

2020

An Exploration of Recidivism Based on Education and Race

Michael Thomas
Walden University

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Walden University

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Michael Thomas

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Walden University
2020

Abstract

An Exploration of Recidivism Based on Education and Race

by

Michael Thomas

MPA, Park University 2008

BS, Cameron University 2001

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

February 2020

Abstract

The United States has the highest rate of incarceration in the world, with over 2,200,000 individuals in jails and prisons. From 1970 to 2000, the U.S. prison population increased by 500%. Among individuals under community supervision, 68% return to prison within the first 3 years after release from prison. African American men are rearrested 72.7% of the time within 3 years of their release from prison. African Americans have a higher incarceration rate than any other racial group in the United States; nearly 1,000,000 African Americans are in jail or prison. Moreover, 60% of African American men who drop out of school are incarcerated by the age of 30 years old. Researchers have demonstrated that education can reduce recidivism; however, few scholars have examined educational attainment and recidivism in connection with African American men. The purpose of this quantitative, descriptive, comparative study was to examine the relationship between education, race, and recidivism among 2,728 incarcerated men. Rates of arrest, rearrest, and educational attainment among African American men were analyzed to determine the impact of education on recidivism. Recidivism rates of incarcerated individuals were compared based on race and education using secondary data. The findings in this study suggest that educational attainment can identify vulnerabilities among an at-risk population. The findings also indicate that individuals who attain a high school diploma or a General Educational Development (GED) equivalency significantly reduce their propensity of incarceration and recidivism. The findings may promote positive social change by educating policymakers and practitioners on the predictors that are relevant to reducing incarceration and recidivism.

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Dedication

To my lovely wife: Thank you for all the love and support that you have provided me during this period of our lives. Thank you for your unwavering ability to make sacrifices on my behalf. Thank you for encouraging and pushing me through this process when I thought I couldn't go any further.

To my mother: Thank you for your lifetime of support and instilling a drive in me to be the best that I can be. Thank you for seeing the best in me before I even knew who I would be. More importantly, thank you for showing me how to trust and keep God first always.

To my daughters, who have relentlessly inspired me to not settle or be mediocre: Thank you for your unconditional love, support, and encouragement. Each of you has withstood the sacrifice of not having all my full attention at one time or another. Time is the one thing in life that we cannot get back, and I thank you all for your sacrifice.

To my sister, thank you for your courage, strength and wisdom. You are far beyond your years. I am appreciative of your independence and I remain in awe of your ability to make your own way in life. Keep lighting the path for others to follow.

Acknowledgments

I would like to thank the following people who have assisted me throughout this process and did not waiver their support.

Dr. Brown, thank you for all your patience and input in guiding me throughout this process. Thank you for not giving up on me.

I would like to thank my other committee member, Dr. Morreale. Thank you for your input, support, guidance, and direction during the formation of my proposal. Most of all, thank you both for your patience.

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Chapter 1: Introduction to the Study

Introduction

It may be possible to reduce recidivism by increasing educational attainment among individuals convicted of crimes. Steurer and Smith (2003) indicated that education is an effective means of crime reduction. If simply attaining education reduces crime, however, the high number of individuals incarcerated throughout the United States is puzzling. At the time of writing, approximately 2,200,000 individuals were incarcerated in jails and prisons in the United States (Alper, Durose, & Markman, 2018), and a disproportionate number of these individuals are African American. In this study, I sought to examine the relationship between incarceration, recidivism, and education among African American men who have been incarcerated. I examined the variables of race and education because they may serve as a predictor of recidivism.

From a historical lens, the War on Drugs led to correctional reform that mandated minimum prison sentences (Nellis, 2016). These mandatory minimum prison sentences ultimately resulted in longer prison terms for incarcerated individuals, which ultimately led to mass incarceration (Nellis, 2016).

Alper et al. (2018) reported that during 2014, nearly 6,800,000 individuals were in community supervision or in jails and prisons throughout the United States. During their 2005–2014 study, Alper et al. found that 68.4% of those released from state prisons were arrested for a new offense within 3 years of release. African Americans made up 34% of the individuals under correctional supervision (Cooper, Durose, & Snyder, 2014).

Western and Pettit (2004) indicated that 1 out of 10 African American men was

incarcerated, and 33% of incarcerated African American men had dropped out of school. According to the U.S. Census Bureau (2012), African American men had the highest dropout rate in the United States.

Background of the Study

In an effort to trace the lineage of incarceration among African Americans, I examined a timeline dating back to the 1800s. Slavery was abolished in 1865, and according to Cahalan (1979), the increased incarceration of African Americans did not begin until the reformatory era (i.e., 1876 to 1890). During this era, prison statistics were utilized for the first time to account for African Americans (Cahalan, 1979). During this period, African Americans had the highest incarceration rate among all racial groups in the United States and made up approximately 50% of all inmates (Cahalan, 1979). From the 1890s to 1935, industrial prisons began to flourish, and states began to profit from the prison industry (Du Bois, 1935). Theorists have long debated the effectiveness of incarceration and weighed the economic benefits of incarceration versus rehabilitation. The industrial prison era was marked by industrialized slavery that evaded the 13th Amendment to the U.S. Constitution (Du Bois, 1935).

Incarceration rates among African Americans appear to be higher than other races. In 1940, there were only 272,955 incarcerated individuals in the United States (Justice Policy Institute, 1999). At one point in the 1980s, 474,368 African Americans were incarcerated (Justice Policy Institute, 1999). In 2019, African Americans made up 37.5% of the inmate population in the United States, according to the Federal Bureau of Prisons (2019). African Americans have been incarcerated at a disproportionately higher

rate than those of other races in the United States. According to the Federal Bureau of Prisons, there were nearly 68,431 African Americans in federal custody out of a total of 180,082 incarcerated individuals in 2018. According to Alper et al. (2018), during their 9-year study, 86.9% of African Americans were arrested after being released from prison, while 46% of African Americans released from prison reoffended within 1 year of release.

Steurer and Smith (2003) conducted a 3-year study and found that correctional education programs significantly reduced crime. The National Center for Education Statistics (2008) showed that African Americans were significantly behind European Americans in writing, reading, math, science, and history. The graduation rate was 42% among African Americans but 62% among European Americans (Musu-Gillette et al., 2016).

Problem Statement

The problem addressed in this study was that incarceration rates have been higher among African Americans than among members of other races. According to Nellis (2016), African Americans are 5 times more likely to face incarceration than European Americans. Sixty-three percent of African Americans released from prison reoffend within 36 months of their release (Bureau of Justice Statistics, 2011).

Steurer and Smith (2003) conducted a recidivism study and concluded that education can reduce recidivism. As significant as Steurer and Smith's findings were, the investigators did not examine why incarceration rates have been higher among African Americans than other races. Madyun (2011) postulated that African Americans have

performed poorly in education when compared to individuals of other races. Educational leaders and practitioners have tried to close the achievement gap in education between African Americans and members of other races (Madyun, 2011). African Americans have a disproportionately high number of dropouts and arrests in the United States when compared to other races (U.S. Census Bureau, 2012).

In 2009, incarceration rates peaked to 743 individuals incarcerated per 100,000 individuals in the United States (Glaze, 2010). Recidivism has become an important social issue in the United States, and for that reason, it is important to examine precursory factors that lead individuals to commit crimes repeatedly. The U.S. Department of Justice indicated that the total correctional population—in prison, on probation, and on parole—in the United States was 6,740,300 (Kaeble & Cowhig, 2016). In an effort to further examine recidivism, Schnappauf and DiDonato (2017) cited that practitioners have been trying to develop predictors of whether individuals released from prison will reoffend.

The main purpose of this study was to examine why the incarceration rate for African American men has been higher than any other racial group. I also sought to examine why the recidivism rate among African Americans has been so high. A deeper understanding of the factors that predict recidivism could lead to policies and practices that reduce the number of individuals incarcerated across the country. Skeem and Lowenkamp (2016) reported that the rate of recidivism among African Americans was higher than that among European Americans, but the difference could be attributed to past criminal history. The gap in the literature is scholars' failure to examine the extent to which education reduces recidivism among African American men.

Purpose of the Study

The purpose of this quantitative study was to examine the relationships between recidivism, on the one hand, and educational attainment and race, on the other. The primary focus was to assess whether educational attainment could be a deterrent in reducing recidivism among African American men. A gap in empirical research has remained related to the longitudinal patterning of criminal behavior (Piquero, 2015). Specifically, an improved understanding of the extent to which different risk factors influence individuals has been needed (Huebner & Pleggenkuhle, 2015; Piquero, 2015). Additional research on this issue would benefit not only theory, but also policymakers, who could use it to guide prevention and intervention efforts (Huebner & Pleggenkuhle, 2015). According to Andrews and Bonta (2010), education is a way of encouraging effective rehabilitation in community-based programs. Vieira, Skilling, and Peterson-Badali (2009) stated that education significantly reduces the commission of crime.

McGarvey, Gabrielli, Bentler, and Mednick (1981); Steurer and Smith (2003); and Groota and Van de Brink (2010) provided important data on the relationship between education and recidivism. Few researchers, however, have examined the extent to which recidivism decreases with each grade level of education attained. In the current study, I measured the educational attainment of African American men to determine its significance in relation to recidivism and race.

Research Questions and Hypotheses

Three research questions and their corresponding hypotheses guided the study.

RQ1: To what extent, if any, does attainment of a GED or high school diploma reduce recidivism among incarcerated individuals?

H₀₁: There is no significant association between recidivism and attainment of a GED or high school diploma among incarcerated individuals.

H₁₁: There is a significant association between recidivism and attainment of a GED or high school diploma among incarcerated individuals.

RQ2: To what extent, if any, does educational attainment beyond a GED or high school diploma reduce recidivism among incarcerated individuals?

H₀₂: There is no significant association between recidivism and educational attainment beyond a GED or high school diploma among incarcerated individuals.

H₁₂: There is a significant association between recidivism and educational attainment beyond a GED or high school diploma among incarcerated individuals.

RQ3: To what extent, if any, is recidivism associated with race among incarcerated individuals?

H₀₃: There is no significant association between recidivism and race among incarcerated individuals.

H₁₃: There is a significant association between recidivism and race among incarcerated individuals.

Theoretical Framework

The life course theory informed the theoretical framework of the study (see Elder, Johnson, & Crosnoe, 2003). This theory supports examination of differences in recidivism among individuals based on demographic variables (Elder et al., 2003). The main tenet of the life course theory is that observers can understand individuals' lives based on structural, social, and cultural contexts (Giele & Elder, 1998). An individual's life course is "a sequence of socially defined events and roles that the individual enacts over time" (Giele & Elder, 1998, p. 22).

Previous researchers investigating incarceration and recidivism have used the life course theory to frame differences in recidivism among individuals (Hassett-Walker et al., 2017; Huebner & Pleggenkuhle, 2015). For instance, Hassett-Walker et al. (2017) used the life course theory to frame the differential effects of race or ethnicity and gender on early adulthood arrest after substance-use behavior. Huebner and Pleggenkuhle (2015) used the life course perspective to frame gender differences in recidivism in terms of residential location and household composition.

Merton (1957) developed the theory of anomie, which frames criminal deviance as a mode of adaptation in which individuals use motivators to influence their choices and opportunities. Merton argued that the mode used by most individuals who choose to participate in criminal deviance is that of the innovator. An innovator uses enticements to success by promoting criminal deviance (Merton, 1957). Innovators believe that in order to succeed or achieve their goals, they are justified in breaking the law, rules, or other social norms (Merton, 1957). Merton's anomie theory asserted five modes in which

individuals adapt: conformity, innovation, retreatism, ritualism, and rebellion. Innovation is the mode of adaptation that was applied to this study. Innovation applied to this study because, according to Merton's theory, innovators are those individuals who are most prone to criminal deviance. Innovators understand what it takes to succeed in society; however, they reject opportunities placed before them that would lead to success (Merton, 1957). An innovator uses criminal behavior to achieve goals and maintain a socially acceptable means of living (Merton, 1957). Anomie theory does not focus on why individuals commit crimes but rather aids understanding of why rates of criminal deviance vary between cultures (Merton, 1957).

Steurer and Smith (2003) empirically determined that education contributed to reducing recidivism. According to Merton's (1957) anomie theory, African Americans have had limited access to quality education and limited educational attainment. According to the U.S. Census Bureau (2012), African American men made up 13.9% of all high school dropouts. Merton's social theory and social structure assert that success is measured by wealth and success, which have received emphasis in African American communities; however, the means to achieve success have not received such emphasis (Merton, 1957).

Policymakers and prison administrators have not mandated incarcerated individuals to take advantage of educational opportunities; the pursuit of such opportunities has been solely a way for inmates to reduce the duration of their incarceration. In this situation, innovators, in the sense of Merton's (1957) theory, will reject offered educational opportunities even though they know that they are necessary

for success. Overall, anomie theory postulates that an individual's criminal deviance depends on the individual's typology. The theory suggests that if an individual's social structure can be balanced, then the propensity his or her criminal deviance can be balanced. According to the theory, education may not prevent criminal deviance and recidivism but may reduce them. Merton's theory considers and applies the social factors of criminal deviance.

Nature of the Study

This study was quantitative, descriptive, and comparative in nature. Researchers use descriptive, comparative research designs to identify differences between groups as a function of an identified criterion (Babones, 2014). Using secondary data archived by the Bureau of Justice Statistics database, I compared the recidivism rates of individuals for different values of the independent variables, which were educational attainment and race.

Before conducting the main statistical analyses, I computed descriptive statistics that captured the general characteristics of the sample. After that, chi-square tests were used to compare the recidivism rates of individuals according to educational attainment and race. My objective was to determine the relationships between education, race, and recidivism. The results of this study may be used to assist practitioners, courts, probation officers, and jails and prison facilities with tools that will assist in decreasing prisoner populations. The findings of this study may be used to address disproportionate prisoner populations among African American men and develop systemic changes that break generational cycles of incarceration in families.

Significance of the Study

The findings of this quantitative study will contribute to social change and expand knowledge of the relationship between recidivism and the demographic variables of education and race. Previously, Steurer and Smith (2003) found a direct link between education and recidivism. Through this study, I sought to show that recidivism decreases with educational attainment among those earning a GED or high school diploma. In correlation with other research pertaining to education and recidivism, the results of this study did not show significance in educational attainment beyond a GED or high school diploma. According to Shrum (2004), the rate of recidivism decreased approximately 6% for every grade level of education completed. The significance of this study was consistent with research conducted because the rate of recidivism decreased with each level of education attained among those earning a GED or high school diploma. The findings of this study showed the most critical area of educational attainment is a GED or high school diploma. Education beyond a high school diploma or GED did not have significance.

Eighty percent of inmates in state prisons had failed to complete high school (Shrum, 2004). Individuals who had received their GED or completed vocational certificate programs were 20% less likely to recidivate than those who had not (Shrum, 2004). Policymakers and members of society share responsibility for assisting the process by ensuring that viable resources are available to all, regardless of economic advantages and previous circumstances.

The findings of this study may provide facilitators and practitioners in the field of criminal justice with additional tools for reducing criminality in the United States. The results may also contribute to addressing the major social and educational challenges faced by African American men in their communities. Perhaps the enormous disparity in rates of incarceration between African American men and those of other races is the result of imprisonment becoming a legitimate way for them to achieve their goals, as Merton's (1957) anomie theory suggests. With this study, I also aimed to identify the predictors of recidivism in order to develop techniques for reducing criminality.

Definitions

In this section, I define terms that are used frequently throughout the study.

Adult basic education: Classes for individuals who are incarcerated that provide basic arithmetic, reading, writing, and English, if necessary. Adult basic education courses target individuals with education below the level of ninth grade (Crayton & Neusteter, 2008).

Adult secondary education: Classes for high school level courses that will assist inmates in taking the General Education Exam (Crayton & Neusteter, 2008).

Community supervision: An alternative to incarceration that permits offenders to live and work in a community while on probation, parole, or halfway houses:

The supervision of criminal offenders in the resident population, as opposed to confining offenders in secure correctional facilities. The two main types of community corrections supervision are probation and parole. Community corrections is also referred to as community corrections .

(Bureau of Justice Statistics, 2019, p. 1).

Predictors: Factors that forecast incarceration or recidivism. Researchers have identified substance abuse a predictor of criminal recidivism (Håkansson & Berglund, 2012. p. 1).

Probation: Probation refers to adult offenders whom courts place on supervision in the community through a probation agency, generally in lieu of incarceration. However, some jurisdictions do sentence probationers to a combined short-term incarceration sentence immediately followed by probation, which is referred to as a split sentence. Probationers can have a number of different supervision statuses, including active supervision, which means they are required to regularly report to a probation authority in person, by mail, or by telephone. Some probationers may be on an inactive status, which means they are excluded from regularly reporting, and that could be due to a number of reasons. For instance, some probationers may be placed on inactive status immediately because the severity of the offense was minimal or some may receive a reduction in supervision and therefore may be moved from an active to inactive status. Other supervision statuses include probationers who only have financial conditions remaining, have absconded, or who have active warrants. In many instances, while on probation, offenders are required to fulfill certain conditions of their supervision (e.g., payment of fines, fees or court costs, participation in treatment programs) and adhere to specific rules of conduct while in the community. Failure to comply with any conditions can result in incarceration. (Bureau of Justice Statistics, 2019, p. 2).

Recidivism: Repeated or habitual relapse into crime. According to the National Institute of Justice (2014),

Recidivism is a primary concept of criminal justice. It is defined as a lapse in judgement or behavior, and frequently individuals face intervention due to being placed on probation or supervision for previous criminal offenses committed.

Recidivism is measured by rearrest, reconvictions, or return to jail or prison during a period of release from incarceration. (para. 1)

Uniform Crime Reporting Program: A program of the Federal Bureau of Investigation (FBI) that produces annual reports based on data gathered on select categories of crimes as reported by other law enforcement organizations. According to the FBI (n.d.),

The Uniform Crime Reporting (UCR) Program has been the starting place for law enforcement executives, students of criminal justice, researchers, members of the media, and the public at large seeking information on crime in the nation. The program was conceived in 1929 by the International Association of Chiefs of Police to meet the need for reliable uniform crime statistics for the nation. In 1930, the FBI was tasked with collecting, publishing, and archiving those statistics. (para. 1)

Summary

In Chapter 1, I explained that African American men have been incarcerated at a higher rate than any other racial group. I also discussed the escalating incarceration rates and how lack of educational attainment and race variables associated with recidivism

increase the likelihood of returning to jail or prison. Reentering society after incarceration presents tremendous challenges for ex-prisoners (Cooper et al., 2014). According to Krivo and Peterson (1996), African Americans are disproportionately-by-circumstance residing in impoverished neighborhoods facing tremendous socio-economic challenges as well as and high-crime areas. Although there are numerous variables impacting incarceration, including critical thinking skills, demographics, employment, and criminal history, the primary disparity examined in this study was education and its impact on recidivism. The results of this study may provide tools to assist in addressing the disparities in educational attainment among African Americans with the intent to reduce recidivism, as Steurer and Smith (2003) suggested. In Chapter 2, I will provide a review of relevant literature. In this review, I will highlight previous researchers' findings in relation to disproportionate prisoner populations, theories related to crime, and the factors that lead to incarceration and recidivism.

Chapter 2: Literature Review

Introduction

In this chapter, I review existing literature related to the relationship between education, recidivism, and incarceration in response to increases in the U.S. prison population. In a report for the U.S. Department of Justice, Kaeble and Cowhig (2016) stated that the total correctional population in the United States was 6,613,500. This was a slight decrease in the correctional population from 2010 when I began researching correctional populations. In 2010, the U.S. Department of Justice reported that the total correctional population was 7,154,700 (West & Sabol, 2010). The total correctional population includes individuals in prisons; jails; and under community supervision, such as probation and parole. In an attempt to determine why the correctional population remains high in this country, I examined existing literature regarding the causes of incarceration. According to Steen, Lovegrove, McKinzey, and Opsal (2009), the rates of incarceration and recidivism are influenced by economics, family dynamics, demographics, and race. Furthermore, Cooke (2005) indicated that African American men committed 45% of all violent crimes.

Disproportionate Prison Populations

With nearly 2 million individuals incarcerated in the United States, Cooke (2005) cited that there were over 800,000 African American men incarcerated throughout the United States. This author also indicated that contributing factors to incarceration among African American men included employment issues, family dynamics, the War on Drugs, and homelessness. Some of the participants from Cooke's study had a college education,

but most had graduated from high school. Cooke reported that many incarcerated men struggled to reconnect with their families upon release and could not find employment because of their criminal records or history of incarceration. Not only has the incarceration rate increased, funding cuts have limited the types of rehabilitation offered to incarcerated individuals (Cooke, 2005). Austin et al. (2003) examined the factors that affect incarceration rates, such as education, economics, and social needs. The authors reported a high incarceration rate and a 70% recidivism rate. Past attempts to reduce incarceration were ineffective (Visher & Travis, 2003). In a report published by the Bureau of Justice Statistics, Glaze (2010) concluded that 30% of reincarcerated individuals were reincarcerated because of community-supervision violations.

The prison population increased from the 1970s through 2000s (Cook, 2005). The increase can be attributed to reforms leading to tougher sentencing, the War on Drugs, and a general shift in cultural values (Ghandnoosh, 2019). The increase in prison population may also be attributed to national economic hardships. Since 2000, both crime and the prison population have been decreasing; however, that does not necessarily mean that individuals have been committing fewer crimes. State leaders have been taking steps to reduce prison overcrowding. In 2009, for example, California Governor Jerry Brown signed Assembly Bills 109 and 117, which allowed individuals charged with simple offenses not involving violence or sex to be sent to local jails rather than state prisons (Stanford Criminal Justice Center, n.d.).

Theories Related to Crime

Merton's (1957) anomie theory discussed why crime rates in lower social classes are higher than those in upper social classes via a series of hypotheses that poverty, conditions, and weak-mindedness cause deviant behavior. The theory of anomie is consistent with opportunities and social structures that affect rates of criminal deviance (Merton, 1957). Merton's anomie theory ties into other theories, such as the social disorganization theory. Those theories differ from the anomie theory, however, because they do not explain why patterns of behaviors tie into authentic possessions that lead individuals to achieve culturally accepted goals (Merton, 1957).

Farmer (2010) discussed social disorganization and crime among young people in inner-city schools. Farmer suggested that African American young people in inner-city schools have been criminalized in a way similar to those who are incarcerated. The processes of going through metal detectors, pat downs, searches, lockdowns, surveillance, and disciplinary practices are identical to those of prison, and these processes shape their ideologies (Farmer, 2010) The author described the "school-to-prison pipeline", which separates individuals by class and race (Farmer, 2010, p. 368). Educators and administrators have used other discriminatory practices to label individuals as criminals in educational settings. This can help explain increased incarceration rates because the incarceration rate of African American men has been higher than that for any other racial group.

Researchers have found an association in urban communities between lack of positive social controls, such as adequate educational programs, and criminal deviance.

Gabidon and Boisvert (2012) found that labeling individuals as criminals may lead those individuals to become criminals. When individuals continually reoffend and their criminal deviance increases, they begin to display the five modes adaptation of Merton's (1957) anomie theory: conformity, innovation, retreatism, ritualism, and rebellion.

Factors Leading to Incarceration

According to Madyun (2011), educational attainment has been an important topic of discussion since the 1950s, and the disparity in educational attainment between African Americans and European Americans has not changed in that time. Madyun posited that the many efforts made to reduce this disparity have failed because of misplaced priorities in educational research. The author used social disorganization theory to study unforeseen dangers in African American achievement outcomes. Madyun reported that African Americans in the 12th grade were at the same educational level as European Americans in the eighth grade. Social advances, such as desegregation, have made strides in reducing educational disparities.

Wilson (1996) focused on role modeling and community resources, or the lack of these, in African American communities. According to Wilson, African Americans lacked role-modeling and community resources, which decrease the likelihood of incarceration, whether they were poor or in middle-class circumstances. Poverty is not the issue; rather, socialization propels success (Wilson, 1996).

Visher and Travis (2003) aimed to determine why incarceration rates were so high in the United States, in which prisons continued to be built despite ignorance of why individuals were committing more crime. Visher and Travis examined prisons, family

dynamics, peers, neighborhoods, and the types of rehabilitation individuals received when incarcerated. They found that reintegration programs were not well situated socially to assist individuals transitioning from incarceration to the community. Social influences received by individuals before and after incarceration are critical for preventing recidivism (Visher & Travis, 2003). The authors focused heavily on the transition from prison back into the community, arguing that transitioning individuals must be able to gain employment, improve family relationships, address substance abuse, get involved with their communities, and receive mentorship.

Wakefield and Uggen (2010) examined the effect of incarceration and the inequalities that are generated among individuals who were incarcerated and then reintegrated back into their communities. Their results suggested that inequalities emerge among individuals who are incarcerated. The effects of incarceration are not the rehabilitation of individuals; instead, incarceration leaves them in disadvantaged positions in society (Wakefield & Uggen, 2010). Wakefield and Uggen's examination of the effect of incarceration provided correlation to extend the literature on recidivism but did identify predictors that may assist in reducing recidivism and incarceration.

Summary

The high prison population has become a problem for the U.S. government because of the high cost of maintaining prisons (Scurich & Monahan, 2016). The high prison population has been caused, in part, by recidivism (García-Gomis, Villanueva, & Jara, 2017). One way to reduce the rate of recidivism is to identify variables that predict recidivism and use that knowledge to target interventions.

To conduct this literature review, I identified relevant research using EBSCOhost, JSTOR, and Google Scholar. Most of the research used was published between 2015 and 2018, with the exception of seminal sources used to construct the theoretical framework. Keyword search terms used included *recidivism*, *recidivism AND gender*, *age*, *sex*, *race*, *type of crime*, *type of offense*, *life course theory*, and *life course theory AND recidivism*. Using these terms, both individually and in combination, I identified relevant studies from database searches. The relevant literature included 70 sources published between 2015–2018 and eight seminal sources not published before 2003.

This chapter begins with a discussion of life-course theory, which was the theoretical framework used for this study. I also provide an in-depth analysis of relevant literature organized by categories that progress from the broad subject matter of recidivism toward its relationship with offenders' educational attainment and race. I conclude the chapter by explaining the gap in the literature that emerged from the review.

Theoretical Framework

The theoretical framework of this study was the life course theory (Elder et al., 2003). Life course theory originated from principles of life span development, agency, time and place, timing, and linked lives (Elder et al., 2003). Life course theory, taking into consideration the principle of life span development, focuses on studying lives over time to identify social and contextual changes that interact with individual development (Elder et al., 2003). With regard to the principle of agency, the life course theory posits that individuals determine their life course through the choices they make and actions they take when faced with opportunity or adversity (Elder et al., 2003; Farrington, 2005).

Using the lens of time and place, this theory helps to describe individuals' life courses as they are shaped by the times and places they experience throughout their lives (Elder et al., 2003). According to the principle of timing in the theory, events influence individuals differently depending on the developmental stage during which individuals experience the events (Elder et al., 2003; Farrington, 2005). The principle of linked lives in the life course theory takes into consideration the way that people live interdependently and convey sociohistorical effects through shared relationships (Elder et al., 2003).

The original purpose of the life course theory was to explain criminal offending and deviant behavior over the course of an individual's lifetime (Messer, Patten, & Candela, 2016). The main tenet of the life course theory is that people's lives can be understood based on structural, social, and cultural contexts (Elder et al., 2003; Farrington, 2005). According to the life course theory, individuals travel on a trajectory through life and experience turning points based on situational events and other factors, such as work, school, and family (Messer et al., 2016). Turning points may also occur following challenges individuals face because of personal characteristics, and these turning points can redirect individuals' trajectories, altering their life courses (Huebner & Pleggenkuhle, 2015). In order for a life event to be considered a turning point, enough time must be spent on the new trajectory for the change in course to be recognized (Piquero, 2015).

Previous theories of criminology did not take into consideration whether individual factors interacted with offending differently at different points in an individual's life course (Piquero, 2015). The view of these theories of why individuals

engaged in criminal behavior was a static one (Farrington, 2005). At the beginning of the 20th century, criminologists started to move away from individual-centered theories of crime to consider risk factors and the roles of environment, structure, life events, and transitions (Farrington, 2005).

Researchers investigating incarceration and recidivism have used the life course theory to frame differences in the trajectories of offenders (Hassett-Walker et al., 2017; Huebner & Pleggenkuhle, 2015). For instance, Hassett-Walker et al. (2017) used the life course theory to frame the differential effects of race and gender on early adulthood arrest rates after substance use. Huebner and Pleggenkuhle (2015) used the theory to frame gender differences in terms of recidivism, residential location, and household composition.

The life course theory and associated gaps in existing research supported an examination of differences in recidivism rates based on demographic variables. Focusing on variables, such as education and race, when investigating recidivism is consistent with the life course theory, which treats these demographic variables as contexts that could explain differences in outcomes (Hassett-Walker et al, 2017; Huebner & Pleggenkuhle, 2015; Messer et al., 2016; Piquero, 2015).

Review of Relevant Literature

The review of relevant literature begins with an overview of sentencing guidelines and the sentencing disparity associated with characteristics such as race. Following this discussion, I define recidivism in detail and discuss its relationship with race and education.

Sentencing Guidelines Related to Demographic Variables

To understand the role that demographic variables play in recidivism, it is important to know how they affect sentencing decisions because sentencing disparity is an important issue across the American court system (Miller, 2015). Although those working for the U.S. court system have promoted equality, fair treatment, and justice in sentencing, court officials have often granted preferential treatment to individuals based on their physical qualities rather than the characteristics of their offenses (Miller, 2015; Monahan & Skeem, 2016). In particular, sentencing outcomes have often varied based race, gender, and age, reflecting judges' own biases, stereotypes, and perceptions (Nowacki, 2016).

Members of the public have continued to express biases related to these characteristics too. Scurich and Monahan (2016) aimed to gauge the degree to which members of the public supported using demographic variables, such as gender, age, and race, as risk factors for recidivism in sentencing. Scurich and Monahan asked 581 U.S. residents, recruited through Amazon Mechanical Turk, to voice their opinions on the matter. Very few participants—less than 3%—had no settled opinion on using the characteristics of a crime to determine the corresponding sentence, and approximately half opposed the practice (Scurich & Monahan, 2016). Regarding using demographics to determine prison sentences, more than 75% of participants opposed using race, but almost 50% were open to using gender and more than 75% were open to using age (Scurich & Monahan, 2016).

Sometimes, demographic variables bear on sentencing decisions for reasons unrelated to bias. Sentencing guidelines have sometimes included extralegal variables, such as race, gender, and age, when research supported their inclusion (Nowacki, 2016). For example, in its federal sentencing guidelines, the U.S. Sentencing Commission (2015) stated that, “Age may be a reason to depart downward [from the sentence recommended elsewhere in the guidelines] in a case in which the defendant is elderly and infirm and where a form of punishment such as home confinement might be equally efficient as and less costly than incarceration” (para. 5H1.1). Another example occurred when the U.S. Supreme Court allowed states to modify their sentencing guidelines for sex offenders after scientific evidence showed that women pose a lower risk of recidivism (Henderson, 2015).

Recidivism

Recidivism is the tendency for a person who has been incarcerated to be reincarcerated for committing another criminal offense (García-Gomis et al., 2017; Markman, Durose, Rantala, & Tiedt, 2016). From a policy perspective, recidivism is concerning given the considerable costs associated with incarceration (Calleja, 2015; Henrichson & Delaney, 2012; Roxell, 2016; Zarkin et al., 2015). Researchers have demonstrated that repeat offending accounts for numerous incarcerations, and those working within the criminal justice system have generally agreed that recidivism reduction should be a prime focus (Przybylski, 2015). Hall (2015) and Faust, Bickart, Renaud, and Camp (2015) posited that age, race, and gender are risk factors of

recidivism; however, variables such as these cannot be used alone as tools in reduction (Desmarais, Johnson, & Singh, 2016).

Piquero, Jennings, Diamond, and Reingle (2015) supported the aforementioned research with their findings that age, sex, and race were significantly related to violent recidivism. Furthermore, many researchers have found race to be a predictor of general recidivism (Costopoulos, Plewinski, Monaghan, & Edkins, 2017; Folk et al., 2018; Lilley, DeVall, & Tucker-Gail, 2018; Lockwood, Nally, & Ho, 2016). Several researchers have also found there are differences between crimes committed by men and women when they recidivate (Caudy, Tillyer, & Tillyer, 2018; Huebner & Pleggenkuhle, 2015; Mannerfelt & Håkansson, 2018; Olson, Stalans, & Escobar, 2016), while others have found evidence for gender neutrality in risk of recidivism (McConaghy & Levy, 2016; Scott & Brown, 2018). Other researchers have found a correlation between age and recidivism, with older individuals less likely to recidivate than younger individuals (Horyniak et al., 2016; Olver & Wong, 2015). Among juvenile individuals, Sanchez and Lee (2015) found race, gender, and program type to be risk factors of recidivism.

Piquero et al. (2015) discussed the importance of violent recidivism as a policy issue. Accordingly, Piquero et al. perceived that it was important to understand the demographic risk factors that moderate recidivism. The authors argued that identifying such relationships is essential to developing a better theoretical understanding of recidivism risk as well as discovering areas of intervention that may be necessary to reduce recidivism (Piquero et al., 2015). To uncover such relationships, Piquero et al. conducted a meta-analysis of literature related to violent recidivism that focused on the

role of demographic risk factors. They found that age, sex, and race were significantly related to violent recidivism. Specifically, those who were younger, male, and belonged to a racial minority group were at higher risk of violent recidivism (Piquero et al., 2015). The authors concluded that interventions should not use a one-size-fits-all approach (Piquero et al., 2015). Instead, interventions for violent recidivism should be tailored to fit the needs of appropriate age, sex, ethnic, or race groups.

Not all recidivism researchers have come to the same conclusion that age, gender, and race are significant predictors. Hall (2015) claimed that researchers have examined recidivism too narrowly, testing various risk factors independently. Hall performed a systematic review of risk factors credited to recidivism to with the aim of identifying the best instrument for recidivism reduction. Hall agreed that earlier researchers had identified age, race, and gender as risk factors of recidivism; however, Hall also argued that these factors were inappropriate tools for reduction of recidivism. Hall concluded that correctional education programming appeared to offer the greatest reduction in recidivism. The author reached this conclusion after analyzing 10 empirical studies from 1995 to 2010 to understand the impact of correctional education programming on recidivism.

Hall (2015) and Folk et al. (2018) believed that recidivism prediction was more complex than simply looking at related demographic variables. These authors noted that although many researchers had examined age, sex, race, and education as predictors of recidivism, very few had examined these predictors as moderators in the relationship between criminal thinking and recidivism (Folk et al., 2018). Examining these potential

interactions was important to Folk et al., because if criminal thinking predicted recidivism in only some demographic groups, then one-size-fits-all interventions targeting criminal thinking would not be effective. These authors used two independent samples of convicted individuals and two separate measures of criminal thinking. The first sample consisted of 226 individuals on probation who enrolled in a randomized clinical trial of a correctional intervention, and the second sample consisted of 346 jail inmates from a longitudinal study (Folk et al., 2018). They found no variation in the strength of the relationship between criminal thinking and recidivism based on demographics, justice system setting, or measure of criminal thinking (Folk et al., 2018). Criminal thinking predicted recidivism to the same degree for individuals who were African American, European American, young, old, male, female, highly educated, or less educated. These findings supported Hall's conclusion that recidivism is predicted best by factors other than race, age, and gender.

The extent of research focused on identifying risk factors of recidivism suggests that this has been an important topic among criminologists. Less clear is the extent to which criminologists have agreed on the use of demographics as predictors of recidivism. In the sections that follow, I reviewed the work of researchers who examined gender, race, age, and type of offense in relation to recidivism.

Recidivism in Relation to Race

Researchers have identified race as another potential factor that influences recidivism. Researchers have become increasingly interested in this relationship because of the substantial extent of racial differences in criminal history (Frase, Roberts, Hester,

& Mitchell, 2015; Mears & Cochran, 2018). Mears, Cochran, and Lindsey (2016) posited that non-European Americans were at a disadvantage in sentencing outcomes and were more likely to be incarcerated than European Americans. Many researchers have questioned whether a racial disadvantage exists with regard to recidivism.

Researchers have found multiple predictors of adverse conditions to be similar among different racial groups, investigators have often used race as a moderating variable in relationships between adverse conditions and recidivism (Costopoulos et al., 2017). Lockwood, Nally, Ho, and Knutson (2015) looked at race as a moderating variable in the relationship between postrelease employment and recidivism in a sample of 3,869 formerly incarcerated individuals in Indianapolis, Indiana, finding that postrelease employment was the factor with the greatest influence on recidivism, regardless of race. The authors also found that unemployment was the strongest predictor of recidivism, regardless of education or race. They derived their findings from a 5-year follow-up study using data from the Indiana Department of Correction Division of Research and Planning, the Indiana Department of Correction Education Division, and the Indiana Department of Workforce Development (Lockwood et al., 2015). According to these authors, these findings supported the general assumption that incarcerated individuals are more likely to be reincarcerated if they cannot find a job after release but contradicted previous findings that African Americans had a higher recidivism rate than that of other races (Lockwood et al., 2015). The authors noted that a limitation of their study was that they examined unemployment in an urban area in the United States only; the relationship

between unemployment and recidivism could have been different in other areas with different economic structures (Lockwood et al., 2015).

Skeem and Lowenkamp (2016) also found no significant racial differences in recidivism rates. Skeem and Lowenkamp tested the nature and strength of relationships among race, risk assessment scores, and recidivism. When referring to race, the authors focused on African Americans and European Americans. Skeem and Lowenkamp used the Post Conviction Risk Assessment (PCRA) to identify which convicted individuals were at high risk and which variables were risk factors. They used a race-matched sample (i.e., one for one by race, gender, age, and type of offense) of 33,074 offenders to isolate the effect of race on risk and recidivism (Skeem & Lowenkamp, 2016). The authors found that African Americans scored higher on the PCRA than European Americans, with the main racial difference attributable to criminal history (Skeem & Lowenkamp, 2016); however, they found no meaningful differences between European Americans and African Americans in the relationship between PCRA scores and recidivism (Skeem & Lowenkamp, 2016). According to the authors, these findings contradicted those from other researchers who had found meaningful differences (Skeem & Lowenkamp, 2016).

Unlike those who found race to be an insignificant factor in recidivism, Baglivio et al. (2016) found child welfare placement to be a significant predictor of recidivism for European Americans and Hispanics, but not for African Americans. Behnken, Bort, and Borbon (2017) found that members of racial minorities demonstrated larger reductions in recidivism when compared to European Americans. Behnken et al. intended to discover whether recidivism rates differed according to race, ethnicity, and gender among juvenile

individuals. Based on earlier research findings suggesting higher recidivism rates in traditional adjudication programs among members of racial and ethnic minorities than among European Americans, the authors hypothesized that juvenile individuals in Santa Clara County, California, who were adjudicated in the Court for the Individualized Treatment of Adolescents would demonstrate reduced recidivism regardless of ethnic or racial group after they completed the program (Behnken et al., 2017). The results favored their hypothesis (Behnken et al., 2017).

At the other end of the spectrum of debate, McNeeley (2018) found that neighborhood characteristics were significantly related to recidivism among non-European Americans but not European Americans. McNeeley addressed inconsistencies in existing research focused on neighborhood effects on recidivism by examining whether housing situation, gender, or race moderated the relationship between neighborhood and recidivism. This author used archived data on 3,923 incarcerated individuals released from Minnesota state prisons in 2009 and rearrest data obtained from the Minnesota Bureau of Criminal Apprehension (McNeeley, 2018). Contrary to the author's expectations, the results indicated no interaction between neighborhood characteristics and gender (McNeeley, 2018). As predicted, disadvantaged neighborhoods influenced risk of recidivism among non-European Americans, possibly because those individuals were more likely to move to disadvantaged areas upon release (McNeeley, 2018).

Veeh, Tripodi, Pettus-Davis, and Scheyett (2018) sought to discover whether recidivism for individuals with serious mental disorders differed among European Americans, African Americans, and members of other racial minorities. The authors used

a sample of 22,376 incarcerated individuals released in North Carolina between 2000 and 2001 in an 8-year follow-up study with time-to-event outcome data (Veeh et al., 2018). The independent variable was derived from general mental health screening performed for all incarcerated individuals at the time of intake, and age, gender, and race were a few of the covariates that the authors controlled for in their statistical analysis (Veeh et al., 2018). Their results showed a significant interaction effect among members of non-African American racial minorities with serious mental disorders: Those with serious mental disorders were reincarcerated significantly faster than those without (Veeh et al., 2018). The authors found no similar interaction effect among either European Americans or African Americans with serious mental disorders; however, African Americans still had a higher rate of recidivism than those of other races (Veeh et al., 2018).

Webster, Dickson, Staton-Tindall, and Leukefeld (2015) aimed to discover the similarities and differences in recidivism predictors, as well as to establish which subset of factors were the best predictors. They collected baseline data from 539 incarcerated men from four Kentucky state prisons (Webster et al., 2015). The authors collected quantitative sociodemographic information, data on drug use and mental health histories using the Addiction Severity Index, and information regarding criminal justice involvement from official criminal records (Webster et al., 2015). Their results showed that being younger, being non-European American, being employed less than full-time, having extensive mental health issues, and having a criminal history predicted recidivism (Webster et al., 2015).

As with gender and recidivism, the published findings on the relationship between race and recidivism have been mixed: Some researchers found no differences in recidivism based on race (Barrett & Katsiyannis, 2015; Lockwood et al., 2015). Others have found European Americans to have the highest risk of recidivism (Baglivio et al., 2016; Behnken et al., 2017). Still others found members of racial minorities to have the highest risk (McNeeley, 2018; Veeh et al., 2018; Webster et al., 2015). These mixed findings can only be resolved through further research.

Recidivism in Relation to Education

Steurer and Smith (2003) examined the effects of education on recidivism in three states. The authors hypothesized that education would reduce rates of arrest and rearrest and that former inmates who went on to commit crimes would commit less serious crimes those they had been incarcerated for. Steurer and Smith believed that individuals who receive education while incarcerated are less likely to commit further crimes.

Groota and Van de Brink (2010) discussed the effects of education on crime. They explored various levels of educational influence on the criminal status, offenses committed, and the social impact of costs associated with crime. The authors concluded that higher levels of education reduced the probability of individuals committing crimes. Groota and Van de Brink did not measure quantitatively levels of educational attainment such as high school or college. They did, however, find significant differences in criminal deviance based on race and education. Lochner and Moretti (2001) showed that among African Americans, the likelihood of committing a crime was 3.4% lower for those with a secondary education compared to those without this level of education. Among European

Americans, those with a secondary education were 0.76% less likely to commit a crime than those without. Additionally, the higher an individual's educational level was, the higher that individual valued social norms.

Visher and Travis (2011) stated that 94% of inmates surveyed prior to their release indicated that they needed more education, 82% needed job training, 80% needed a job, 72% needed transportation, and 49% needed housing. The authors followed inmates in their time-based study after they were released: Education and employment remained the greatest needs after release from incarceration. Identifying these needs prior to release was a valuable tool for reducing recidivism. Fifteen months later, education and employment were still high-priority needs of the former inmates (Visher & Travis, 2011).

Thomas and Stevenson (2009) examined primary and secondary levels of education, gender, and the challenges African American boys faced attaining education. The authors analyzed male African Americans, urban communities, and low-income families. African American men have dominated the U.S. prison population. Thomas and Stevenson found that gender contributed to what students learned in school. Male and female students typically received differential treatment in school, and this differential treatment contributed to what individuals of different genders learned (Thomas & Stevenson, 2009). The differential treatment could come in the form of guidance and demonstration, and boys were usually instructed what to do rather than how to do it; this shaped how learning took place. Thomas and Stevenson also demonstrated that African

American students were at the greatest risk of underachievement in school, when compared to students of other racial groups.

Visher and Travis (2011) identified challenges that incarcerated individuals faced when returning home after release. These authors reported that incarcerated individuals indicated just prior to release that education, employment, housing, and transportation were essential needs; those individuals indicated that employment and education remained essential factors 15 months later. Each of these challenges increases individuals' propensity for recidivism.

Summary

In this literature review, I illustrated that several previous authors have established race and education as predictors of recidivism (Costopoulos et al., 2017; Folk et al., 2018; Lilley et al., 2018; Lockwood et al., 2016; Maharaj, Murphy, & Gibart, 2016). The extent of research focused on identifying risk factors of recidivism suggests that this has become an important topic among criminologists. Less clear is the extent to which criminologists have agreed on the use of demographics as predictors of recidivism. This lack of clarity stems from the inconsistent results found by different researchers for each demographic variable in relation to recidivism. I reviewed the existing literature and produced a detailed account of research into race and education in relation to recidivism in order to gain a better understanding of gaps in the existing research.

Published research findings on the relationship between race and recidivism were also mixed. Some researchers have found no differences in recidivism based on race (Barrett & Katsiyannis, 2015; Lockwood et al., 2015), with others noting that European

Americans had the highest risk of recidivism (Baglivio et al., 2016; Behnken et al., 2017), and others citing that members of minority racial groups had the highest risk (McNeeley, 2018; Veeh et al., 2018; Webster et al., 2015).

I broke up the review of the relationship between recidivism and its relationship to race and education. Synthesis of the findings regarding the relationship between recidivism and education while incarcerated significantly reduced recidivism (Visher & Travis, 2003). With regard to race an emotional or behavioral disorder predicted recidivism more strongly for African Americans than for European Americans (Barrett & Katsiyannis, 2015). They also found that other predictors such as background, adverse parenting, mental health, school-related disabilities, and aspects of initial offenses were not affected by race, suggesting that young African Americans and European Americans exhibited similar vulnerability to early adversities (Barrett & Katsiyannis, 2015).

In Chapter 2, I reviewed literature on the relationships between education, community supervision, incarceration, and recidivism among African Americans in the United States. The findings from existing literature support the positive role of education in decreasing recidivism. I found no research, however, that examined the extent to which education can reduce recidivism with each grade level attained. In this study, I addressed research gaps related to inconsistencies in the literature regarding relationships between recidivism, race, and education. In Chapter 3, I will discuss the research method and design that I used to address those gaps.

Chapter 3: Research Method

Introduction

In this chapter, I describe the research method that I selected to compare the recidivism rates of individuals by educational attainment and race. Using secondary longitudinal data about the trajectories of incarcerated individuals, I determined how the recidivism rate differs based on educational attainment and race. A better understanding of the relationship between these factors and recidivism may facilitate the development of policies and practices aimed at decreasing the number of people incarcerated in the United States. I collected and analyzed data from the Bureau of Justice Statistics (2004) with respect to educational attainment and race to address the research questions and hypotheses of the study.

In this chapter, I explain the details of the selected method. I first discuss the rationale for choosing a quantitative method with a comparative research design. Then, the target population and sample selection are described. Next, I discuss the procedures for recruitment, participation, data collection, data analysis, validity, and ethical issues. The chapter concludes with a summary of the important details of the study methodology.

Research Design and Rationale

I used a descriptive, comparative research design for the study. Researchers use descriptive, comparative approaches to identify differences between groups as a function of an identified criterion, which serves as the dependent variable (Babones, 2014). The purpose of this study was to compare the recidivism rates of incarcerated individuals according to educational attainment and race. I used chi-square tests to determine the

relationships among the variables based on the criterion of recidivism (see Kim, 2014; Shen & He, 2014). Previous researchers with similar intentions have used comparative research designs to address their objectives (Andersen & Skardhamar, 2017; Barrett, Katsiyannis, Zhang, & Zhang, 2014; Ramakers, Nieuwbeerta, Van Wilsem, & Dirkzwager, 2017). The independent variables of this study were educational attainment and race. I measured all of the independent variables categorically. The dependent variable was recidivism rate, which I measured nominally. A descriptive, comparative research design was appropriate for the study because it directly addressed the research questions and hypotheses.

Methodology

Population

I collected and analyzed data from a 2004 survey of inmates from state and federal correctional facilities. The data were originally collected via personal interviews conducted from October 2003 through May 2004 using a computer-assisted interviewing system. Individuals incarcerated in state and federal prisons provided their criminal history, current offenses, and educational background as well as data on recidivism, educational attainment, and race. The Bureau of Justice Statistics made the resulting data set freely available for download.

All data were in the public domain; therefore, I did not have to obtain permission to use them from either the Bureau of Justice Statistics or the Inter-University Consortium for Political and Social Research, which distributed the data set. Moreover, the data included no names or other means of identifying the original interviewees, so

informed consent was unnecessary. I had access only to the archival data made available by the Bureau of Justice Statistics and had no contact with the individuals who participated in the creation of the data set.

Sampling Method

The interviewees who contributed to the data set were originally recruited using purposive sampling (Bureau of Justice Statistics, 2004), which is a sampling technique that involves the mindful selection of participants who satisfy the inclusion criteria (Duan, Bhaumik, Palinkas, & Hoagwood, 2015; Haas, 2012). To be included in collection of data for the data set, an individual had to be (a) lawfully considered a criminal offender by the Department of Justice, (b) incarcerated in 2005, and (c) aged 18 years old or above. Those with serious psychological problems were excluded from the data set.

I conducted an a priori power analysis to determine the required minimum sample size for the study. The analysis depended on four factors: significance level, effect size, test power, and statistical technique. The significance level, also known as Type I error, refers to the chance of rejecting a null hypothesis that is true (Haas, 2012). Most quantitative researchers use a 95% significance level because it provides adequate statistical evidence (Creswell, 2013). Effect size refers to the estimated measurement of the relationship between the variables being considered (Cohen, 1988). Cohen (1988) categorized effect sizes as small, medium, or large. Berger, Bayarri, and Pericchi (2013) argued that a medium effect size is best because it strikes a balance between being too strict (i.e., small) and too lenient (i.e., large). The power of a test is the probability of

correctly rejecting a null hypothesis (Sullivan & Feinn, 2012). Most quantitative researchers assume a power of 80% (Sullivan & Feinn, 2012). The statistical test used in this study was the chi-square test. I used G*Power, Version 3.1.9.2 (Faul, Erdfelder, Buchner, & Lang, 2009) to compute the required minimum sample size with a 95% significance level, medium effect size, and 80% test power for a chi-square test. The minimum sample size that resulted was 143 (see Appendix A). The size of the sample of the Bureau of Justice Statistics (2014) data set was 2,728—well above this minimum.

Procedures for Recruitment, Participation, and Data Collection

For tracking purposes, I used the unique identifier assigned to each individual when I transferred the data from the data set report (see Bureau of Justice Statistics, 2004) to Microsoft Excel, Version 16.30 for preprocessing. After preprocessing, I transferred the data to Statistical Package for the Social Sciences (SPSS), Version 26 for analysis.

Instrumentation and Operationalization of Constructs

The Bureau of Justice Statistics originally collected data using only the code book developed and published by the Bureau (Kaeble, Glaze, Tsoutis, & Minton, 2015). In this study, the independent variables were educational attainment and race. I measured all independent variables categorically. Depending on the test performed, I operationalized race as African American versus not African American, European American versus not European American, or European American or African American with other racial categories incorporated into the not African American or not European American category. Apart from European American and African American, other racial categories

used in the data set were American Indian, Alaska Native, Asian, Pacific Islander, Native Hawaiian, and all other races; these races were populated into the data set as Not European American or Not African American categories. I operationalized educational attainment as two categorical variables: attainment of a GED or high school diploma and attainment of education beyond high school. A nominal measurement was utilized with the value representing yes (0) or no (1). The dependent variable was recidivism, which I measured nominally.

Data Analysis Plan

I used SPSS, Version 26 for Mac to produce a range of descriptive and inferential statistics, including correlations utilizing a logistic regression analysis. I preprocessed data using Microsoft Excel, Version 16.30 to remove outliers and missing data. I only included data from participants who had provided data on recidivism, educational attainment, and race. After preprocessing, I exported the clean data to SPSS for analysis.

To provide context and background for the research questions and hypotheses, I computed descriptive statistics for educational attainment, race, and recidivism. I also performed inferential statistical analyses to compare the recidivism rates of incarcerated individuals according to their educational attainment and race. I used chi-square tests, which assess associations between pairs of categorical variables, to test the hypotheses. Both the independent and dependent variables were categorical; therefore, chi-square tests were appropriate. I measured the dependent variable of recidivism based on a participant's criminal status at the time of arrest—parole, supervised release, probation, shock probation, split sentence, or escape—in terms of arrest after periods of release. I

also performed logistic regression to determine whether a model including the identified significant race and education predictors provided a statistically significant explanation for recidivism.

Role of the Researcher

As the researcher, I served as a collector of data and ensured objectivity and transparency during data collection and analysis. I used secondary data; therefore, I was not involved in the original data collection. My personal experience of having been a probation officer and being a law enforcement officer at the time of the study provided me with internal knowledge of the criminal justice system and those who commit crimes.

Ethical Considerations

I met all the ethical requirements of Walden University. The Institutional Review Board (IRB) number 04-25-19-0245987. I followed the guidelines for research ethics of the American Psychological Association (2010) to protect the research participants. My highest priority when conducting this study was that there would be no harm to participants. Because of the nature of this study, participants were not subjected to potential harm or distress. I used only secondary data with no identifying information, so there were no or minimal risks to participants.

The data will be kept in encrypted form on a flash drive in a secure place in my office for 5 years, at the end of which the data will be irretrievably destroyed. I will put in place safeguards to ensure that these procedures are followed over the 5-year period, including electronic calendar reminders.

Threats to Validity

The validity of the results of this study relied heavily on the data provided by the Bureau of Justice Statistics (2004). The data were originally collected from interviews conducted within both state and federal prisons. To ensure that the data were relevant, I ensured that only data from those who meet the inclusion criteria were considered for analysis. My personal experience of being a probation officer and my current employment as a law enforcement officer provide me with an internal knowledge base of the criminal justice system and those who commit crimes. My role as a researcher in this study was as an agent who facilitated a study in a nonbiased manner by maintaining objectivity throughout the data collection and analysis processes.

I conducted a regression analysis to determine factors of probability measuring the relevance of race and education as it is related to incarceration. All efforts were made to ensure that each variable maintained its internal validity and correlated with the dependent variable. The research design did not provide me with the ability to control comparison and contrast explanations among the variables, leading to an unambiguous assumption (see Frankfort-Nachmias & Nachmias, 2008).

Limitations

One limitation of this research design was the exclusion of gender. Only 0.2% of the sample were female. A broader sample could have enabled the determination of whether gender impacts recidivism. The educational data provided were limited and based on self-reporting. Person-to-person assessments completed in a controlled environment could strengthen validity. A final limitation was that the research design did

not include demographics. In an effort to further examine the significance of educational attainment and race used in this study, the scope of future studies may be broadened to gain a macroscopic picture of the entire population. The research design did not offer a way to control for contrary explanations of the relationships between variables, which can result in ambiguity (see Frankfort-Nachmias & Nachmias, 2008).

My intention was to examine the relationship between each of the variables and to determine how they correlate with each other. The range of age and race used in this study may need to be broadened to gain more of a macrorepresentation of an entire population. I did not have the ability to control comparison and contrast explanations among the variables, leading to an unambiguous assumption (see Frankfort-Nachmias & Nachmias, 2008). This would have assisted in establishing the credibility of the study.

Education increases critical thinking skills that influence decision-making and social influence (Staib, 2003). The more education attained, the higher the employability (Steurer and Smith, 2003). Employability increases an individual's social-economics, which then influences their socio-environment (Lockwood et al., 2015). Previous authors have indicated that mass incarceration appears to have lowered crime rates; however, the effect of individuals being released from prison with no employment-related tools is detrimental to society (Western and Pettit, 2004).

Summary

In Chapter 3, I described the research methodology that I used in this study. The purpose of this quantitative, descriptive, comparative study was to compare the recidivism rate of criminal offenders by educational attainment and race. The population

of this study consisted of incarcerated individuals interviewed by the Bureau of Justice Statistics (2004) starting in 2003. I analyzed secondary data obtained from the Bureau using chi-square tests. The independent variables were participants' educational attainment and race, while the dependent variable was the recidivism rate. I also used logistic regression to determine the significance of the impact of education on recidivism. In Chapter 4, I will present the results of the data analysis.

Chapter 4: Results

Introduction

The purpose of this quantitative, descriptive, comparative study was to compare the recidivism rate of incarcerated individuals by race and education using secondary data that I obtained from the Bureau of Justice Statistics (2004). The independent variables in the study were education and race, and the dependent variable was recidivism. I used descriptive statistics, chi-square tests, and logistic regression to address the research questions and hypotheses that guided the study, which were as follows:

RQ1: To what extent, if any, does attainment of a GED or high school diploma reduce recidivism among incarcerated individuals?

H₀1: There is no significant association between recidivism and attainment of a GED or high school diploma among incarcerated individuals.

H₁1: There is a significant association between recidivism and attainment of a GED or high school diploma among incarcerated individuals.

RQ2: To what extent, if any, does educational attainment beyond a GED or high school diploma reduce recidivism among incarcerated individuals?

H₀2: There is no significant association between recidivism and educational attainment beyond a GED or high school diploma among incarcerated individuals.

H₁2: There is a significant association between recidivism and educational attainment beyond a GED or high school diploma among incarcerated individuals.

RQ3: To what extent, if any, is recidivism associated with race among incarcerated individuals?

H_03 : There is no significant association between recidivism and race among incarcerated individuals.

H_13 : There is a significant association between recidivism and race among incarcerated individuals.

I begin Chapter 4 with a discussion of the data collection. A presentation of the results organized by the type of analysis are then provided.

Data Collection and Analysis

I obtained data from the Bureau of Justice Statistics (2004) and analyzed the same through SPSS, Version 23. The data reflected the recidivism of individuals incarcerated in state and federal prisons. The data set recorded interview responses of 3,686 incarcerated men and women of various races. Data were originally collected from 1,401 federal and state prisons housing men (225 of which were state prisons) and 357 prisons housing women (65 of which were state prisons). I analyzed data from the 2,728 men in the sample only. Of the 3,386 individuals in the total sample, 958 individuals were females, which I excluded from the sample.

To answer Research Question 1, I measured the independent variable of education by asking whether a participant had earned a GED or high school diploma. To answer Research Question 2, I measured the independent variable of education by whether a participant had attained education beyond high school. To answer Research Question 3, I measured race, which served as the independent variable, in three ways: African

American versus not African American, European American versus not European American, and African American or European American with other racial categories excluded. Recidivism was the dependent variable, and I measured this based on a participant's criminal status at the time of arrest—parole, supervised release, probation, shock probation, split sentence, or escape—in terms of arrest after periods of release.

I performed chi-square analyses to determine whether there were statistically significant differences in recidivism between different levels of each independent variable. Including statistically significant predictors in the logistic regression allowed me to examine both the direction and strength of the relationships between the independent and dependent variables. Logistic regression was used to determine whether a model that included the significant race and education predictors provided a statistically significant explanation for recidivism. These analyses also provided an account of which predictors were statistically significant after controlling for the other variables.

Table 1 summarizes the recidivism variable. With regard to race, the sample analyzed included 1,208 European Americans and 1,520 non-European Americans. There were 1,199 African American participants and 1,529 non-African American participants. There were 321 participants who were neither European American nor African American.

Table 1

Incarcerated Individuals' Recidivism Responses

Recidivism	<i>f</i>	%	Valid %
Valid			
No	1,954	71.6	72.3
Yes	748	27.4	27.7

Total	2,702	99.0	100.0
Missing			
Missing	6	0.2	
System	20	0.7	
Total	26	1.0	
Total	2,728	100.0	

Research Question 1

Research Question 1 asked to what extent the attainment of a GED or high school diploma reduces recidivism among incarcerated individuals. I performed a frequency test to determine the highest grade completed (see Table 2). I performed a chi-square test to compare recidivism rates by whether participants had earned GEDs or high school diplomas (see Table 3 and Table 4). Among participants who recidivated, 34% had earned a GED or high school diploma compared to 48% among the nonrecidivist group. Recidivism rates differed significantly by educational attainment. The results of the logistic regression revealed that those who did not earn either a GED or high school diploma were much more likely to experience recidivism ($B = -0.437, p < .001$). Based on these results, I rejected the first null hypothesis that earning a GED or high school diploma has no impact on recidivism.

Table 2

Highest Grades Completed by Incarcerated Individuals

Highest grade completed	<i>f</i>	%	Valid %	Cumulative %
Never attended or attended kindergarten only	14	0.5	0.5	0.5
Grade school				
First	7	0.3	0.3	0.8
Second	8	0.3	0.3	1.1
Third	12	0.4	0.4	1.5
Fourth	17	0.6	0.6	2.2
Fifth	19	0.7	0.7	2.9
Sixth	64	2.3	2.4	5.2
Seventh	56	2.1	2.1	7.3
Eighth	131	4.8	4.9	12.2
Ninth	254	9.3	9.4	21.6
10th	354	13.0	13.2	34.8
11th	373	13.7	13.9	48.7
12th	696	25.5	25.9	74.5
College				
Freshman	143	5.2	5.3	79.9
Sophomore	213	7.8	7.9	87.8
Junior	61	2.2	2.3	90.0
Senior	127	4.7	4.7	94.8
Graduate school				
1 year	20	0.7	0.7	95.5
≥ 2 years	87	3.2	3.2	98.7
Attended school in other country/system without comparable grades	34	1.2	1.3	100.0
Total valid	2,690	98.6	100.0	
Blank	38	1.4		
Total	2,728	100.0		

Table 3

Incarcerated Individuals Regarding Having Earned a GED or High School Diploma

Earned	<i>f</i>	%	Valid %	Cumulative %
No	1,540	56.5	56.5	56.5
Yes	1,188	43.5	43.5	100.0
Total	2,728	100.0	100.0	

Table 4

Crosstabulation of Incarcerated Individuals' Responses Regarding Having Earned a GED or High School Diploma Versus Recidivism

Earned	Recidivism		Total
	No	Yes	
No	1,024	496	1,520
Yes	930	252	1,182
Total	1,954	748	2,702

Research Question 2

Research Question 2 asked to what extent educational attainment beyond a GED or high school diploma reduces recidivism among incarcerated individuals. I performed a chi-square test to compare recidivism rates by whether participants had attained education beyond high school (see Table 5). Among participants who recidivated, 17% attained education beyond high school compared to 27% among the nonrecidivist group. The chi-square test solely completed by itself revealed a statistically significant difference in recidivism based on whether participants had attained education beyond high school ($N = 2,702$, $\chi^2(1) = 27.83$, $p < .001$). The results of the logistic regression revealed that attaining education beyond high school did not have significant impact on

recidivism ($B = -0.212, p = .14$). Therefore, I failed to reject the second null hypothesis, and there is no significant association between recidivism and educational attainment beyond a GED or high school diploma among incarcerated individuals.

Table 5

Crosstabulation of Incarcerated Individuals' Attainment of Education Beyond High School Versus Recidivism

Attainment	Recidivism		Total
	No	Yes	
No	1,433	621	2,054
Yes	521	127	648
Total	1,954	748	2,702

Research Question 3

Research Question 3 asked to what extent recidivism is associated with race among incarcerated individuals. Table 6 and

Table 7 illustrate the frequencies of African American and Not African American participants.

Table 6

Frequency of African American Participants

Race	<i>f</i>	%	Valid %
Not African American	1,529	56.0	56.0
African American	1,199	44.0	44.0
Total	2,728	100.0	100.0

Table 7

Frequency of European American Participants

Race	<i>f</i>	%	Valid %
Not European American	1,520	55.7	55.7
European American	1,208	44.3	44.3
Total	2,728	100.0	100.0

Among participants who committed recidivism, 38% were European American compared to 47% among the nonrecidivist group (see Table 8). Being European American had a statistically significant impact on recidivism ($N = 2,702$, $\chi^2(1) = 15.61$, $p < .001$).

Table 8

Crosstabulation of Being European American Versus Recidivism

Race	Recidivism		Total
	No	Yes	
Not European American	1,042	462	1,504
European American	912	286	1,198
Total	1,954	748	2,702

Among participants who recidivated, 51% were African American compared to 41% among the nonrecidivist group (see Table 9). Being African American had a statistically significant impact on recidivism ($N = 2,702$, $\chi^2(1) = 21.08$, $p < .001$).

Table 9

Crosstabulation of Being African American Versus Recidivism

Race	Recidivism		Total
	No	Yes	
Not African American	1,145	365	1,510
African American	809	383	1,192
Total	1,954	748	2,702

The results of the logistic regression revealed that being African American was associated with recidivism, ($B = .347, p = .013$). In addition, being European American had no impact on recidivism ($p = .962$). Based on these results, I rejected the third null hypothesis as there is a significant association between recidivism and race among incarcerated individuals.

Logistic Regression

The two main assumptions of logistic regression were met. First, the sample size requirement of 20 participants per predictor was exceeded because the sample size was 2,728. Second, the multicollinearity assumption was met because the correlations among the predictors were not above .80 (see Table 10).

Table 10

Intercorrelations for Predictors of Recidivism

Predictor	1	2	3	4
1. European American	—			
2. African American	.782	—		
3. Beyond high school	-.055	-.024	—	
4. GED or high school diploma	-.038	-.001	-.624	—

I examined four goodness-of-fit statistics to assess how well a model containing the two race and two education variables predicted recidivism among incarcerated men. First, I compared the predictive accuracy of the baseline (i.e., constant) model (i.e., no predictors included) to that of the model including all four predictors with the expectation that the accuracy would improve with the addition of the predictors. This was not the case, because prediction accuracy (i.e., 72.3%) stayed the same across both models. This suggests that knowing about an individual's race and education would not improve the ability to accurately predict recidivism. Second, the omnibus test of model coefficients indicated that the model with all four predictors was statistically significant ($N = 2,728$, $\chi^2(4) = 61.075$, $p < .001$). Third, the Nagelkerke R^2 value of .03 showed that 3% of the variance in prediction of recidivism is explained by the model including race and education variables. Fourth, I ran a Hosmer and Lemeshow test to assess whether the predicted probabilities matched the observed probabilities. The result, which was not statistically significant ($N = 2,728$, $\chi^2(7) = 2.79$, $p = .835$), indicated that the set of four predictors accurately predicted the actual probabilities (see Table 11).

Table 11

Logistic Regression of Race and Education as Predictors of Recidivism

Predictor	<i>B</i>	<i>SE</i>	Wald statistic	<i>p</i>	Value	<i>e^B</i>	
						LL	UL
European American	0.007	0.144	0.002	.962	1.007	0.760	1.334
African American	0.347	0.140	6.104	.013	1.414	1.074	1.862
Beyond HS	-0.212	0.142	2.216	.137	0.809	0.612	1.069
GED/HS diploma	-0.437	0.116	14.217	.000	0.646	0.515	0.811
Constant	-0.901	0.129	48.426	.000	0.406		

Note. For each predictor, *df* = 1. CI = confidence interval; HS = high school; LL = lower limit; UL = upper limit.

Summary

The purpose of this quantitative, descriptive, comparative study was to determine the impact of education and race on recidivism. I conducted logistic regression analysis with statistically significant predictors included to test three research hypotheses. Chi-square analyses were performed to determine the relevance of the statistical relationship of each independent variable to the dependent variable of recidivism.

I concluded that the statistically significant predictors of recidivism were being African American and having earned a GED or high school diploma. Specifically, African American men were 1.41 times more likely to have recidivated than their non-African American counterparts. Not having earned GED or high school diploma made men 0.646 times more likely to have recidivated. Being European American and attending school beyond high school were not statistically significant predictors of recidivism. For Research Question 1, the results indicated that educational attainment of a GED or high school diploma was a significant predictor of recidivism. For Research

Question 2, the results indicated that educational attainment beyond high school was a significant predictor of recidivism. For Research Question 3, the results indicated that race was a significant predictor of recidivism. In Chapter 5, I will discuss the implications of the results, suggest how the findings could be applied in organizational settings, and provide recommendations for future research.

Chapter 5: Discussion, Conclusion, and Recommendations

Introduction

In this chapter, I summarize the results and conclusions of the study. The chapter begins with a summary of the study and its results, which provides a basis for my interpretation of the findings, recommendations for practice and research, and the implications of the results for professional practice and social change. In this study, I sought to examine whether race and education were a factor among recidivism. Through this research, I identified statistically significant results to the three research questions posed in this study; however, further examination of this area of study is necessary. Steurer and Smith (2003) believed that individuals who received education while incarcerated were less likely to commit further crimes. My findings expand the evidence that education does reduce crime. Individuals who receive a GED or high school diploma are 14% less likely to commit recidivism than those who did not earn their GED or high school diploma. This result reaffirmed the findings of Lochner and Moretti (2001), who showed that among African Americans, the likelihood of committing a crime was 3.4% lower for those with a secondary education compared to those without.

Summary of the Study

The research problem that I addressed in the study was that the incarceration rate among African Americans is higher than that of other racial groups and this population also exhibits a correspondingly high recidivism rate. For this reason, I sought to assess precursory factors that predict whether individuals will commit criminal offenses repeatedly. The purpose of this quantitative study was to compare recidivism rates by

educational attainment and race based on secondary data from the Bureau of Justice Statistics (2004). These data were originally collected via a survey to track arrests and educational attainment. The independent variables in the study were education attainment and race, and the dependent variable was the recidivism rate.

Summary of the Findings

I developed three research questions and their corresponding hypotheses to guide this study. In the following subsections, I summarize the results by research question and discuss the corresponding findings. Overall, the findings suggest that having earned a GED or high school diploma, educational attainment beyond high school, and race are significant predictors of recidivism.

Research Question 1

I rejected the null hypothesis for the first research question. I concluded that there is a significant association between recidivism and the educational attainment of a GED or high school diploma among incarcerated individuals.

Research Question 2

For the second research question, the null hypothesis was not rejected. I determined that there is not a significant association between recidivism and educational attainment beyond high school among incarcerated individuals. The Chi-square analyses indicated there was significance among those who attained education beyond GED or high school diploma among incarcerated individuals. However, the logistic regression analysis indicated that attending school beyond high school had no statistically significant predictors of recidivism.

Research Question 3

The third null hypothesis was rejected. The results indicated that there is a significant association between recidivism and the race among incarcerated individuals, although only when distinguishing between African Americans and members of other racial groups. The distinction between European Americans and members of other racial groups had no statistically significant association with recidivism.

Examination of Predictors

I conducted logistic regression analysis to determine whether there was any association of predictors among the independent variables of educational attainment and race and the dependent variable of recidivism. The findings indicated that statistically significant predictors of recidivism included being African American and not having earned a GED or high school diploma. Being European American and attending school beyond high school had no statistically significant association with recidivism.

Interpretation of the Findings

Previous researchers have used demographic variables, such as age, gender, and race, to assess the recidivism risk of individuals (Scurich & Monahan, 2016). For instance, Monahan and Skeem (2016) found age to be a risk factor, concluding that younger people were more likely to recidivate than older people. The findings in the current study indicated a significant association between recidivism and race. This is in alignment with the findings of Skeem and Lowenkamp (2016) that African Americans were more likely to recidivate than European Americans, a difference that they attributed to past criminal history. My findings are also consistent with those of Scurich and

Monahan (2016), who identified demographic variables, including race, as risk factors for recidivism. Nowacki (2016) noted that disparities in sentencing outcomes have often varied based on race, among other factors, which reflects judges' biases, stereotypes, and perceptions. The findings in the current study appear to agree with those of previous investigators who found race to be a predictor of general recidivism (Costopoulos et al., 2017; Faust et al., 2015; Folk et al., 2018; Hall, 2015; Lilley et al., 2018; Lockwood et al., 2016; Piquero et al., 2015).

In this study, I found a significant association between recidivism and educational attainment. Previous researchers have also identified a correlation between education and employment prospects (Visher & Travis, 2011). My findings extend those of other researchers such as McGarvey, Gabrielli, Bentler, and Mednick (1981), Steurer and Smith (2003), and Groota and Van de Brink (2010) with regard to the importance of educational attainment and its impact in reducing recidivism. I found that not earning a GED or high school diploma was associated with recidivism. The results of the regression analysis in this study showed that the most significant predictor of reduced recidivism was having earned a GED or high school diploma.

Limitations of the Study

I identified three limitations prior to collecting data; however, I reduced the impact of several of these. The first limitation was that I obtained all of the examined data from the Bureau of Justice Statistics (2004), and these data may not have reflected the population of interest, limiting possible insights. The findings suggest that this

limitation had a strong influence; however, the findings also align with and extend those of previous researchers in both qualitative and quantitative studies.

The second limitation was that I did not investigate the variable of gender at all, and only partially investigated the variable of race. Although I did not study gender, my findings are not inconsistent with the findings of others that the male recidivism rate is higher than the female rate (see Anderson et al., 2016; Conrad et al., 2014; Dolittle & Aalsma, 2012; Pettus-Davis, Veeh, Davis, & Tripodi, 2017). With regard to race, my findings were consistent with previous scholars' conclusions that race was a significant predictor of recidivism (Costopoulos et al., 2017; Faust et al., 2015; Folk et al., 2018; Hall, 2015; Lilley et al., 2018; Lockwood et al., 2016; Piquero et al., 2015); however, I did not directly study racial groups other than European Americans and African Americans.

The third limitation was that the use of purposive sampling, a nonprobability sampling procedure, reduced the possibility of generalizing the results to a larger population. I constrained this limitation by not generalizing the findings to populations that are not similar to the population included in this study. A fourth limitation of the study was that the comparative research design limited the scope of my analysis to similarities and differences between two groups. However, these comparisons led to new insights and a better understanding of the phenomena.

Recommendations

I developed several recommendations based on the findings and my interpretation of the findings in relation to the existing literature. The recommendations can be divided

into two groups: (a) practical recommendations, which are relevant to policymakers and other stakeholders in prison reform and recidivism, and (b) recommendations for future research, which are relevant to other researchers who are interested in the topic of recidivism and its association with the variables of race and educational attainment.

Practical Recommendations

Understanding the significant associations found between recidivism and educational attainment and between recidivism and race could provide a way to challenge policymakers and other stakeholders interested in criminal justice reform. The findings of this study suggest a need to tackle the problem of recidivism through reforms from a perspective other than that in which the associations between these variables are taken for granted. For instance, as I noted while interpreting the findings, educational attainment may be associated with other variables associated with recidivism, such as juvenile delinquency, employment, and educational curricula in urban communities. Policymakers may need to reassess crime-control measures and develop policies that address the dynamic factors that affect incarceration, such as education, treatment, and support after periods of incarceration.

In this study, I did not obtain any data from juvenile individuals. Instead of assuming a significant association between age and recidivism, policymakers may benefit by recognizing a more evident association between crime, quality of education, and age. The project of reducing recidivism should be undertaken with an understanding of the complicated interacting factors involved, which include educational attainment and race,

and the project should continue regardless of whether significant associations are established between single variables and recidivism.

Recommendations for Future Research

The theoretical framework of the study was the life course theory, which posits that it is possible to understand people's lives based on structural, social, and cultural contexts (see Elder et al., 2003; Farrington, 2005). The results expanded the application of the life course theory through an exploration of the associations between recidivism and variables representing such contexts—in this case, educational attainment and race. I recommend that future researchers continue to build upon my findings in order to expand the application of the life course theory in areas reflecting multiple contexts, such as those represented by the variables of this study.

I drew all my data from the Bureau of Justice Statistics (2004), and as I discussed in the Limitations of the Study section, this choice may have limited the insights possible from analysis. I recommend, therefore, that future researchers study the relationships between recidivism and the variables of educational attainment and race by collecting data directly to confirm or refute my findings. I also suggest that future researchers manipulate, control, and measure the variables included in this study to better grasp the relationships between them, particularly with regard to causality.

Implications for Professional Practice and Social Change

I conducted this study with the goal of filling an identified gap in existing literature regarding whether race and educational attainment differentiated the trajectories

of individuals with respect to recidivism. The findings have implications for both professional practice and social change, both of which I will discuss in this section.

The findings of this study contribute to social change by extending the criminal justice literature on the relationship between recidivism and the variables of educational attainment and race. The findings could aid in the creation and refinement of instruments for predicting or addressing criminality and recidivism. The findings suggest a more fine-grained relationship between recidivism and the factors studied, knowledge of which can be used to reduce the recidivism that disadvantages African Americans. This can occur through refinements of existing popular understanding of the associations between recidivism and variables such as educational attainment and race as well as within existing efforts toward criminal justice reform.

Current efforts relevant to the population studied may benefit from testing of educational attainment and aptitude. The findings of this study suggest that educational attainment can help to identify a vulnerable group—those at risk of recidivism. Legislative and judicial bodies should seek alternatives in sentencing. Perhaps they will find that the costs of quality education are comparable to those of prison sentences. Expanding legislation, developing tools, and providing educational mandates for incarcerated individuals prior to release from prison may be beneficial. A modicum of understanding regarding the associations between recidivism and the variables of race and educational attainment could increase the effectiveness of existing policies and programs by challenging received wisdom. Refining existing efforts to reduce recidivism based on my findings could lead to positive social change for African Americans, who

have been overrepresented in prisons. The findings could be used to promote social change in this way by addressing the social and educational challenges faced by African Americans.

Individuals ultimately are responsible for their own actions, but society and policymakers can share that responsibility by ensuring viable resources are available to all, regardless of previous circumstances. Facilitators and practitioners in the criminal justice field can use the results of this study to create additional tools with the aim of reducing criminality and recidivism. Recognizing the significant association found between recidivism and both the attainment of a GED or high school diploma and race could present a challenge to policymakers and other stakeholders interested in criminal justice reform to ensure that race does not become a source of injustice. Additionally, the findings of this study challenge these stakeholders to ensure that African Americans can earn a GED or high school diploma.

For professional practice, the findings suggest a need to tackle the problem of recidivism from a perspective other than that in which the associations between these variables are taken for granted. For instance, practitioners may suppose that it is possible for age to be associated with outcomes associated with recidivism, such as juvenile delinquency, although I did not examine the association between recidivism and age in this investigation. In that case, instead of assuming a significant association between age and recidivism, practitioners may benefit by recognizing a particular association between crime and age. The project of reducing recidivism must be undertaken through an

understanding of the complex factors that may interact with educational attainment, aptitude, retainment, and continuation of services after incarceration.

Conclusion

I conducted this study with the goal of filling a gap identified in the current body of literature regarding whether factors, such as race and education, differentiate the trajectory of individuals in terms of recidivism. The findings of the study, which were largely consistent with existing literature, suggest that earning a GED or high school diploma, attaining education beyond high school, and being of the African American race are significant predictors of recidivism. The resulting improved understanding of the relationships between recidivism and the factors studied can be used to reduce recidivism that disadvantages African Americans. This can occur through influence on received wisdom, adjustment of existing efforts toward criminal justice reform, and creation of new policies and practices to reduce recidivism.

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