremental markers of desistance - such as improvements in employment, housing stability, social relationships, and mental health - this study seeks to capture a broader and more meaningful spectrum of post-release outcomes. These measures not only reveal indicators of personal growth but also help to guide supportive, rehabilitative interventions rather than punitive responses (Klinge, 2019).

Additionally, this work addresses critical gaps in current metrics by considering the social and racial disparities deeply embedded in the prison system, aiming to construct measures that account for the inequitable barriers many formerly incarcerated individuals face (King & Elderbroom, 2014). Current recidivism-focused metrics can inadvertently overlook structural disadvantages, such as socioeconomic hardship and systemic discrimination, which disproportionately impact individuals from marginalized communities. By including factors that reflect these realities, the study's desistance-focused scale provides a more equitable approach to evaluating reentry success, offering insights into the challenges and progress made by individuals navigating reentry in the context of broader social inequities (King & Elderbroom, 2014).

In developing a measure sensitive to the realities of those affected by the prison system, this study also aims to contribute to prison abolition efforts. By moving away from punitive success markers and focusing instead on positive, process-oriented outcomes, this research highlights pathways that can lead to meaningful social integration. A focus on these broader, justice-centered measures underscores a shift towards recognizing and supporting the agency and growth of individuals post-incarceration, ultimately encouraging a rethinking of the metrics and policies that shape responses to reentry (Klinge, 2019; King & Elderbroom, 2014).

2.4.4 Hypotheses

Recall, the research question asks how a newly created scale of desistance compares to traditional recidivism measures when evaluating the association between family structure and criminal behavior following a young adult's first conviction. Through the use of theories of criminal desistance, and traditional uses of recidivism, this study will create a scale of criminal desistance and compare it to a recidivism metric based on re-conviction status, as well as a

recidivism metric based on self-reported criminal behavior. These dependent variables will be used, primarily, to test the association between family structure and the trajectory of criminal outcomes for young adults. To test family structure, variables that report the biological mother's age at birth, as well as the highest educational attainment of the respondent's parents were used. In addition, multiple independent variables were included. The hypotheses below will form the basis of each regression as well as comparative analysis across regressions.

Table 2 Hypotheses

H1	Black people will be most positively correlated with conviction recidivism, followed by self-report recidivism, and then less and/or inversely correlated with desistance.
H2	Self-report recidivism will result in a stronger model fit than conviction recidivism.
H3	Biological mom's age at birth and highest parental educational attainment will be positively correlated with desistance and a stronger association than with either recidivism metric.
H4	Being enrolled in more educational programs will be associated with less recidivism and higher desistance.

3 DATA AND METHODS

3.1 Data

3.1.1 Dataset

This study employs a data set compiled by the United States Department of Justice (DOJ), specifically the Office of Justice Programs' Bureau of Justice Statistics called "Recidivism in the National Longitudinal Survey of Youth 1997." This is a standalone data set, compiled from the National Longitudinal Study of Youth 1997 (NLSY97), was initiated by the United States Department of Labor and part of the National Longitudinal Survey (NLS) series. The NLSY97 is a comprehensive longitudinal collection of data that examines recidivism and criminal behavior among youth as they grow into adulthood in the United States (United States Department of Justice, 2014).

It is based on a nationally representative sample of 8,984 individuals born between 1980 and 1984 and living in the United States. The dataset has 392 variables. At the start of the first round of the survey, participants ranged from 12-16 years old. These same individuals were surveyed annually for 13 years (1997-2009). The NLSY97 cohort has two independent probability samples: a cross-sectional sample and an oversample of Black and/or Hispanic or Latino respondents. The oversampling was done to ensure enough Black and Hispanic respondents to carry out robust statistical analyses. As the DOJ states: "The NLSY97 cohort was selected in two phases. In the first phase, a list of housing units for the cross-sectional sample and the oversample was derived from two independently selected, stratified multistage area probability samples. This ensured an accurate representation of different sections of the population defined by race, income, region, and other factors. In the second phase, subsamples of

the eligible persons identified in the first phase were selected for interview” (United States Department of Justice, 2014, pg. 1).

This data set is divided into two separate versions. The second version includes data from rounds 1-7 and 9-13 only for the 2977 individuals in a subsample who were asked self-reported illegal activity questions starting in round 8. For this study, I utilized the second version because it reports adult criminal behavior up to the age of 25. Additionally, the data in the second version has variables constructed as age-based – i.e. year turned 18; year turned 19, etc.

3.1.2 Variable Construction

Each variable within this study was heavily modified during the coding process for two key reasons. Firstly, the overall research goal was to create a measure that can effectively replace recidivism in current research. Therefore, variables must be operationalized in a similar way as they would in more traditional recidivism research. The key contributor to this recoding was the level of analysis of the study. Although this study is longitudinal, I have conducted a cross-sectional analysis to match existing recidivism research (National Academies of Sciences, Engineering, and Medicine, 2022). To accomplish this, multi-year variables were combined into single variables that denote the “progress” each individual made in the frequency of said behavior through an applied ranking system.

To facilitate a comparison to traditional recidivism research, this study seeks to understand the change in criminal behavior of young American adults over the course of 3 years following their first conviction. In the case of this study, conviction was chosen to be the starting point for two reasons: too few respondents were ever incarcerated through the course of this study and arrest data is known to be heavily biased as it does not prove guilt (National

Academies of Sciences, Engineering, and Medicine, 2022). Additionally, 3 years has been chosen as the given time frame due to its commonality in past recidivism research.

To code the data, an observation period for each individual had to be decided. Because of the limited sample size, observation periods could not be the same age range for every individual. Therefore, I identified every respondent's age at first conviction and coded them into groups (referred to as first conviction groups) that captured the three years following each individual's first conviction. These groups were limited to individuals who had their first conviction between the ages of 17 and 22, meaning there were 6 different groups, each with a different 3 years of observation. 17 was the youngest year an individual could be considered an adult during the 3-year observation period and 22 was the latest age that still had 3 recorded years of data available to analyze. Of the original 2977 individuals in version two of NLSY97, only 976 met this criterion. The goal for each age-based variable was to create a final variable that noted the change in behavior over the 3-year observation period. To accomplish this, each behavioral change variable had to be coded separately for each first conviction group and then combined into one final variable.

3.1.3 Dependent variables

This study creates and tests 3 dependent variables: a scale of criminal desistance, recidivism derived from self-reported criminal activity, and recidivism derived from conviction status. To properly compare each dependent variable to each other, each regression included the same variables. However, because the desistance scale combines a number of variables that recidivism does not, these variables had to be extracted and used as independent variables in the recidivism regressions. Because of the different uses, some of these variables had to be coded

slightly differently for each regression, which will be explained in more detail in the following sections.

3.1.3.1 Desistance

The goal of the desistance scale is to create a variable that measures the rehabilitative progress of an individual, rather than simply reporting the criminal behavior. Because of this, the scale combines self-reported criminal activity along with important desistance predictor variables marriage, employment, substance abuse, as well as carrying a firearm. To optimize this scale's interpretability, each variable was coded in a negative to positive range, with negatives always coded as regression in rehabilitative progress and positives as an improvement in progress. When combined, the scale becomes a larger range that when read, gives a nuanced view of each individual's trajectory at the end of an observation period.

The variables of substance abuse and firearm usage, including alcohol, marijuana, hard drugs, were all recoded. These metrics were annually collected, self-reported binary variables that stated that an individual either did or did not participate in that specific behavior. Because all of these variables were coded in the same way, I will explain the coding of alcohol usage to provide an understanding of the process applied to all variables. Firstly, alcohol usage for every age was recoded as a -1 if the behavior was reported and a +1 if they did not participate in the behavior. Then a variable was created that totaled the alcohol usage for the 3 years following the age at first conviction. This created a final variable that scored each respondent on a range of -3 to +3, with -3 meaning they drank alcohol every year after conviction and +3 meaning they did not drink alcohol at all after conviction. This process was carried out for every conviction age group creating 6 alcohol behavior variables that were then combined into the final variable which simply measures the change in alcohol consumption during the observation period.

Marital status was also used as a key metric within this study. This variable was coded on a range of -1 to +1 with -1 meaning the individual was divorced over the three years, 0 meaning they had no change in marital status (never married or stayed married), and +1 meaning they were married over the three years. Additionally, a variable on the average number of hours worked per week every year (self-reported) was utilized to analyze employment status. This variable was converted into a scale of -1 (worked less hours than in the previous year), 0 (had no change in the hours worked the year prior), and +1 (worked more hours per week than the year prior). Changes in marital status and change in work status were coded for each conviction group and then combined, just as the previous variables were.

The self-reported criminal behavior variables within this data set include stole under \$50, sold drugs, destroyed property, stole over \$50, committed other property crimes, and assaulted someone. For the desistance scale, these variables were combined to create two new key metrics, change in frequency of criminal behavior and change in crime level. For frequency in criminal activity, the criminal behavior variables were recoded to denote whether an individual has (-1) or has not (+1) committed any self-reported crimes for each year after conviction. The three studied years were then tallied together and measured on a scale of -3 to +3, signifying a range from having continued criminal activity each year (-3) to having ceased criminal activity entirely (+3).

Change in crime level began with designating each criminal behavior as a specific level. A respondent is marked as a 0 if they did not commit a crime that year, a -1 if the only crime they committed was stole under \$50, a -2 if they sold drugs, a -3 if they destroyed property, stole over \$50, or committed other property crimes, and a -4 if they assaulted someone. Each respondent's crime level is determined by the highest level of crime they committed out of all types, meaning if an individual stole over \$50 and assaulted someone, they would be coded a -4.

Crime level is then coded into 2 variables for each first conviction year that measure the change in crime level between their first- and second-year following conviction, and the second and third year. The change is then recoded into -1 if they committed a higher level crime, 0 if they had no change in crime level, and +1 if they committed a lower level of crime. Next, a variable is created for each conviction year that combines the changes in crime level over the three years following first conviction. For example, CHANGECRIMELEVEL17 represents the change in crime level for all cases where FIRSTCONV == 17. The variable runs from -2 to +3, where -2 means someone committed a higher level crime each year after first conviction, -1 means they committed at least one higher level crime, 0 means there was no change in the crime level committed, +1 means they committed at least one lower level crime, +2 means a person committed a lower level crime each year, and +3 means an individual did not reoffend or commit any crime throughout the three years.

To create the final desistance scale, the 8 variables were combined to give a wide array of behavioral activity that signifies progress made towards the cessation of crime. The array includes the change in crime level, change in criminal frequency, change in hours worked per week, change in marital status, change in years carrying a firearm, and change in the usage of alcohol, marijuana, and hard drugs. These variables were all added together as is, meaning they were all weighted based on their specific recodes, with the scale ranging from -14 to +19. A negative value signifies a regression in rehabilitative progress, with -14 signifying a complete regression across all domains. 0 signifies that no progress was made, and a positive number signifies an improvement in rehabilitative progress with a +19 meaning a complete cessation of criminal activity and a perfect score across all other domains.

A factor analysis was completed to test the validity of this scale. Combined, these variables have an eigen value of 2.65326 for factor one and a 1.20677 for factor two, signifying the need for only one factor. A Cronbach's Alpha was then used to test the overall validity, coming to a 0.6435. While a 0.70 is the typical cutoff, this desistance scale maintains a medium level of quantitative validity while also being theoretically strong due to the included variables and was therefore considered valid. As seen in the histogram in *Figure 1*, the scale maintains a high level of normalcy with a mean of 4.113139 and a standard deviation of 7.39108.

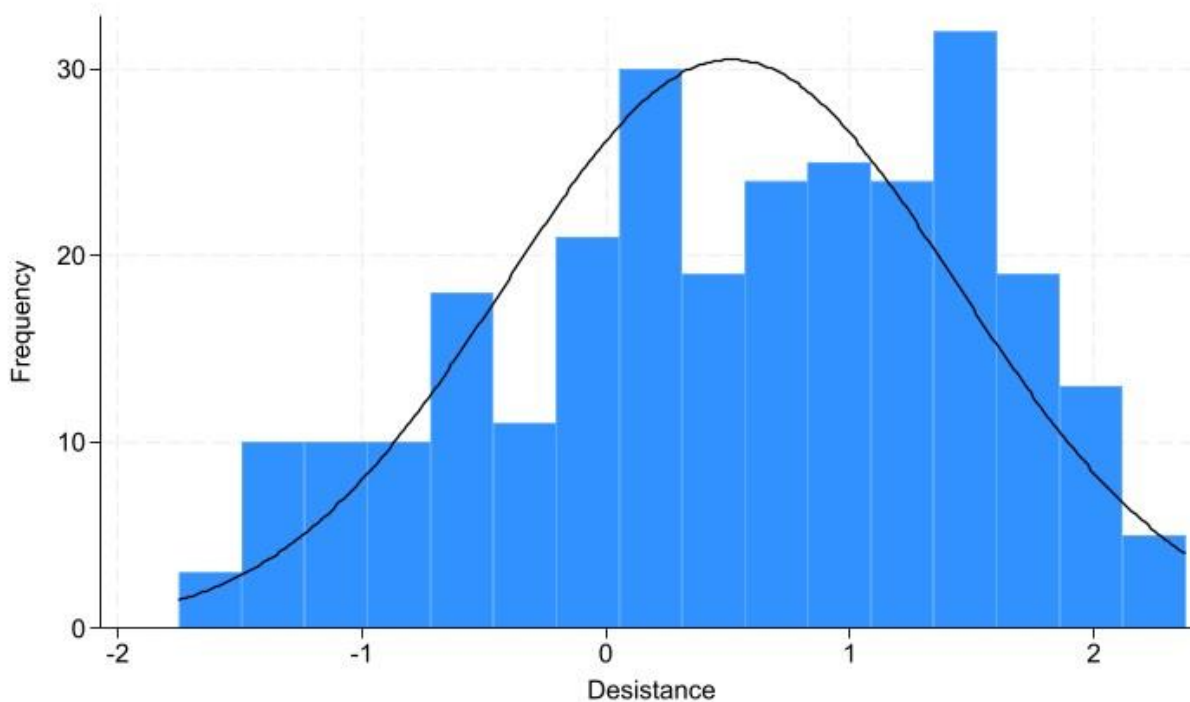


Figure 1 Desistance Histogram

3.1.3.2 Recidivism

This study employs two different recidivism metrics. The first metric uses self-reported criminal activity so that a better comparison can be made directly to desistance, which also employs self-report data. The second metric utilizes re-conviction status. Conviction status was

chosen since arrest data does not prove guilt, and incarceration data excludes minor offenses, which is the basis of most of the self-report crimes. Both recidivism metrics are binary variables which analyze whether someone recidivated in the three years following their first conviction. These variables were coded so that a 0 = did not recidivate and a 1 = did recidivate. For self-report data, a 1 means that an individual self-reported to *any* illegal activity at any point during the observation period. This was created using the criminal frequency variable discussed within the desistance scale. For the conviction-based recidivism metric, individuals who had a reported conviction at any point during the observation period were marked as a 1 and those who did not were marked as a 0.

3.1.4 Independent Variables

Starting with demographic variables, I included race/ethnicity and sex. Sex was coded as either a 0 (male) or 1 (female). Race and ethnicity were originally reported as non-Black/non-Hispanic, Black, Hispanic, and mixed race. However, less than 5 individuals were noted as mixed race, so I removed them from the study leaving only non-Black/non-Hispanic (0), Black (1), and Hispanic (2). The two main independent variables being tested were reporting aspects of the respondent's family structure. Biological mother's age at respondent's birth (interval/ratio (I/R) level variable) and highest parental education between both resident parents (reported as zero through 11th grade of high school (1), graduated from high school (2), some college (3), and college degree or higher (4)) were chosen to suit this purpose. While there were a few other variables available, factors such as missingness and feasibility made them less ideal.

In addition to family structure and demographics, educational enrollment was also used across all regressions. This variable is binary and notes whether an individual was enrolled in any kind of educational program each year, with 0 meaning not enrolled and 1 meaning enrolled.

Each year in the observation period was combined to create a metric that notes whether an individual was never enrolled in an educational program (0), enrolled in one year (1), enrolled in two years (2), or enrolled in three years (3).

As mentioned before, there were a number of variables that were included in the desistance scale that needed to be pulled out and used as independent variables for recidivism to ensure proper comparisons. However, because these variables were originally coded on a negative to positive scale to work with desistance, they had to be recoded as logistic regressions cannot use negative values.

For use of the recidivism regressions, marriage was recoded as a specific change in status: got divorced (1), never married (2), married all 3 years (3), got married (4). If individuals got married and divorced, whichever was the latest change to occur was the one reported (i.e. If someone got married and then divorced, they were reported as got divorced). In addition, average hours worked each week was recoded as 0 = fewer hours worked, 1 = same hours worked, and 2 = more hours worked. The last set of variables, usage of alcohol, marijuana, hard drugs, and whether the individual carried a gun, were all recoded to a 0 if they reported continual/increased frequency of usage and a 1 if they had decreased frequency/no usage.

3.1.5 Missingness

While the data set originally held 2977 individuals, the qualification of having been convicted for the first time between the ages of 17 and 22 resulted in a possible sample size of 976 individuals. Using listwise deletion removed 71.93% of cases, leaving a final $n = 274$. The vast majority of these cases were due to missingness within the self-reported criminal activity variables, as one might expect for a variable of this nature. Missingness was not random, with Black people being overrepresented, people who worked the same hours each year being

overrepresented, and overrepresentation of 0 years of enrollment and under representation of 1 year, and both an over and under representation across multiple substance usage categories. The final sample was Not Missing At Random (NMAR), indicating that any results should not be considered directly comparable to the general population. However, this is an exploratory analysis that seeks to compare measures across diverse theoretical domains, rather than direct application to a specific population. This research does not attempt to make claims about specific populations and therefore does not necessarily require accurate representation.

3.1.6 Univariate Descriptive Statistics

The total n for this study was 274. Of those, the majority were non-Black or non-Hispanic (59.85%) and male (79.93%). Additionally, most respondents were never married during the observation period (89.78%), ended up working less hours per week overall (62.77%) and did not enroll in any educational programs (48.91%). The average respondent's biological mother had them at 24 years old, with the earliest being 14 and latest 40 years old. Educational attainment was relatively equally distributed with the majority graduating high school (36.50%) followed by completing some college (27.37%). Substance use for respondents varied with the continual consumption of alcohol (69.34%) and continual marijuana usage (32.48%) being the most prevalent. However, 27.37% of individuals did not use marijuana. Hard drugs were largely unused (62.77%) or a decreased frequency of usage (22.26%). Similarly, the majority of participants never carried a gun during the observation period (79.93%).

Regarding the dependent variables, very different stories are told by each option. When considering our desistance scale, we observe the average respondent received a 4.11, indicating slight progress towards the cessation of crime through an improvement in lessening criminal activities and behaviors. Regarding recidivism based on self-report data, nearly 60% of

individuals found themselves returning to crime, suggesting little to no progress towards rehabilitation having been made by most respondents. Finally, recidivism based on conviction data suggests the opposite, with nearly 60% having *not* recidivated, suggesting a more successful rehabilitative outcome.

Table 3 Descriptive Statistics

Independent Variables						Dependent Variables			
Race And Ethnicity		Change in hours worked per week		Years of enrollment in an education program		Hard drug usage		Desistance	
Not Black/Not Hispanic	59.85%	Worked less	62.77%	0	48.91%	Continual usage	6.93%	Range	-14 to +19
Black	21.17%	Worked the same	4.74%	1	23.36%	Increased frequency	8.03%	Mean	4.11
Hispanic	18.98%	Worked more	32.48%	2	16.42%	Decreased frequency	22.26%	Std Dev.	7.39
				3	11.31%	No usage	62.77%		
Sex		Bio-mom's age at R's birth		Frequency of carrying a firearm		Alcohol consumption		Recidivism (Self-Report)	
Male	79.93%	Range	14 to 40	Always carried firearm	1.82%	Continual consumption	69.34%	Did not recidivate	40.51%
Female	20.07%	Mean	24.78	Increased frequency	4.38%	Increased frequency	16.42%	Did recidivate	59.49%
		Std Dev.	5.08	Decreased frequency	13.87%	Decreased frequency	7.66%		
				Never carried firearm	79.93%	No consumption	6.57%		
Change in marital status		Highest parental education		Marijuana usage				Recidivism (Conviction)	
Got divorced	2.19%	Less than high school	20.80%	Continual usage	32.48%			Did not recidivate	58.76%
Never married	89.78%	Graduated high school	36.50%	Increased frequency	22.26%			Did recidivate	41.24%
Married all 3 years	1.82%	Some college	27.37%	Decreased frequency	17.88%				
Got married	6.20%	College degree or higher	15.33%	No usage	27.37%				

N= 274

3.2 Methods

3.2.1 Regressions

To evaluate the quality of the newly developed desistance scale, an Ordinary Least Squares (OLS) regression analysis was conducted. OLS regression is widely used in social science research for its ability to estimate the linear relationships between a continuous dependent variable and one or more independent variables (Darlington & Hayes, 2017; Sirkin, 2006). In this study, the desistance scale serves as a continuous dependent variable designed to quantify an individual's behavioral and attitudinal shift away from criminal activity, capturing nuanced changes over time that traditional recidivism measures may overlook.

A stepwise regression approach was applied to iteratively test and refine four models, allowing for a systematic assessment of which independent variables most significantly predict desistance. Stepwise regression is a valuable tool in this context, as it sequentially includes or excludes variables based on statistical criteria, thereby enhancing model interpretability and ensuring that only meaningful predictors are retained (Field, 2017). This method aids in isolating key factors contributing to desistance, as it provides insights into the strength and significance of each predictor, ultimately refining our understanding of variables that influence successful reintegration into society (Poston, Conde, & Field, 2023).

For the recidivism variables, a binomial logistic regression was employed, as both recidivism measures (self-report and conviction) are binary outcomes. Logistic regression is particularly suited for dichotomous dependent variables and models the probability of an event occurring, such as a criminal relapse, based on the values of independent variables (Menard, 2010). This method enables the calculation of odds ratios, allowing for an interpretation of how each predictor affects the odds of recidivism while holding other factors constant. Using odds

ratios provides a straightforward measure of association that is widely understood in sociological research, making it an effective tool for evaluating recidivism outcomes (Sirkin, 2006).

3.2.2 Assumptions

All assumptions necessary for both the OLS and Binary Logit regression analyses were rigorously tested and met. For the OLS regression, key assumptions such as linearity, normality, homoscedasticity, and the absence of multicollinearity were confirmed through diagnostic plots and variance inflation factors (VIF) (Agresti & Finlay, 2018). For Binomial Logit regression, a binary dependent variable was used, linearity in the logit for continuous predictors, independence of observations, and the absence of perfect multicollinearity were similarly satisfied. Diagnostic measures, such as Cook's distance, were applied to address potential influential cases (Menard, 2010). These steps ensure the validity and interpretability of the regression models, adhering to established guidelines in statistical methodology.

3.2.3 Model Fit Statistics

For evaluating the fit of the Ordinary Least Squares (OLS) regression models, R-squared and the F-statistic were used. R-squared is a widely accepted measure of model fit that indicates the proportion of variance in the dependent variable explained by the independent variables (Darlington & Hayes, 2017; Sirkin, 2006). R-squared values range from 0 to 1, with values closer to 1 suggesting a better model fit, as a higher percentage of variance in the dependent variable is accounted for by the predictors. R-squared was chosen for its interpretability in assessing overall model quality and in comparing the explanatory power of different OLS models in this study. However, it is essential to note that R-squared may increase with additional variables, even if they do not significantly improve the model, highlighting the importance of careful variable selection (Poston, Conde, & Field, 2023).

The F-statistic evaluates the overall significance of the model by testing whether at least one predictor variable has a statistically significant association with the dependent variable. Unlike R-squared, which solely assesses the proportion of explained variance, the F-statistic considers the probability that the observed fit could have occurred by chance. A significant F-statistic indicates that the regression model provides a better fit than a model without predictors (Darlington & Hayes, 2017). Including the F-statistic ensures that each OLS model not only accounts for variance but does so in a statistically meaningful way, allowing for more confident inferences about model strength.

For logistic regression models, McFadden's R-squared and the chi-squared (X^2) statistic were employed to assess model fit. McFadden's R-squared is an alternative to R-squared in logistic regression, designed to account for the nonlinear relationship between predictors and a binary outcome. It is calculated based on the likelihood ratio, comparing the log-likelihood of the fitted model against a model without predictors. McFadden's R-squared typically yields lower values than traditional R-squared in OLS, yet it remains an appropriate measure of fit for logistic models, with values between 0.2 and 0.4 often considered a good fit (Poston et al., 2023). McFadden's R-squared was selected to evaluate how well each logistic model explains variance in the binary outcome, enabling meaningful comparison across models.

The chi-squared statistic in logistic regression is used within the likelihood ratio test to evaluate the model's overall fit, specifically testing whether the inclusion of predictors significantly improves the model compared to a baseline model without predictors. A significant chi-squared value suggests that the predictors collectively contribute to explaining variation in the outcome variable. Including the chi-squared test allows for assessment of the statistical

significance of the model fit, ensuring that each logistic model's predictive value is not a result of random chance (Sirkin, 2006; Poston et al., 2023).

4 RESULTS

4.1 Comparative Analysis of Descriptive Statistics

When we compare the average outcomes of race by sex, as outlined in *Figure 2*, we can see very different stories arise. *Figure 2* employs the percentage recidivated in the left graph and the mean desistance value on the right graph and breaks descriptives down to race/ethnicity and gender. Recall *Table 3* in which, on average, nearly 60% of individuals found themselves *returning* to crime when looking at self-report data and 60% of individuals having *not* recidivated when looking at conviction date. Additionally, the average person received a desistance score of 4.11. Of those who recidivated through self-report recidivism, the average desistance score was 0.012. Those who recidivated through conviction recidivism averaged 2.381 on the desistance scale.

When analyzing these averages by demographic, the picture becomes much clearer. The most significant result in *Figure 2* is for Black females, who across the board had the lowest recidivism rates and highest desistance score. However, this demographic only consisted of 5 individuals, so results for Black females may not be broadly applicable. Similarly, the demographic for Hispanic females was 7, but the equal self-report and conviction averages (42.86% for both) were starkly different than the other demographics.

When comparing Black males and non-Black/non-Hispanic males, we see similar recidivism rates, but significantly different desistance scores. With Black men at 5.43 and non-Black/non-Hispanic men at 3.22, the data suggest black men, on average, made much more progress towards rehabilitation, which was not detectable based on recidivism rates. When comparing non-Black/non-Hispanic men to Hispanic men, recidivism (53.33% & 71.11%) shows a much higher persistence of crime than non-Black/non-Hispanic males (40.50% & 60.33%).

However, based on desistance scores, the two demographics are nearly identical (3.35 & 3.22 respectively). This suggests that with regard to domains outside of criminal behavior, non-Black/non-Hispanic males are doing notably worse than are Hispanic men.

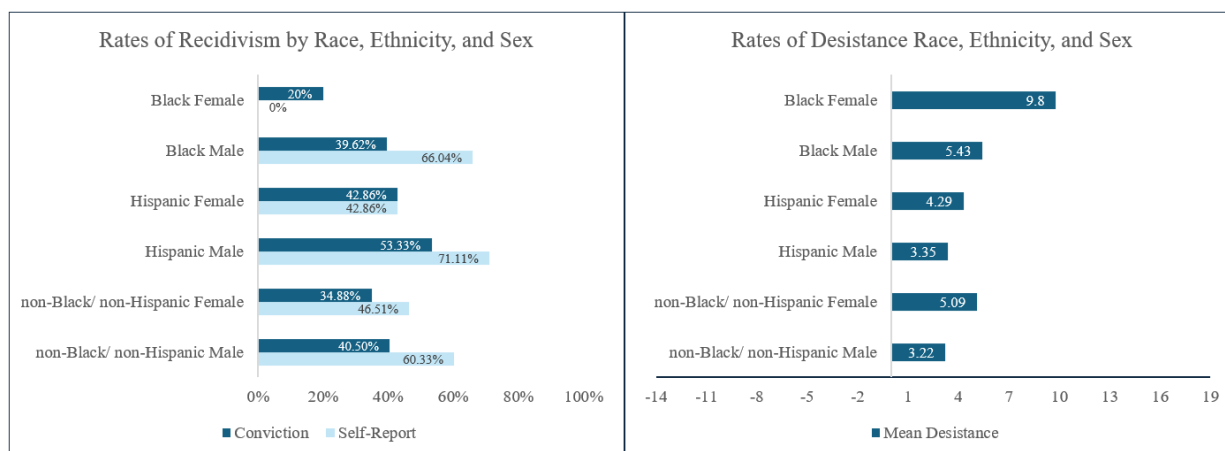


Figure 2 Univariate Analysis of Dependent Variables by Demographics

4.2 Desistance Model Analysis

Models in *Table 4* were built using a stepwise approach. Variables were added sequentially to each model, beginning with demographic variables, in model 1, Adding parents' educational attainment in model 2, then biological mom's age at birth in 3, and finally education in model 4. In the end, model 4 was chosen as it had the highest R-squared (0.0299) of all the models, the only significant F-statistic, and included all theoretically desired variables. While the R-squared suggests the model can only explain 2.99% of variation within the dependent variable, this is expected as most traditional predictors of recidivism were incorporated into the measure of desistance itself.

Across all models, race and ethnicity were significant. Model 4 suggests that there is a significant, positive relationship between desistance and being Black. This suggests that, on

average, Black individuals had a 2.21-point gain in desistance towards the cessation of criminal activity following their first conviction, compared to their white counterparts. Educational enrollment was significantly negatively correlated with desistance, which suggests that any enrollment in an education program results in a regression in rehabilitation. Specifically, a one-year increase in educational enrollment led to a 2.22 decrease in desistance and a two-year increase in educational enrollment led to a 2.49 decrease in desistance. Finally, model 4 also shows a significant negative relationship between biological mother's age at respondent's birth and desistance, where every one-year increase in the mother's age corresponds to a -.18 decrease in desistance. This suggests that the older the mother is, the more regressive their rehabilitative process is.

Table 4 Desistance Models

Variables	Model 1		Model 2		Model 3		Model 4	
	Coef. (b) (p)	Std Error	Coef. (b) (p)	Std Error	Coef. (b) (p)	Std Error	Coef. (b) (p)	Std Error
N = 274								
<i>Race & Ethnicity</i>								
(Non-Black/Non-Hispanic)								
Black	2.4497* (0.032)	1.1381	2.4481* (0.038)	1.1756	2.2752^ (0.053)	1.1702	2.2129^ (0.059)	1.1686
Hispanic	0.0231 (0.984)	1.1763	0.1571 (0.902)	1.2724	0.1367 (0.914)	1.2638	0.4119 (0.746)	1.2684
<i>Sex</i>								
(Male)								
Female	2.0048^ (0.076)	1.1272	1.9248^ (0.093)	1.1411	1.9492^ (0.087)	1.1333	1.7331 (0.129)	1.1381
<i>Highest parental educational attainment</i>								
(Some high school)								
Graduated from high school)			0.7216 (0.573)	1.1411	0.9698 (0.448)	1.2760	0.9815 (0.444)	1.2806
Some college			0.4916 (0.722)	1.3820	0.7372 (0.593)	1.3772	.9130 (0.506)	1.3714
College degree or higher			0.2039 (0.899)	1.6042	0.9331 (0.567)	1.6284	1.2705 (0.438)	1.6345
<i>Biological mother's age at R's birth</i>								
					-0.1949* (0.031)	0.0900	-0.1797* (0.048)	0.0904
<i>Years of educational enrollment</i>								
(0 years)								
1 year							-2.2279* (0.048)	1.1190
2 years							-2.4983^ (0.055)	1.2948
3 years							-1.1053 (0.463)	1.5032
Constant	3.1878		2.7496		7.3469		7.9254	
Adjusted R-Squared	0.0149		0.0053		0.0188		0.0299	
F-statistic	2.38		1.24		1.75		1.84*	
df	1		2		3		4	

a *** p≤0.001; ** p≤0.01; *p ≤0.05; ^ p≤0.10 (two tailed tests).

b Reference groups in parenthesis

4.3 Comparative Model Analysis

To properly compare outcomes across regressions of different dependent variables, it was important that the independent variables were consistent throughout each regression. Therefore, after testing the best fitting model for the desistance scale, I employed the same variables across

both recidivism binomial logit regressions. However, because so many independent variables were built into the desistance scale itself, I extracted those and included them as independent variables in both recidivism regressions, hence the added variables.

Table 5 is a combination of three different regressions, allowing for theoretical comparisons across each regression. Because the dependent variables are changing, and there is variance in the type of regression being employed, it is unreliable to attempt a quantitative comparison, as model fit statistics across OLS and Logistic models are measured in slightly different ways, making direct empirical comparisons not possible.

The self-reported recidivism model features a few notable features. While race is insignificant, unlike the desistance model, sex was significant. Women are 61.78% less likely to recidivate than men. Similarly to desistance, educational attainment was notable. Individuals enrolled in just one year of an educational program during their observation period were 40.70% more likely to recidivate than individuals enrolled in 0 years. All other years were non-significant. Additionally, marijuana and hard drug usage were significant with individuals being 331% and 215%, respectively, more likely to recidivate than non/decreased users. Individuals who continued to carry a firearm were also 458% more likely to recidivate than those who did not, displaying a significant positive relationship between carrying a firearm and recidivating. Finally, there was a significant and highly positive correlation in marital status. Specifically, individuals who were never married over the observation period were 1369% more likely to recidivate than individuals who got divorced.

Within the recidivism measure based on conviction, unlike self-report, there were two marginally significant outcomes within educational enrollment. Individuals enrolled in 2 years of an educational program were 112% more likely to recidivate than those enrolled in 0.

Interestingly, individuals enrolled in 3 years were 57.38% less likely to recidivate than the reference group. The last notable outcome was a significant positive relationship between recidivism and marijuana usage, with those using the substance being 112% more likely to recidivate than those using less/not using at all.

Overall, the self-report regression had a McFadden's R^2 of .214 with the conviction regression at just .084, indicating a much better fit for the self-report regression. Because self-report data is a more accurate representation of true criminal activity, and the fact that the model is quantitatively sounder, I would argue that self-report based recidivism is both theoretically and quantitatively better at measuring recidivism than conviction data. When comparing desistance versus recidivism, it becomes more complicated. Comparison largely revolves around the theoretical arguments of each. I think the most effective component of the desistance scale is its ability to understand nuance. Both recidivism variables only report whether an individual is more or less likely to recidivate over the three-year period due to the independent variable. In contrast, the desistance scale better accommodates more minute changes in criminal behavior and can report aspects not commonly seen in recidivism research. While race was not significant in either recidivism model, in the desistance model, Black people held a marginally significant and positive relationship with desistance, saying that overall, Black people are correlated with higher rehabilitative success.

Table 5 Dependent Variable Comparisons

Variables	Desistance		Recidivism (Self-report)		Recidivism (Conviction)	
	OLS		Logistic		Logistic	
	Coef. (b) (p)	Std Error	Coef. (b) (p)	Odds Ratio	Coef. (b) (p)	Odds Ratio
N = 274						
<i>Race & Ethnicity</i>						
(Non-Black/Non-Hispanic)						
Black	2.2129 [^] (0.059)	1.1686	0.2029 (0.595)	1.2250	-0.2900 (0.423)	0.7483
Hispanic	0.4119 (0.746)	1.2684	0.1254 (0.778)	1.1337	0.3246 (0.390)	1.3834
<i>Sex (Male)</i>						
Female	1.7331 (0.129)	1.1381	-0.961* (0.012)	0.3822	-0.0155 (0.964)	0.9846
<i>Highest parental educational attainment</i>						
(Some high school)						
Graduated from high school	0.9815 (0.444)	1.2806	-0.6565 (0.134)	0.5187	-0.4241 (0.265)	0.6544
Some college	.9130 (0.506)	1.3714	-0.3487 (0.454)	0.7056	-0.5462 (0.181)	0.5792
College degree or higher	1.2705 (0.438)	1.6345	-0.4425 (0.415)	0.6424	-0.5274 (0.283)	0.5901
<i>Biological mother's age at R's birth</i>						
	-0.1797* (0.048)	0.0904	-0.027 (0.359)	0.9731	-0.0326 (0.241)	0.9679
<i>Years of educational enrollment (0 years)</i>						
1 year	-2.2279* (0.048)	1.1190	1.4070*** (0.001)	4.0836	0.0139 (0.967)	1.0140
2 years	-2.4983 [^] (0.055)	1.2948	0.1283 (0.765)	1.1369	0.7519 [^] (0.054)	2.1210
3 years	-1.1053 (0.463)	1.5032	-0.4751 (0.326)	0.6218	-0.8530 [^] (0.093)	0.4262
<i>Alcohol consumption frequency</i>						
(Reduced frequency/no consumption)						
Increased frequency/continual consumption			-0.5132 (0.240)	0.5986	-0.2945 (0.478)	0.7449
<i>Marijuana usage frequency</i>						
(Reduced frequency/no usage)						
Increased frequency/continual usage			1.4613*** (0.000)	4.3114	0.7522* (0.012)	2.1218
<i>Hard drugs usage frequency</i>						
(Reduced frequency/no usage)						
Increased frequency/continual usage			1.1474* (0.025)	3.1500	-0.3083 (0.459)	0.7347
<i>Frequency of carrying a firearm</i>						
(Reduced frequency/none)						
Increased frequency/continual			1.7191* (0.044)	5.5792	0.9368 (0.107)	2.5517
<i>Change in marital status (Got divorced)</i>						
Never married			2.6870 [^] (0.053)	14.6880	1.3480 (0.240)	3.8496
Married all 3 years			2.7075 (0.120)	14.9911	1.3958 (0.347)	4.0382
Got married			2.1238 (0.158)	8.3624	0.8251 (0.518)	2.2820
<i>Change in hours worked per week (Worked less)</i>						
Worked the same amount			-0.7420 (0.284)	0.4762	-0.0638 (0.921)	0.9382
Worked more			-0.1554 (0.627)	0.8561	-0.0964 (0.744)	0.9081
Constant	7.9254			-1.7174		-0.6569
Adjusted R-Squared	0.0299					
F-statistic	1.84*					
McFadden R ²			0.214		0.084	
X ²			79.12		31.13	
df	4		10		10	

^a *** p≤0.001; ** p≤0.01; *p ≤0.05; [^] p≤0.10 (two tailed tests).

^b Reference groups in parenthesis

5 DISCUSSION

5.1 Hypothesis Outcomes

The results of this study display many interesting possibilities using this newly created desistance scale as well as bringing up more questions. To start, we must look back at *Table 2* to assess the support of my original hypotheses. Hypothesis 1 was supported, with desistance being the only variable to have statistically significant results in which it was also correlated with a higher score. This suggests a more progress on average for black people than non-Black/non-Hispanic people. Hypothesis 2 was supported, with self-report recidivism having a much stronger model fit than conviction recidivism, suggesting that self-report data is a quantitatively stronger measure for predicting different post-release outcomes than conviction data. This aligns with theoretical views of the measures as well. Self-report data is known to be more accurate as it captures a fuller extent of criminal behavior, rather than *just* what is actually reported within the criminal justice system.

Continuing, Hypothesis 3 was not supported. Across the board, parental educational attainment was not significantly associated with any dependent variables. For biological mothers age, the only significant result was for desistance which was, however, surprisingly partially correlated with desistance. The results suggest that the older a mother is at respondents' birth, the worse rehabilitative progress the young adult made following their first conviction. This result contrasts with what one might assume the impact of having a young mother may have on their upbringing and could warrant further study in the future.

Finally, hypothesis 4 was also not supported. For one year of educational enrollment, we find significance for both self-report recidivism as well as desistance. For both instances, the single year of education is associated with worse behavioral outcome in comparison to 0 years of

educational enrollment. Similarly, 2 years of educational enrollment is significantly negatively associated with desistance. In contrast, however, 3 years of enrollment is natively associated with conviction recidivism, which suggests a lower likelihood to recidivate in comparison to those enrolled in 0 years. From these results, I might theorize that those who only participated in one or two years did not show a full commitment to education, possibly having dropped out during the observation period. During this time, they may have been more prone to behaviors like substance abuse or committing minor crimes like stealing under \$50 or selling drugs. However, those who were enrolled in educational programs throughout the observation period showed a commitment to it, likely aligning with underlying motivations to better themselves and therefore had fewer run-ins with the law. Another possibility is that those who had the resources to stay enrolled throughout the observation period may have been systemically further from the criminal legal system and had less of a chance of being caught for the crimes they committed, which could explain why the same result wasn't seen in the two other dependent variables.

5.2 Desistance vs. Recidivism

Overall, I think the univariate analysis shows the aptitude of the desistance scale the clearest. Due to data limitations, discussed below, the regressions lacked a variety of significant results, making it difficult to compare. Through the univariate analysis, we can see the scale's ability to show nuance very clearly. *Figure 3* demonstrates this through the differences between different demographics. When looking at recidivism alone, the normal conclusion would be that Hispanic men were far more unsuccessful in rehabilitation than non-Black/non-Hispanic men. In contrast, the desistance scale suggests very similar levels of progress overall in the rehabilitative process for the two demographics. Similarly, when looking at *Table 5*, Black people having a

marginal, positive association with desistance, suggests an increased number of positive behaviors towards rehabilitation in comparison to non-Black/non-Hispanic people.

When comparing these two, it's important to note that recidivism only reports whether an individual re-engaged in crime within a specific time frame. In contrast, the desistance scale gives a measure of progress in rehabilitation over a given time frame. This means that no matter the observation period, desistance gives researchers the ability to make definitive conclusions about individuals' rehabilitation. Through recidivism, these conclusions are merely approximations.

These results demonstrate the fundamental aspect of new this proposed measure; its ability to demonstrate nuance across multiple life domains. This is a feature that recidivism lacks. When analyzing the outcomes of both recidivism measures, the most that *can* be concluded is that a specific variable is significantly associated with higher or lower rates of recidivism. This merely indicates a correlation with increased or decreased instances of criminal behavior or the intersection of criminal behavior and the criminal justice system within a given time frame. Yet from these limited insights we evaluate the effectiveness of rehabilitation programs, justify funding allocations, inform sentencing guidelines, and shape reentry policies (Klinge, 2019; King & Elderbroom, 2014). With a measure such as the created desistance scale, we more adequately account for the nuanced and individualized nature of the rehabilitative process. While this scale has not revolutionized the field or created a measure able to be standardized and applied to other studies, it demonstrates the possibility for testing more nuanced outcomes within rehabilitative research and the underlying tensions between the three measures that all claim to evaluate the same phenomenon.

5.3 Limitations

The greatest limitation in this study, and all criminal justice research, is the data itself. Specifically in this study, there were far too few individuals that could even meet the criteria to join the final sample. Additionally, there was a great lack of other life domain variables, limiting the ability to test different outcomes and predictors. These consist of things such as specific employment records, actual educational attainment, salary, mental health questions, social capital or networks, exposure to community violence, housing stability, familial or community support structures, access to social services, etc. Overall, this had a large effect on the usability of my regressions for proper analysis. The lack of detailed and in-depth data is a major feature of criminal justice research due to inconsistent requirements across federal, state, and local departments as well as an unwillingness to properly fund research.

Going forward, this needs to be the greatest focus within the field. We must fight to get a standardization of administrative data across the US that is not only consistent but looks for data outside the rudimentary items currently collected. To conduct effective research, we need both self-report and administrative data so that we can have a more complete picture of criminal behavior. We should also have far more state-conducted longitudinal studies, allowing for the collection of data on criminal activity as well as a wide array of life outcomes over extended periods of time.

6 CONCLUSION

This study set out to evaluate whether a newly created quantitative desistance scale could offer a more nuanced understanding of post-release success compared to traditional recidivism measures. By comparing outcomes derived from this scale with those from two variations of a recidivism metric, the study assessed the extent to which desistance can serve as a meaningful alternative or complement to recidivism in measuring rehabilitative success. Using OLS and binomial logistic regression models, I examined the predictive factors associated with desistance and recidivism outcomes, highlighting key differences in the indicators and strengths of predictors across these measures.

By using theories of desistance, I have created a quantitative measure that can be used as a replacement for recidivism in future research. The results demonstrate that the desistance scale captures dimensions of post-release behavior overlooked by traditional recidivism metrics. Additionally, the findings reveal significant variability within recidivism itself; the two measures of recidivism used in this study - both established approaches - produced vastly different results. While recidivism provides a binary measure of success based on reoffending, the desistance scale reflects a continuum of behavior change, offering a richer and more comprehensive perspective on post-release trajectories. It denotes individuals' progression toward rehabilitation and can be used to give much better evaluations of rehabilitative programs and sentencing policies.

Despite its promise, the desistance scale is not without limitations. Its generalizability beyond this study remains unclear, and further refinement is needed to develop it into a standardized tool for evaluating rehabilitation outcomes across diverse contexts. The primary constraints were the limited availability of sample-eligible participants and the lack of diverse

life domain variables. Both issues stem from data limitations, underscoring the critical need for more robust criminal justice data collection practices that are both comprehensive and consistent.

Future research would benefit greatly from standardized, longitudinal data that integrates administrative records with self-reported measures. Such datasets would enable a more thorough examination of the multifaceted factors influencing desistance and recidivism. Moreover, increasing the frequency and depth of state-supported longitudinal studies could establish a stronger foundation for evaluating diverse life outcomes, enhancing our understanding of post-release success beyond simple recidivism rates. From there, researchers can work toward developing a range of desistance measures, ultimately identifying one that is both statistically sound, theoretically robust, and tested extensively across multiple studies. Establishing a standardized measure of post-release success would enable more precise research and, in turn, better inform policy and practice.

Ultimately, my greatest hope is to contribute to improving the lives of the millions of individuals impacted by the criminal justice system. Decarceration must be a priority, reducing the hold this institution has over so many lives. Through prison abolition, the possibility of a more equitable future becomes increasingly tangible. As Angela Davis (2003) argues, the prison industrial complex represents a profound instrument of systemic oppression, and its abolition could usher in transformative change. While this study is a preliminary exploration of desistance as a measure of rehabilitative success, it offers promising directions for future research. Expanding this line of inquiry may deepen our understanding of post-release outcomes and inform more effective policies designed to support individuals in their journey away from crime and out of incarceration.

REFERENCES

- Agresti, A., & Finlay, B. (2018). *Statistical methods for the social sciences* (5th ed.). Pearson.
- Akers, R. L. (1998). *Social Learning and Social Structure: A General Theory of Crime and Deviance*. Northeastern University Press.
- Alexander, M. (2010). *The new Jim Crow: Mass incarceration in the age of colorblindness*. The New Press.
- Bonilla-Silva, E. (1997). Rethinking Racism: Toward a Structural Interpretation. *American Sociological Review*, 62(3), 465–480. <https://doi.org/10.2307/2657316>
- Brucato, B. (2020). Policing Race and Racing Police: The Origin of US Police in Slave Patrols. *Social Justice*, 47(3/4 (161/162)), 115–136. <https://www.jstor.org/stable/27094596>
- Buehler, E. D., & Kluckow, R. (2024). *Correctional populations in the United States, 2022 – Statistical tables* (NCJ 308699)*. U.S. Department of Justice, Bureau of Justice Statistics.
- Bushway, S. D., Piquero, A. R., Broidy, L. M., Cauffman, E., & Mazerolle, P. (2003). An empirical framework for studying desistance as a process. *Criminology*, 41(3), 515-548.
- Byfield, N. P. (2019). Race science and surveillance: police as the new race scientists. *Social Identities*, 25(1), 91–106. <https://doi.org/10.1080/13504630.2017.1418599>
- Cornish, D. B., & Clarke, R. V. (1986). *The Reasoning Criminal: Rational Choice Perspectives on Offending*. Springer.
- Darlington, R. B., & Hayes, A. F. (2017). *Regression Analysis and Linear Models: Concepts, Applications, and Implementation*. Guilford Press.
- Davis, A. Y. (2003). *Are prisons obsolete?* Seven stories press.
- Devers, L. (2011). Desistance and developmental life course theories. Research summary.

- Durr, M. (2015). What is the Difference between Slave Patrols and Modern Day Policing? Institutional Violence in a Community of Color. *Critical Sociology*, 41(6), 873-879. <https://doi.org/10.1177/0896920515594766>
- Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). Sage Publications.
- Farrington, D. P. (2003). Developmental and life-course criminology: Key theoretical and empirical issues—The 2002 Sutherland Award address. *Criminology*, 41(2), 221-255.
- Gehring, T. (2000). Recidivism as a Measure of Correctional Education Program Success. *Journal of Correctional Education*, 51(2), 197–205. <http://www.jstor.org/stable/41971935>
- Ghandnoosh, N. (2023). One in five: Ending racial inequity in incarceration. *The Sentencing*.
- Gottfredson, M. R., & Hirschi, T. (1990). *A General Theory of Crime*. Stanford University Press.
- Jancic, M. (1998). Does Correctional Education Have an Effect on Recidivism? *Journal of Correctional Education*, 49(4), 152–161. <http://www.jstor.org/stable/23294070>
- King, R. S., & Elderbroom, B. (2014). Improving recidivism as a performance measure. Washington, DC: Urban Institute.
- Klinge, C. (2019). Measuring Change: From Rates of Recidivism to Markers of Desistance. *The Journal of Criminal Law and Criminology* (1973-), 109(4), 769–817. <https://www.jstor.org/stable/48572943>
- Logan, J., & Molotch, H. (1987). *Urban Fortunes: The Political Economy of Place*. Berkeley: The University of California Press. Chapter 3, “The City as a Growth Machine” (pp. 50-98)
- Menard, S. (2010). *Logistic Regression: From Introductory to Advanced Concepts and Applications*. Sage Publications.

- National Academies of Sciences, Engineering, and Medicine. 2022. *The Limits of Recidivism: Measuring Success After Prison*. Washington, DC: The National Academies Press.
<https://doi.org/10.17226/26459>.
- Poston, D. L., Conde, E., & Field, L. M. (2023). *Applied Regression Models in the Social Sciences*. Cambridge University Press.
- Roberts, D. E. (2004). The Social and Moral Cost of Mass Incarceration in African American Communities. *Stanford Law Review*, 56(5), 1271–1305.
<http://www.jstor.org/stable/40040178>
- Robinson, Cedric J. (2 October 2019). Quan, H. L. T. (ed.). *Cedric J. Robinson: On Racial Capitalism, Black Internationalism, and Cultures of Resistance*. Pluto Press.
- Robey, J. P., Massoglia, M., & Light, M. T. (2023). A generational shift: race and the declining lifetime risk of imprisonment. *Demography*, 60(4), 977-1003.
- Sampson, R. J., & Laub, J. H. (1993). *Crime in the Making: Pathways and Turning Points Through Life*. Harvard University Press.
- Sirkin, R. M. (2006). *Statistics for the Social Sciences*. Sage Publications
- Travis, J., Western, B., & Redburn, F. S. (2014). The growth of incarceration in the United States: Exploring causes and consequences.
- Treverton, G. F., Wollman, M., Wilke, E., & Lai, D. (2011). Policing Today. In *Moving Toward the Future of Policing* (pp. 15–42). RAND Corporation.
<http://www.jstor.org/stable/10.7249/mg1102.10>
- United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. Recidivism in the National Longitudinal Survey of Youth 1997 - Standalone Data

- (Rounds 1 to 13). Inter-university Consortium for Political and Social Research [distributor], 2014-02-06. <https://doi.org/10.3886/ICPSR34562.v1>
- Van Cleve, N. G., & Mayes, L. (2015). Criminal Justice Through “Colorblind” Lenses: A Call to Examine the Mutual Constitution of Race and Criminal Justice. *Law & Social Inquiry*, 40(2), 406–432. <http://www.jstor.org/stable/26630823>
- Wacquant, L. (2001). Deadly symbiosis. *Punishment & Society*, 3(1), 95. <https://doi.org/10.1177/14624740122228276>
- Wakefield, S., & Uggen, C. (2010). Incarceration and Stratification. *Annual Review of Sociology*, 36, 387–406. <http://www.jstor.org/stable/25735084>
- Walker, S., & Katz, C. M. (2018). *The police in America* (9th ed.). McGraw Hill.
- Western, B., & Muller, C. (2013). Mass Incarceration, Macrosociology, and the Poor. *The Annals of the American Academy of Political and Social Science*, 647, 166–189. <http://www.jstor.org/stable/23479100>