

## Abstract

### “Are We Doing Better? The Implications of Race, Sex, and Geographic Factors Associated with Sentence Length for Marijuana Charges”

As marijuana use is becoming recreationally legalized, and decriminalized across the United States, there has been ongoing questioning as to why many Marijuana related charges have extensive sentencing. This dissertation examined different factors that potentially contribute to sentence length for marijuana charges such as race, sex, and geographical locations. This dissertation aimed to identify how influential these factors are in sentencing for marijuana related charges through use of a Hierarchical Linear Model analyses framed through the lens of Critical Race Theory and Social Constructivism Theory. The researcher hopes to continue the conversation of how policies both old and new need to have ongoing analysis to ensure there is no bias rooted in decision making and that all policies are fair and just.

“Are We Doing Better? The Implications of Race, Sex, and Geographic  
Factors Associated with Sentence Length for Marijuana Charges”

by

*Tory Thomas*

DISSERTATION

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By

Tory Thomas

The committee for this doctoral dissertation proposal consisted of:

Advisor's Name Dr. Auerbach

Committee Member Dr. Pilkay

Committee Member Dr. Beckerman

Committee Member \_\_\_\_\_

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## Dedication

I would like to dedicate this dissertation to my parents, Madolyn and Kelvin Dukes, who've continuously supported all my aspirations; to my siblings Monica, Noel, and Skyler, who've continuously cheered me on; to my best friend Andrea, who stayed up late nights with me; and most importantly, to my community for igniting the flame within me that will create better opportunities for people of color, like myself.

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## Chapter One: The Overview

This study examined the contributing effects of inmates' characteristics such as race, sex, age, and geographical factors on sentence length for marijuana charges. This research study was a quantitative quasi-experimental design. This study utilized data from the National Archive of Criminal Justice Data (NACJD) for this study. The NACJD manages the collection of crime and justice data for every state and facilitates research. The data was analyzed using a Hierarchical Linear Model to better understand the magnitude of effects across individual, census division, and state-level factors while controlling previous prison time and previous felonies as covariates. The data was also subset after the initial analysis, controlling for participants who have had prior felony convictions only. The study was consistent with the following National Association of Social Workers Codes of Ethics and demonstrated relevance to the Social Work field. Those codes of ethics were social justice, dignity and worth of persons, and integrity. The social justice, dignity and worth of persons, and integrity codes of ethics connected to this study by outlining core components to understanding and identifying factors to sentencing for marijuana related charges. Each of these Social Work codes will be further defined. The "social justice" value in the NASW Code of Ethics is defined as "Social workers pursue social change, particularly with and on behalf of vulnerable and oppressed individuals and groups of people. Social workers' social change efforts are focused primarily on issues of poverty, unemployment, discrimination, and other forms of social injustice" (National Association of Social Work Code of Ethics, 2008). Social justice will be operationalized as the efforts made by all individuals in a community to converge (Novak, 2000). The "Dignity and Worth of a Person" value in the NASW Code of Ethics is defined as "...Social workers are cognizant of their dual responsibility to clients and to the broader society. They seek to resolve conflicts between clients' interests and the broader



society's interests in a socially responsible manner consistent with the values, ethical principles, and ethical standards of the profession" (National Association of Social Work Code of Ethics, 2008). The last NASW Code of Ethics that will be operationalized by the standards set from the NASW is "Integrity," which is defined as "Social workers are continually aware of the profession's mission, values, ethical principles, and ethical standards and practice in a manner consistent with them. Social workers act honestly and responsibly and promote ethical practices on the part of the organizations with which they are affiliated" (National Association of Social Work Code of Ethics, 2008).

The societal interest in racial disparities in policing increased tremendously in the United States in the past few years (aclu.org, 2020). Racial disparities was operationalized as when the amount of individuals in a controlled environment, from a particular ethnicity surpass the ratio they comprise in the general population (The increased interest is due to an increase in the media prevalence of videos showing police officers conducting unwarranted searches, unethical police stops, and excessive restraints of African-American citizens (aclu.org, 2020). Issues surrounding marijuana use, legal punishment, and racial disparity intersect with societal interest in policing and have garnered the attention of researchers (aclu.org, 2020).

Statistical investigations by the American Civil Liberty Union have shown that marijuana and incarceration are disproportionately linked for African-American individuals compared to other populations in the U.S. (aclu.org, 2020). Although recent statistical investigations have shown that marijuana and incarceration are disproportionately linked to African-Americans, recent commentary has cited a 2010 report (Chapman et al., (2010) claiming that the disproportionate marijuana-related arrests are more likely due to an increased use of marijuana

by African-American citizens who are more dishonest about that use (D'Alessio & Stolzenberg, 2021).

The discrepancies among these study conclusions highlight the need for more stringent approaches to investigating marijuana-related racial disparities within the criminal justice system, more specifically, the links between individual characteristics (e.g., race, sex, and age), geographical characteristics, and marijuana-related sentence length. For the purpose of this study, the terms race, sex, and age were operationalized by their assignments at birth of the individuals. Race was consistent with African-American, Latinx, Caucasian, Asian and other; sex was consistent with male and female; and age was consistent with the assigned birth year.

Marijuana laws and sentencing guidelines vary by state. Moreover, court personnel, such as a county judge, for instance, could influence sentencing decisions according to their interpretation of the laws and the arguments made in court (Holmes, 2019). Therefore, this research study's scope explored the varying contribution of individual characteristics and geographical factors that influence sentencing outcomes for individuals with marijuana charges in the United States. Specifically, the researcher explored the effects of inmate race, gender, age, and the census division and state of the criminal charge on sentence length, while also including the covariates of prior incarceration time and prior felony convictions. The researcher considered contributing factors such as other potential drug convictions to identify pattern consistency across them. As detailed in the NACJD, other potential drugs include heroin, cocaine/crack, and "other". The Bureau of Justice Statistics data that was used for this investigation did not include additional information about previous criminal charges without convictions or misdemeanor convictions. Therefore, prior incarceration and felony convictions were only used as controls rather than additional predictor variables in the statistical analyses. Moreover, examining

associations among the variables allowed for observation of possible changes in sentencing trends. Inmate gender and age were included in the list of individual characteristics to control for possible spurious effects. The Hierarchical Linear Model analysis application allowed for the identification of the most substantial contributing factors to sentencing according to how individuals were clustered in groups by race, gender, age, census division, and state.

The research study, and the problem it addressed, is relevant to social work and is justified by the disproportionate racial demographics in the U.S. criminal justice system (Bureau of Justice Statistics, 2020). Social welfare is grounded in making changes where the outcomes of a decision disadvantage those who are truly in need, such as “lower class” communities but often benefit communities in a higher socioeconomic class (Danque-Berry, 2017). The war on drugs has led to an imbalance of social justice and dignity and the worth of persons in everyday life by disproportionately affecting people of color, especially African Americans, across the U.S. Although the civil rights movement created change to reduce the marginalization of people of color (POC), which in this study correlated to individuals of African and Latinx descent, the recent national protests have increased society’s awareness of discrimination that is still ongoing. Marginalization according to Alakhunova et al., (2015) has been operationalized as “both a condition and a process that prevents individuals and groups from full participation in social, economic, and political life enjoyed by the wider society” (2015). For example, police brutality such as excessive force, unlawful searches, racial discrimination, and wrongful arrests (blacklivesmatter.com, 2020) and longer prison sentences (Rehavi & Starr, 2014).

The research study aimed to provide generalizable findings for the social work profession to inform legal systems as appropriate and to provide awareness for ongoing civil discussions. More specifically, by exploring the varying effects of individual versus geographical

characteristics on marijuana crime sentencing it provided insight into some possible mechanisms such as demographic makeup and political interest resulting in disproportionate racial demographics in the U.S. criminal justice system. The research study findings could provide insight into the development of or amendment to laws across the United States. Lastly, the inclusion of geographical factors as having potential contributing effects added to the conversation about racism and discrimination in specific census division for a broader perspective on how the social work profession can better achieve social justice and enhance dignity and worth to social work practice and social work education.

The sample population included prisoners serving marijuana-related charges. Given that the sample included the entire national population, the data was representative of the true population during the most recent data collection time. The NACJD provided the data from state reports on all incarcerated individuals in a de-identified format (See Appendix A). There were no direct questions queried of incarcerated individuals. Due to the current global pandemic and IRB restrictions on collecting data in person, the research study utilized restricted national data from the NACJD. Permission was obtained from the NACJD to access the restricted data through an application process that began after approval of the research study and IRB approval (Appendix A). The researcher obtained the NACJD application instructions and forms, and verified approval criteria to determine data access feasibility. All of the information gathered from NACJD was de-identified. However, general demographic information was included to allow sample descriptions and analyses by race, gender, and age. Given the absence of identifiable information, the current inmates were not informed of the study. Furthermore, the secondary data's nature eliminated the potential for harm to subjects by the use and/or gathering of research information.

## Chapter Two: The Study Problem

### Overview of the Problem

The United States criminal justice system has long been studied to identify any links between race, crime, and punishment (Brewer & Heitzeg, 2008). Empirical evidence highlights the appearance of racial neutrality in the U.S. criminal justice system, yet the racial disparity is still evident (Van Cleve & Mayes, 2015). For example, from 2001 to 2010, Caucasians were noted as using marijuana more frequently than African Americans (aclu.org, 2020). However, African Americans are four times more likely to be arrested for marijuana possession (aclu.org, 2020). The increased arrests create a cycle of disparity because the record of previous charges is often used to inform sentencing for future criminal cases (Rehavi & Starr, 2014). However, individuals with marijuana-related charges are not often involved in violent crime. Research shows that those with marijuana charges are often first-time offenders with no criminal records (Lopez, 2018).

The National Center for Drug Abuse Statistics (drugabusestatistics.org, 2016) has stated that, on average, 11,533 inmates are in prison for marijuana-related offenses. As of 2016, 12 percent of the federal prison population included individuals who have minor marijuana-related charges which was defined and will be operationalized as possession in small amounts, such as two ounces and under (drugabusestatistics.org,2016) Although the overall percentage of inmates with marijuana-related charges is low compared to inmates with other drug-related charges, the NCDAS (2016) states that inmates of color are arrested more often than other individuals incarcerated for non-marijuana-related charges (NCDAS, 2016).

The research study analyzed if geographic factors are more influential on sentence outcomes than the individual factors of race, age, or gender. It examined how POCs (inmates identified as persons of color) in the justice system have received longer or more severe marijuana-related sentences. The inclusion of other ethnic groups outside of African-Americans strengthened the validity of findings from this study. It is necessary to control for gender because the National Center for Drug Abuse Statistics has noted that nearly 94 percent of those incarcerated are males, suggesting that gender may be a factor influencing marijuana-related charges (drugabusestatistics.org, 2016).

### **The Problem Historically and Now**

The usage of Marijuana has been a source of societal and political discussion in the U.S. for many years (Shapiro & Mettler, 2017). Recreational use of marijuana became illegal in the mid-1900s with little knowledge of the beneficial effects it possessed. Upon criminalization of the substance under the Reagan administration, a “war on drugs” began with a “zero tolerance” policy in place (Shapiro & Mettler, 2017). It is argued that the “war on drugs” is a “war on blacks” that has resulted in the disproportionate incarceration of African-American citizens (Nunn, 2002). Subsequently, as the War on Drugs began, a New York City Governor sparked a trend for sentencing individuals with small possession amounts to the maximum prison sentence (Kohler-Hausmann, 2010). These laws sentenced individuals with small possession amounts to a minimum of 15 years to life to a maximum of 25 years to life (Kohler-Hausmann, 2010). This zero-tolerance approach was known as Rockefeller Drug Laws and shortly afterwards became the precedent for sentencing across the United States (Kohler-Hausmann, 2010). As time went on, many states changed their perspectives towards recreational marijuana use and began to decriminalize the substance (Shapiro & Mettler, 2017). From the point of decriminalization,

marijuana legislation began to change in many states due to changes in community perspectives (Shapiro & Mettler, 2017). However, it is unclear if this has affected the racialization of marijuana-related sentencing.

As many current legislators and states favor changing their laws to legalize marijuana, there are questions if marijuana legalization is the appropriate decision (Shapiro & Mettler, 2017). The legalization of marijuana is not a law that has been federally changed but enacted on the state level. Therefore, what is considered acceptable use varies among states (Shapiro & Mettler, 2017) and would influence sentencing outcomes. Research has shown that most of the bills passed across the U.S. have legalized the recreational use of Marijuana while also decriminalizing its possession found under a certain amount (DISA, 2020).

One of the first bills to be introduced in favor of marijuana legalization was H.R. 2306 by the 112<sup>th</sup> Congressional House. H.R. 2306 was the “Ending Federal Marijuana Prohibition Act of 2011” (H.R. 2306, 2011). This bill sought to “limit the application of Federal laws to the distribution and consumption of marijuana, and for other purposes” (H.R. 2306, 2011). There has been no policy changes made at the federal level yet and much speculation regarding whether the factors contributing to no federal change are similar to those that contribute to sentencing length. Some of these speculations concern geographic locations such as state and census division. German Lopez (2018) has stated that there are higher crime rates in geographic locations that are highly populated with POC and Quillian and Pager (2001) have shared the same sentiments.

### **The Problem as a Social Work Concern**

The study problem is a social work concern on many levels. Social work is grounded in fighting for equality and justice, and research supports the ongoing need for advocacy for POCs

involved in the criminal justice system. Equality was operationalized as “circumstances in which people are equal not in their welfare but the resources at their command” (Dworkin, 1987). The war on drugs introduced a systematic change within the judicial system that increased racial disparities in the United States (Shapiro & Mettler, K., 2017). POCs are five times more likely to be incarcerated compared to Caucasian Americans (naacp.org, 2020) for marijuana-related crimes. Previous incarceration has been shown to significantly reduce an individual’s earning potential and thereby an individual’s ability to live independently in a sustainable manner (Kling, 2006). Reduced earning potential increases the likelihood that a POC will disproportionately live-in poor communities that receive more policing than middle and upper-class communities (Brunson & Miller, 2006) which directly correlates with racially targeted arrests and police brutality (Kling, 2016). Unfortunately, the increased risk for incarceration effects on earning potential and the use of prior criminal records in sentencing create an almost inescapable cycle for POCs.

This research study of how race, gender, and geographic factors contribute to sentence length for populations serving marijuana-related crimes, further explored the social problem of sentencing disparities for people of color. Research to date has not identified why people of color experience longer sentencing, thus creating a significant issue for these communities. States have the authorization to create their specific laws, allowing various standards to apply for the same legal issues. This research addressed the study problem by identifying what factors into longer sentencing for people of color, and identified if these factors resorted to an updated review of policies and practices within the judicial system for reasons of social workers aiding the underserved.



Sentence length for marijuana related charges and the factors associated with it is a social work concern on all levels (micro, mezzo, macro) in social work. The social work field has always been rooted in advocacy for those who may not be able to advocate for themselves (National Association of Social Work Code of Ethics, 2008) and, by understanding factors that contribute to sentencing, this will assist the social work field in centralizing advocacy concerns for marijuana related charges. The micro level is the level that correlates directly with the individual on a daily basis (Lacasse & Gambрил, 2015). The social work concern on this level is the emotional and mental health the individual experiences upon being charged (Wilson, 2013). The mezzo level is the level that correlates directly with services and community organizations (Lacasse & Gambрил, 2015). On this level the social work concern would be identifying if there are community appropriate programs or school district restrictions for someone with marijuana related charges (Wilson, 2013). The macro level is the level that correlates directly to social policy, activism, and governmental entities (Lacasse & Gambрил, 2015). The main social work concern on this level would be identifying drug policy reform, inclusive of government funding for program initiatives (Wilson, 2013). Identifying factors of sentence length for marijuana related charges is a social work concern because as mentioned, the problem affects not only the individual but community policies and funding (Wilson, 2013). As marijuana continues to move towards legalization, being able to understand how it would affect the community, both positively and negatively, is imperative to the field of social work in order to appropriately inform systems for the greater good of society.

## Chapter Three: Literature Review

### Introduction

This systematic literature review explored the empirical evidence focused on marijuana use and incarceration. The literature review also discussed how the usage of marijuana, and the legislation surrounding it, has systematically disproportionately affected people of color. First, the racialization of marijuana use is reported, followed by exploring the relationship among marijuana, race and incarceration.

### *The Racialization of Marijuana Use*

Marijuana prohibition is often portrayed as a ban on a substance that is a “gateway drug” to other substances. This portrayal can be viewed untrue given the medicinal benefits the drug possesses (Anguelov, 2018). Research has pushed the theory of this substance being a “gateway drug” since the mid-1900s (Hay, 2015). People often claimed that this substance’s categorization as a level 1 drug, which is typically viewed as the most dangerous drug level, was inappropriately labeled. What researchers eventually discovered was the racially driven reason why marijuana use would become so heavily monitored (Hay, 2015).

In the mid-1800s to the early 1900s, the recreational use of marijuana was legal (Hay, 2015). People could purchase and use marijuana in the U.S. without any repercussions (Hay, 2015). It was not until the 1920s that marijuana became illegal. Historians like Eric Schlosser attributed the change in American views towards the use of marijuana to the Mexican Revolution (Hay, 2015). Americans held prejudicial viewpoints towards Mexicans contending that their use of alcohol and Marijuana enticed aggressive behavior (Hay, 2015). Later, a new perception grew

towards the substance deeming it an illicit drug, a change mostly due to the utilization of marijuana in communities primarily inhabited by people of color (Kaminoff, 2018).

Marijuana came to be known as a substance used by people of color. According to Hay (2015), stereotypes were employed to persuade individuals against the substance. Hay (2015) stated that marijuana had been viewed as a substance only used by people of color until the late 1960s and that by the late 1960s, Caucasian college students began to smoke marijuana, so that the connection or idea of this substance as a “colored-only” drug soon changed. Caucasian students worldwide began smoking marijuana, and laws changed shortly afterward (Hay, 2015). Hay offered the idea that decriminalization did not become a consideration until the perception of the desired client changed (Hay, 2015).

### ***Marijuana, Race, and Incarceration***

There is a negative correlation between marijuana legislation and race, significant in terms of sentencing for those incarcerated for marijuana use (McVay, 1991). Many individuals have received longer sentencing due to biased views against people of color. The criminal justice system has historically provided harsher punishments and or sanctions towards people of color than someone who is not of color (McVay, 1991). Individuals of color face longer sentencing, twice the rate of someone not of color (McVay, 1991). With states having the power to determine whether to legalize the use of marijuana, it is likely that states with more in-depth histories of racial injustices would choose to remain a marijuana-free state as suggested by McVay (1991).

This research study sought to understanding how race, sex and geographic factors impact how laws and policies are implemented or considered. The analysis of race in relation to

marijuana usage was beneficial due to the early stereotypical connections associated with people of color and marijuana. We must understand factors that aid in sentencing length and its effect on people of color.

## **Methods**

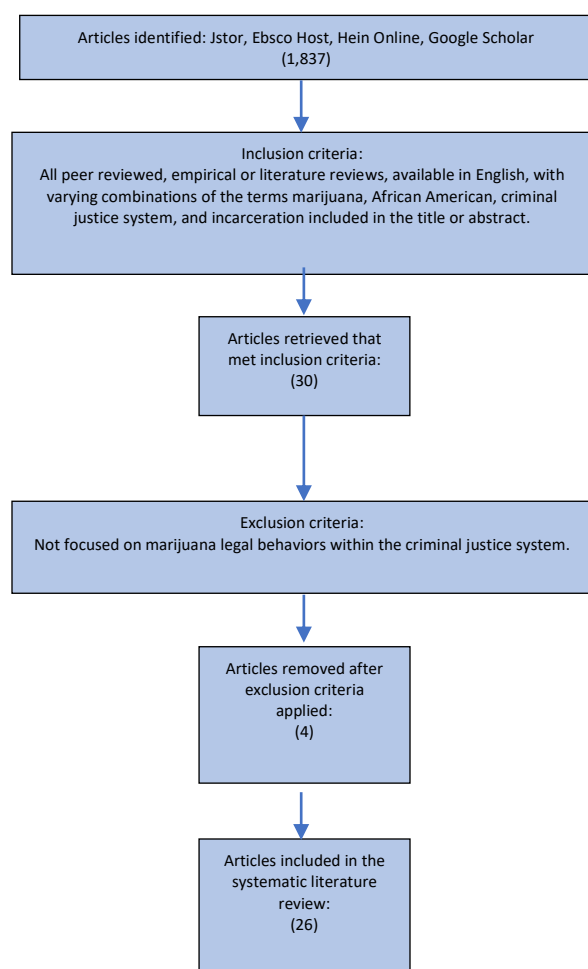
When conducting the initial search for articles on marijuana and incarceration, a search criterion was created using the search terms in varying arrangements included: “marijuana” AND “African American” AND “criminal justice system” OR “incarceration.” Four databases were utilized during the search; JSTOR, Ebsco Host, Hein Online, and Google Scholar. The inclusion criteria encompassed peer-reviewed empirical literature in English and included the search terms in the title or abstract. The initial search produced 1,837 articles. The title and abstract screening produced twenty-six articles that met the inclusion criteria. Exclusion criteria included any articles that were focused on Cannabidiol (CBD) type products versus Marijuana with Tetrahydrocannabinol (THC). Zero articles were removed after applying the exclusion criteria. The search process is depicted in Figure 1.

From the findings, eight articles used mixed methods, nine articles were qualitative, and seven articles were quantitative. Some of the methods used were interviews, quasi-experimental, experimental, meta-analysis, and observational studies. One article stated that utilizing these research-gathering approaches allowed for a more comprehensive understanding of how individuals were incarcerated and why marijuana legalization poses as a barrier after incarceration (Bolivar, 2016).

Several themes emerged in the literature and were used to organize the findings of this review. The themes included: 1) systematic racial inequality, 2) Marijuana legalization issues,

and 3) how Marijuana legislation benefits those who are not persons of color. In describing the common themes gathered from the literature, many researchers began their work by first accessing data from their local prisons and judicial facilities. Upon gathering literature, researchers then analyzed their findings. Other researchers that utilized qualitative approaches interviewed individuals and then synthesized their findings from the research (Bolivar, 2016).

**Fig. 1. Search flow chart**



## Results

### *Systematic Racial Inequality*

The first consistent theme throughout the research was the higher rate of incarceration for people of color. Six articles discussed racial inequality in the judicial system, specifically how people of color have been systematically institutionalized and racially profiled to commit certain crimes, and as a result, their sentencing is automatically longer (Aduyesi, 2016; Danque-Berry, 2017; Kamalu, 2016; Mazzocco, 2017; Takei, 2017; Van-Cleve, 2015). Some researchers conclude that African Americans are most likely to be impacted than other POC due to social constructs such as education systems and the wealth gap ostracizing people of color (Danque-Berry, 2017). Often, these social constructs are derived from community influences such as “societal norms”, and even community influencers. The potential impact of these influences can pose as limitations on judicial practices (Danque-Berry, 2017).

Aduyesi (2016) stated that African Americans are eight times more likely than Caucasian people to be arrested, accounting for almost 81% of drug tests administered and highlighting that African Americans are stopped more than other races. Researcher Danque (2017), stated that the arrest rates are 2.4 times higher for African Americans than for Caucasian people but account for 3.8% of the population. Danque stated African Americans have 3.7 times higher arrests than any other race. Kamalu (2016) points to the fact that African Americans have been the subject of suspicious traffic stops, that African Americans account for about 70% of traffic stops. According to Kamalu, these traffic stops had been masked under “probable cause,” and that African Americans are usually detained to be held and not released. Kamalu’s research shows that minorities make up 55% of arrests.

Other research highlights the inequality in the judicial system. Mazzocco (2017) sampled 1,700 young adults, both male and female. Of these, 62% were Caucasian, 13% were African American, 17% were Hispanic. Mazzocco highlighted how the Caucasian participants exhibited biases and/or “color blindness” related to African Americans, thus unknowingly over-criminalizing them. Overall, 46% exhibited color blindness overall, 64% were colorblind related to policies, 54% acknowledged personal, racial biases, and 11% did not want to talk about race.

Takei (2017) posited that the judicial systems in place do not favor the parolee. Van Cleve (2015) stated that individuals change to acknowledge injustices within the judicial system, and some choose to ignore it. Van Cleve’s study found that race and criminal justice each enforce and exacerbate the other based off of inherited practices, and that though there is the allusion of racial neutrality in the criminal justice system, in reality, there is a pronounced racial disparity

### ***Marijuana Sentencing Issues***

The second theme consistent throughout the research was that POCs serve extensive sentences for minor non-criminal charges. Nine articles discussed inconsistency throughout the years as it relates to sentencing, showcasing how many individuals currently serve sentences for non-criminal marijuana offenses, despite its minor criminal status. These articles point as well to how those who are currently incarcerated are often overlooked.

Anguelov (2018) conducted a cross-sectional regression analysis sampling 70,000 people from all 50 states. His research gathered data on how many people were engaging in smoking to understand sentencing better. A questionnaire was administered to participants aged 12 and up and found that many individuals across the U.S. engage in smoking at an early age. Brewer

(2008) sampled 40 young males and found that criminal justice and mass imprisonment within the U.S. has roots in classism and racism. Brewer's research pointed to the many injustices in the criminal justice system and that there is often an overrepresentation of POCs in the judicial system.

Like Brewer, Brunson (2006) conducted a study sampling of 40 men of color and found that the majority of their experiences with law enforcement involved harassment and police misconduct. When studying disparities in law enforcement, clear discrepancies can be identified between men and women. Kling (2006) sampled 4,610 individuals, both male and female, ages ranging from 25 to 64 years of age from all races. Each individual served a sentence of either half a year to four-and-a-half years. Kling's research contends that increase in incarceration length has adverse long-term effects, and that these effects have historically impacted men more often than women. Marijuana by the numbers (2020) provided statistics for the sentencing of people of color: 52% of drug arrests are marijuana-related; 88% of 8.2 million marijuana arrests were simply for possession; and the POC population was 3.7 times more likely to be arrested and have longer sentencing for small marijuana amounts.

Policy changes for dealing with possession of marijuana in small amounts, which will be operationalized as two ounces and under, may lead to a decrease in marijuana sentencing. McVay (1991) concluded that many individuals charged with these minor charges are otherwise "law-abiding citizens," and found that a better system to manage marijuana infractions would resort in less negative recourse. Shapiro (2017) found that states are arresting far fewer individuals for marijuana charges since its legalization. Vitiello (2019) found that marijuana use is consistent across the overall population, but that POC arrests are higher than for other ethnic groups.



### *Marijuana Legislation and Policies*

The third theme that was consistent throughout the research was the political gain in legalizing marijuana. The articles overviewed how many policies affected their respective census divisions and states. Nine articles shared similar viewpoints in the research (Bolivar, 2016; Holmes, 2019; Kaminoff, 2018; Kenneth, 2017; Lopez, 2017; Rehavi, 2014; Schlusset, 2017; Thompson, 2017; Todd, 2018).

Bolivar (2016) sampled males from Denver, Colorado. His study participants were 31% Caucasian, 17% Hispanic and 12% African Americans. Bolivar found that, of the prison population, African Americans made up 38% and Hispanic people made up 20%, thus, furthering the contention that POCs are overly policed and sentenced at greater numbers than people not of color. Holmes (2019) researched in California and found that the judicial system's structure there was organized well and critiqued local control and enforcement for its lack of structure and organization. He concluded that "lack of structure" within the judicial system can be a direct result of the actions rendered from the community. Those actions include stealing, gun possession and crimes alike.

Kaminoff (2018) interviewed seven people over 35 years of age, both Caucasian and African Americans. Like Holmes, Kaminoff found that Caucasian people's views and stances with regard to judicial policies are based on traditional notions of those who use substances. He also found that African Americans based their views on "linked fate", meaning their inherited mindset towards potential arrests, and experiences in the criminal justice system. Kenneth (2017) found that African Americans are at a disadvantage and face institutionalized discrimination, and that historical policies add to political decisions regarding marijuana legalization. Lopez's (2018)

research focused on how legalizing marijuana would not mean individuals would be free from implicit bias in the judicial system or have improved opportunities to live their everyday lives.

Rehavi (2014) sampled 36,675 people of the general population. He found that of those arrested, 33,252 had court filings, 790 had no filings, and 2,647 individuals had their cases dismissed. Rehavi found that although the criminal justice system contends that state arrests is not based on race, 80% of Black arrests are incarcerated while only 68% of Caucasian arrests are. He also found that Black sentences are usually 70% longer, resulting in an additional two years or more added onto their sentencing. Rehavi found that the real issue lies within the differences in the distribution of arrest offenses, alluding to how personal biases may be factors.

Schluskel (2017) concluded that most Caucasian people favor marijuana legalization with a concern toward entrepreneurship. He concluded that marijuana policies do not look at the past harms of prohibition and that the expungement of records should be included when considering policies. Todd (2018) found that court filings fell by 98% in D.C. after states legalized marijuana cases, ultimately reducing sentencing for minor marijuana-related charges for all races. Thompson (2017) found that, due to inherent biases and systemic structural racism, individuals of color are disadvantaged.

## **Discussion**

### ***Summary of What We Know***

The research presented has highlighted the various ways in which careful review of marijuana sentencing could be beneficial to individuals in their respective communities and the judicial system by taking into account the major themes highlighted. The research also

highlighted how equality in sentencing had not been afforded across all demographics (Bolivar, 2016). Bolivar (2016) showed how the literature has balanced the unknown and the known about marijuana legalization and sentencing in such way that while it does not victimize POCs, it highlights potential gaps to be addressed regarding the ways the judicial system has historically sentenced this population.

It is hoped that this study brought about awareness of the contribution race and geographical factors played in sentencing individuals. The researcher hopes that by bringing awareness to these factors that practices used for sentencing will change. There is an anticipation that by conducting this research, real legislation can be created. The researcher intended to broaden the knowledge base on this topic and foster further conversation and research that could be had around the world.

The articles highlight numerous justifications as to why further research is needed, from racial differences with sentencing to a difference amongst legislation across the states (Holmes, 2019). Many states have different expectations, along with partial or full legalization. The research has presented evidence that some neighborhoods are targeted within these states to remain institutionalized (Mazzocco, 2017). There is evidence that inmates maintained within the system will ultimately experience long-term marginalization. Furthermore, to reduce potentially overlooked aspects of factors that contribute to marijuana sentencing, the policies would need to be analyzed more fully.

## Gaps in the Literature

Gaps within the literature varied based on the relevance of the topic in current society. These gaps involve methodology, knowledge, and system practices. These gaps will be further explored below.

The vast majority of the research discussed the overrepresentation of POCs, specifically African Americans, within the prison systems. Within the research reviewed, the first gap was method of data collection. Interviews appeared to be a commonly used research method. Overly utilizing a specific research method could have created a gap in the type of information received and ultimately the type of information passed along (Aduyesi, 2016).

Secondly, there were gaps in knowledge found from the literature review. One major gap in knowledge was that the research did not discuss in depth the contributing factors for legalization. By understanding contributing factors to legalization, better understanding can be had for sentencing factors (Takei, 2017).

Thirdly, as stated, communities populated with POCs are often over policed, thus meaning that their communities have a large police presence (Barghouty et al., 2020). The research to date has seldom discussed the influences that encourage specific neighborhood practices within the judicial system. The expansion of research on these factors that contribute to community policies would improve understanding of the policies' rationales (Kaminoff, 2018).

## Chapter Four: Theoretical Framework

### Introduction

In this section, the researcher will provide a brief overview of what theory is, what theories will be used to guide the research study, and explanations of how the selected theories will inform this research. Each theory will be explored independently and considered for how each theory compliments the other. Lastly, this section will explain how the selected theories explain and inform the study problem.

A theoretical framework provides a scaffolding that shows how theories and social constructs are related and the means by which research is conducted. Theoretical frameworks are a necessary component of any conducted research. The term “theory” is often used to explain and/or describe a specific concept but is not often explored in terms of its own meaning. Theory is defined in several ways, but the term’s basic meaning remains just what it is. In its general sense, the American Sociological Association (Sell, 2018) defines theory as “critical thinking about the factors that influence knowledge and what distinguishes justified belief from opinion.” This definition provides the assumption that one specific idea holds as the basis for a set of actions according to the American Sociological Association (Sell, 2018).

When diving deeper into the meaning of theory, a more concise definition is required. The term theory as used in the Social Work field (Leeman, D., 2019) is defined as “General explanations that are supported by evidence obtained through the scientific method. A theory may explain human behavior and why something happens” (Leeman, 2019).

## **Theoretical Orientations that Guide this Study**

Social Constructivism Theory and Critical Race Theory were chosen to provide a framework for the research study. These theoretical frameworks represent the fundamental underlying issues, specifically ethnocentrism and norms developed around biases, that cultivate and shape systemic racism within the judicial system.

Social Constructivism Theory defined by Vygotsky (1962) states that “knowledge is co-constructed and that individuals learn from one another”. Social Constructivism theory is based around societal norms that are often rooted in racism and inequality within communities. It outlines how stipulations within society come from societal interactions (Zydney et al., 2012). This theory speaks to the influence individuals have on everyday actions based on how their understanding of other individuals from their perspectives, also known as ethnocentrism (Zydney et al., 2012).

Critical Race Theory provides a means for understanding societal norms structured around biases (Curry, 2016). The lack of cultural understanding contributes to the critical divide among individuals of different “races” (Curry, 2016). Critical Race theory (2016) addresses how and why individuals interact with one another in specific ways. It ultimately examines racism at its core (Curry,2016). Crenshaw (1995) stated there are five major aspects of Critical Race Theory. These aspects of Critical Race Theory are: the notion that racism is ordinary and not aberrational; the idea of an interest convergence; the social construction of race; the idea of storytelling and counter-storytelling; and the notion that Whites have actually been recipients of civil rights legislation.

## **Theory Rationale**

When choosing a theory to represent the topic of race-related consequences for marijuana-related crimes and all that it encompasses, Social Constructivism and Critical Race Theory provide the best framework for understanding the problem and investigating the potential for racialization in marijuana-related sentencing. Social Constructivism and Critical Race Theory provide ways for understanding how community and societal norms are imposed on people and by how individuals affect groups of people in terms of how they are treated. Critical Race and Constructivism theory provide a lens for understanding how normalized behaviors impact communities.

Each theory provides a unique perspective on society's impact of sentencing individuals for marijuana-related charges. Marijuana use has been demeaned due to the societal perception of it being a substance mainly used by people of color. As a result, it has been stigmatized as a "harmful" substance (Vitiello, 2019). Since the substance has received more exposure or has been indulged in by various races, more recently, the perspective is now shifting from being looked at as harmful to having numerous "beneficial" effects (Vitiello, 2019).

Selecting Critical Race Theory and Social Constructivism Theory highlights how social constructs were created to suppress the usage of marijuana, more specifically to suppress African Americans systematically, and to suppress people of color during the sentencing process (Vitiello, 2019). Critical Race theory focuses on how society views and treats individuals of different races and how they affect that group of people on a macro level. Like critical race

theory, social constructivism looks at how social behaviors and cultural differences also suppress individuals differently (Zydney et al., 2012).

### **Social Constructivism and Critical Race Theory**

Social Constructivism and Critical Race Theory have been used similarly in other research projects due to their utility in a number of areas. These theories elaborate on how imposed constructs impact positively or negatively the well-being of a race other than the “majority” in a community. Race and constructivism theory specifically can assist in identifying how these constructs thrive while simultaneously suppressing a group of individuals.

Critical race theory, allows for in-depth, introspective analysis on how factors such as culture and society infiltrate race and power (Curry, 2016). Critical Race theory also aims to understand how individuals of systemic racism are affected (Curry, 2016). The functionality of critical race theory will help to unpack if any racial factors impact marijuana-related charges and sentence length.

Although both Social Constructivism Theory and Critical Race Theory are extremely different, they share similarities. Both theories provide a means for in-depth analysis of interacting factors that affect how individuals are treated. Both focus on social constructs, such as societal norms, and ultimately assist with the understanding of how those aspects contribute to decisions made for those incarcerated (Crenshaw, 1995; Vygotsky, 1962).

Vitiello (2019) noted that the theories mentioned above were utilized to expose specific patterns of a community that sought to alienate a specific group of individuals based on constructs created by those with prior prejudices. Critical Race theory and Social Constructivism



highlight the societal constructs that are in place and shed light on underlying aspects that are often overlooked. Many of these aspects include discrimination, prejudiced views and/or practices, and ignorance.

Within the judicial system, and more specifically within prisons, many constructs have been imposed by individuals who work within the judicial system or in prisons, some constructs are even imposed by individuals who own facilities, and by investors. These constructs have been carried on for many years and negatively affect how prisoners were treated (Vitiello, 2019). Social constructs within the judicial system have highlighted a necessity to analyze behavior on many levels.

Through a Critical Race Theory perspective, it suggests that there is a heightened number of POC in prison because the system in which it is maintaining is intended to keep hierarchy and power within those infrastructures that benefit from it (Curry, 2016). As stated previously, Vygotsky stated “knowledge is co-constructed and individuals learn from each other” (Vygotsky, 1962). The act of legalizing or prohibiting something derives from the importance placed on that object by a group of individuals. Policies are created and or put in place because of the importance to the “greater good” of society. Social Constructivism Theory could frame marijuana policies through the perspective of importance to arrest and sentence in certain geographic locations. Furthering the analysis of learned thought and actions in systems. Therefore, the idea of critical race theory and social constructivism must be applied in many other aspects aside from a sole introspective “criminal” lens.

## Study Problem

Marijuana-related sentencing has been an ongoing fight between legislative officials and individuals within communities for years. The “war on drugs,” officially started in the late 1960s and has been uncannily carried on since then. Since then, many states have countered this imposed war and have reshaped their policies to not forcefully criminalize innocent individuals (Anguelov, 2018).

This war on drugs started as a strategized attempt to reduce illegal substances in the United States. As the primary focus during the height of the war on drugs was to eliminate the distribution of illicit substances, legislators decided to criminalize marijuana use (Anguelov, 2018) to the maximum degree (Kohler-Hausmann, 2010). By criminalizing marijuana use, this strategy eventually became a “targeted approach” for people of color. The research has shown that people of color, since criminalization, have received longer sentencing than non-POCs.

Marijuana was often used for medicinal purposes in the early 1900s. As the substance became more popular among people of color, it was deemed illicit and harmful (Anguelov, 2018). By analyzing each theory’s different components, a better understanding of why legislators took on the precedence they did can be gained. How this precedence created a systematic downward spiral for People of Color can be easily explored later.

Critical Race Theory’s five major tenets will provide for deep analysis of the study problem of legalized marijuana and its effect on sentence length. Critical Race theory focuses on the “intercentricity of racism, it challenges the dominant identity, there is a commitment to social justice, and there is a deep concern for interdisciplinary perspective” (Curry, 2016).

Social Constructivism will also have components that relate to the study problem. Some of those components include the testing of “what is real v. what is constructed, creating reality and the understanding of reality through history, language, culture and society” (Zydney et al., 2012). This will assist with separating perceived false belief and reality through learned experience.

### **Understanding the Problem**

Theory components research will be useful in understanding how the specific theories chosen operate and how they will aid in addressing the study problem. Critical Race theory and social constructivism are two theories that are deeply rooted in social behavior and social interaction; by analyzing the different components, a concise guide and introspective view can be presumed.

The different components of the two theories, such as reality creation and understanding what is real versus what is constructed, will help us understand why marijuana charges and sentencing will continue to affect those currently and/or recently incarcerated. The legalization of marijuana is happening rapidly across the United States. The perception of marijuana use is beginning to shift. Although there has been a shift in perception, legalization has occurred without proper consideration to individuals whose lives have become impacted negatively due to long sentencing for marijuana possession (Curry, 2016).

Marijuana has been medicinally legal in many states. As stated, marijuana was mainly used in earlier times for medical practices and is still being used for this reason. But unlike medicinal legality, recreational usage in many states is still prohibited. Factors underlying current usage will be better understood through the use of critical race and constructivism theory.

Societal issues that occur across the world can have positive effects depending on the type of framework used. The use of Critical race theory and social constructivism has been proven to be appropriate due to the nature of its analysis (Vitiello, 2019). A clear understanding of the study problem through these types of frameworks has assisted in providing a deeper understanding at both theoretical and emotional levels (Vitiello, 2019).

By having a deeper understanding of factors that contribute to marijuana sentencing, the ways in which the problem at hand of a heightened number of people of color arrested for marijuana charges would be remedied, would differ (Curry, 2016). The response in sentencing length is influenced by how individuals are perceived. Analysis perception provides context to these issues, allowing further understanding (Curry, 2016).

### **Use of theoretical framework**

Critical race theory and social constructivism were used to connect how social policies have impacted those in prison and, more specifically, inmates of color. These two frameworks have provided a perspective to the problem issue on a macro level, providing a perspective on how macro-level issues are assessed.

There is a massive implication for needed change that could occur by understanding the study problem on a macro level. Macro-level issues assess problems from the top down. Having a greater understanding of how issues are managed and or could be changed on a macro level would continue to aid in the progressive actions of marijuana legislation.

Policies are enacted at many levels within the judicial system such as, locally, at the state level, and federally by the government (Lopez, 2018). On each of these levels, policies are

analyzed by bodies of individuals and decided on as they see fit (Lopez, 2018). Policies enacted on the local level are considered micro-level policies. Policies enacted on the state and federal levels are considered macro-level policies. These policies vary from possession to legalization and could all be analyzed under these constructs.

For the use of this research study, policies were analyzed on a macro level, and included many analysis of how those incarcerated are impacted. Research has alluded to these constructs having different effects on each level (Zydney et al., 2012). It has been said that critical race and social constructivism theory, as explored on a macro level, will be more complex and multifaceted but have the most significant impact on social justice and change (Zydney, et al., 2012).

### **Theoretical Justification**

As the research has shown and presented itself, many factors cause an individual to become incarcerated and serve sentences of specific time length. For this research study, the focus area was on individuals who have been incarcerated for possession of marijuana. Marijuana-related sentencing has been an ongoing topic for years, not due to the recent changes in recreational use of the substance, but rather due to underlying implicit perspectives towards individuals of color.

The speculation of unjust racial practices involved in sentence length of individuals of color at a rate of 3.7 times faster than other races (Vitiello, 2019) were further explored in the research study. It is no secret that individuals of color are imprisoned at rates twice that of Caucasian people. Furthermore, the implications as to what influences such practices were further explored.

There can be many implications of imprisonment, and these implications were made more explicit through the analysis of critical race theory and social constructivism theory. As mentioned, laws are enacted on different levels, and at each level, various factors influence the laws made and implemented. The research has already alluded to racial disparities between groups of incarcerated individuals and has stated at which rates they differ. However, by analyzing the research through the two frameworks of Critical Race Theory and Social Constructivism Theory, behavioral, societal, and even culturally learned practices were not only highlighted but potentially prefaced as implications for policy change.

Marijuana sentencing is not a new concept but understanding the underlying factors that aid in sentence length is. Analyzing how race, sex, geographical factors and social constructs influenced people of color's sentencing was illuminated by utilizing the theories researched. Understanding these components may ultimately help construct a way for individuals to receive more appropriate sentencing upon completion of the research.

## Chapter Five: The Research Question

This chapter will identify the research question, sub-research questions, and accompanying hypotheses. The research study aimed to answer how race, gender, census division, and state factors contribute to sentence length in populations serving marijuana-related crimes, and if there has been a change in legal behaviors since societal perceptions have shifted. The researcher hypothesized that race and gender will predict sentence length for marijuana-related charges regardless of the census division and state of residence. The study sub-questions are detailed below:

Q1: To what extent does race predict sentence length for marijuana crimes in census division and state?

H1: Individuals with POC racial identities will receive longer marijuana-related sentences compared to individuals with Caucasian identities.

Q2: To what extent does gender predict sentence length for marijuana crimes in census division and state?

H2 Men will receive longer sentences compared to women with marijuana-related crimes.

Q3: To what extent does the census division of residence predict the sentence length of marijuana-related crimes for race and gender?

H3: The census division will predict sentence length with census divisions located in the southern United States showing longer and more severe sentences.

Q4: To what extent does state of residence predict sentence length for marijuana-related crimes for race, gender, and census division?

H4: States with legalized marijuana will have shorter sentencing lengths.

## **Chapter Six: Research Methodology**

### **Research Perspective**

The research study used a quantitative quasi-experimental approach. This study looked at the effects of individual and geographical characteristics on marijuana-related sentence length for incarcerated individuals. A quasi-experimental approach utilizing hierarchical linear modeling allowed for the investigation of the varying contributing influences according to how data is nested in groups by the individual, census division, and state characteristics on sentence length for marijuana-related incarceration. Given the large size of the sample, the true population, this approach provided adequate statistical power to generate predictive statistics that illuminated the magnitude and direction of relationships among the independent variables, covariate and inmate sentence length.

### **Type & Subtype**

The subtype of quantitative research that was used for the research study was a quasi-experimental design. The use of a quasi-experimental design allows for the investigation of causal factors with an independent variable that is not manipulated and is used with already-formed groups to make comparisons. This approach allowed for the researcher to infer some cause and effect relationships with caution.

### **Context of Study**

The study examined data from prisons within the United States. The NACJD data included information collected annually from state and federal prisons over the last 10 years (Appendix A). An examination among independent variables such as race, census division, state, a dependent variable of sentence length and covariates of sex and age assisted with capturing an accurate depiction of sentencing trends and practices to assess potential ongoing racism and



discrimination. The investigation of the most recent data allowed for observation of possible changes in sentencing trends that were important for the context of findings from the most recent data.

### **Data and Subjects**

For this research study, there was a strong reliance on data already gathered on offenders through the National Archive of Criminal Justice Data. This data included demographic information, sentence length, and reasons for sentencing, to name a few.

Data was analyzed on offenders convicted of marijuana-related charges in all 50 states. The term offender was defined by NACJD as a person, “who has ever been sentenced to confinement for a felony as a juvenile or adult prior to his/her current prison admission.” All NACJD data used for this study was de-identified.

### **Measures**

All of the data has been previously collected and reported to the NACJD. The measure used to collect inmate data is the National Incident Based Reporting System (NIBRS). The researcher only had access to the data and not the actual completed surveys. The data only included demographic indicators and factual information and did not include any measurement of constructs. Therefore, the reporting and assessment of the reliability and validity of the original survey measure is not applicable.

### **Data Collection and Analysis**

For this research study, data was collected from a centralized federal database through NACJD. Although data was collected through NACJD, there were still regulatory practices that had to be followed. Again, population protection against vulnerability is the main focus of federal entities, and the research study utilized a dataset that is restricted. In order to obtain

access to the restricted database, an application was completed and emailed to the head of the National Archive of Criminal Justice Data. The only requirement for approval was an approved security plan for the data. The researcher utilized university policy for data security to outline the security plan for the restricted data access.

The analysis of data was conducted using a Hierarchical Linear Model (HLM). A hierarchical linear model, also known as a multilevel model, allows for casual inference to be drawn according to how the data is clustered into groups of varying levels. Using this model allowed for an analysis of multiple levels of influence, such as individual and geographical characteristics. The analysis plan is outlined in Table 1. The data was subset after the initial analysis. The first subset was of all participants who have previous prison time only and the analyses outlined in Table 1 was conducted again while controlling for prior felony convictions. The second subset was of all participants who have had prior felony convictions only and the analyses was conducted again without controls for prior prison time or felony convictions. This subset approach allowed for a more precise investigation of the predictor variables by reducing the within-group variations related to prior criminal behavior that could influence sentencing decisions such as charges without convictions.

**Table 1.**  
**Data Analysis Plan**

Hypothesis	Variable Name	Definition	Level of Measurement	Variable Use	Analysis
1. Individuals with POC racial identities will receive longer sentences in relation to marijuana crimes.	Race	AA, Asian, Hispanic, Caucasian, other	Nominal	Independent	Hierarchical Linear Model
	Sentence Length	Months	Continuous	Dependent	
	Census Division	Census Division name	Nominal	Independent	
	State	State name	Nominal	Independent	
	Sex	Male/Female	Dichotomous	Covariate	
	Age	Years	Continuous	Covariate	
2. Men will receive longer sentences in relation to marijuana crimes.	Sex	Male/Female	Dichotomous	Independent	Hierarchical Linear Model
	Sentence Length	Months	Continuous	Dependent	
	Census Division	Census Division name	Nominal	Independent	
	State	State name	Nominal	Independent	
3. The residing census division will predict sentence length with census divisions located in the southern United States showing longer and more severe sentences.	Sentence Length	Months	Continuous	Dependent	Hierarchical Linear Model
	Census Division	Census Division name	Nominal	Independent	
	State	State name	Nominal	Independent	
4. States with legalized marijuana will have shorter sentencing.	State	Legalized/Not Legalized	Dichotomous	Independent	Hierarchical Linear Model
	Sentence Length	Months	Continuous	Dependent	
	Census Division	Census Division name	Nominal	Independent	

## Chapter Seven: Results

The purpose of this study was to examine the contributing effects of inmates' characteristics such as race, sex, age, and geographical factors on sentence length for marijuana charges. Four research questions were addressed with the data analysis and outlined here for this quantitative cross-sectional study. The first research question was looking to answer, "to what extent does race predict sentence length for marijuana crimes in census division and state?", with a hypothesis of "individuals with POC racial identities will receive longer marijuana-related sentences compared to individuals with Caucasian identities". The findings to this question were identified with a one-way ANOVA analysis. This analysis showed that individuals with black racial identities (51.6%) served a 6 month longer sentence than those who identified as white ( $M = 42.97$ ,  $SD = 43.26$ ), and a 16 month longer sentence than those who identified as Hispanic ( $M = 32.79$ ,  $SD = 35.02$ ).

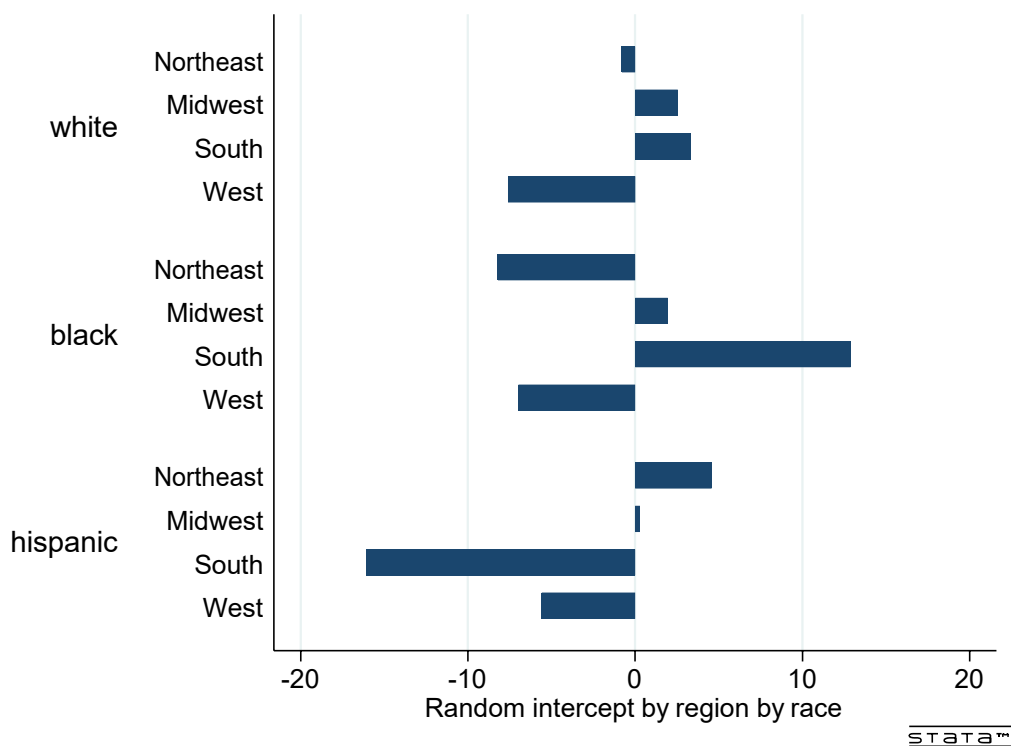
The second research question was looking to answer, "to what extent does gender predict sentence length for marijuana crimes in census division and state?". The hypothesis to this question stated, "that men will receive longer sentences compared to women with marijuana-related crimes". The findings to this question were identified with a Hierarchical Linear Model analysis (HLM). This analysis showed statistical significance for men serving on average a 4 month longer sentence than women ( $B = -4.35$ ,  $p < .01$ ).

The third research question was looking to answer, "to what extent does the census division of residence predict the sentence length of marijuana-related crimes for race and gender?". The hypothesis stated, "the census division will predict sentence length with census divisions located in the southern United States showing longer and more severe sentences. The findings to this question were identified with a HLM analysis. This analysis showed that those in

the South Atlantic division of the South region have the highest sentence lengths overall ( $M=62.66$ ,  $SD=10.95$ ) and have a 12 month longer sentencing for Black (79.0 %) individuals than White individuals (67.0 %) in this division. The findings also found statistical significance across all census divisions for men serving a 4 month longer sentence than women ( $B = -4.35$ ,  $p < .01$ ).

The fourth and last research question was looking to answer, “to what extent does state of residence predict sentence length for marijuana-related crimes for race, gender, and census division?”. The hypothesis stated, “states with legalized marijuana will have shorter sentencing lengths”. The results indicate those states with a legalized status had shorter sentence lengths than those states that did not have a legalized marijuana status. When region, race, and sex were put into the study model by analysis of Hierarchical Linear Model, it appeared that bias against race in sentencing was prominent in certain regions of the country as shown in Figure 2.

**Figure 2. Random Intercept by Region and Race**



This cross-sectional study consisted of participants from within the United States. The participants ( $n = 101,765$ ) resided within four regions of the United States; Region 1: Northeast; Region 2: Midwest; Region 3: South; and; Region 4: West. Each region was further subdivided. Region 1 consisted of two subdivisions, Division 1: New England, and Division 2: Middle Atlantic. Region 2 consisted of Division 3: East North Central, and Division 4: West North Central. Region 3 consisted of Division 5: South Atlantic, Division 6: East South Central, and Division 7: West South Central. Region 4 consisted of Division 8: Mountain, and Division 9: Pacific.

Each division contains different states as shown in Table 1. Within Division 1 the states that comprise it are Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. In Division 2 the states are New Jersey, New York, and Pennsylvania. In Division 3 the states are Indiana, Illinois, Michigan, Ohio, Wisconsin. In Division 4 the states are Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. In Division 5 the states are Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. In Division 6 the states are Alabama, Kentucky, Mississippi, and Tennessee. In Division 7 the states are Arkansas, Louisiana, Oklahoma, and Texas. In Division 8 the states are Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, and Wyoming. In Division 9 the states are Alaska, California, Hawaii, Oregon, and Washington.

**Table 1.** Regional Divisions

Northeast		Midwest		South			West	
New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Connecticut	New Jersey	Indiana	Iowa	Delaware	Alabama	Arkansas	Arizona	Alaska
Maine	New York	Illinois	Kansas	D.C	Kentucky	Louisiana	Colorado	California
Massachusetts	Pennsylvania	Michigan	Minnesota	Florida	Mississippi	Oklahoma	Idaho	Hawaii
New Hampshire		Ohio	Missouri	Georgia	Tennessee	Texas	New Mexico	Oregon
Rhode Island		Wisconsin	Nebraska	Maryland			Montana	Washington
Vermont			North Dakota	North Carolina			Utah	
			South Dakota	South Carolina			Nevada	
				Virginia			Wyoming	
				West Virginia				

All study participants were deidentified to maintain participant confidentiality. This study analyzed previously collected data through the National Archive of Criminal Justice Database. The variables identified for this study are as follows: sex, race, age, region, prison term, census division, and level of education. The sex variable is broken into two categories, which are male and female. The race variable is further detailed as White, Black, and Hispanic. Age is identified through birth year; region is described through four categories which are Northeast, Midwest, South, and West. Prison term is identified through the number of months sentenced, and level of education is categorized as grammar school, some high school, high school graduate, some college, and college graduate.

The NACJD provided data on all criminal charges within the penal system, thus requiring the data to be made specific. The participants were subset to those having marijuana related offenses only. The data was analyzed on two levels: level 1 and level 2. On the first level, the researcher analyzed sentence length as the fixed variable, and on the second level, analyzed age,

sex, race, and census division as the random variables. The researcher did experiment with analyzing race on both levels. Thus, resulting in race being predictive on the first level and not predictive on the second level. When conducting the analysis, the Intraclass Correlation Coefficient (ICC) displayed there being a variation in average mean length of sentence between states. The average months of sentencing was 44.5 months. When including race as a random factor the ICC dropped from .25 to .20 informing the researcher that race as a random slope didn't display much difference. The researcher then decided not to include race as a random slope on the random effects part of the model. Table 2 displays the ICC analysis.

**Table 2.** Intraclass Correlation Coefficient of Sentence Length.

pterm	Coefficient	Std. err.	z	P> z	[95% conf. interval]
_cons	44.5077	4.144338	10.74	0.000	36.38495 52.63046

Random-effects parameters	Estimate	Std. err.	[95% conf. interval]
<b>cendiv:</b> Identity sd(_cons)	.0009427	.0069648	4.85e-10 1833.297
<b>STATE_CODE:</b> Identity sd(_cons)	22.16667	2.948043	17.0803 28.76772
sd(Residual)	38.03843	.0742061	37.89327 38.18415

LR test vs. linear model:  $\chi^2(2) = 42193.19$  Prob >  $\chi^2 = 0.0000$

Note: L R test is conservative and provided only for reference.

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. estat icc Intraclass
correlation
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Level	ICC	Std. err.	[95% conf. interval]
cendiv	4.58e-10	0	4.58e-10 4.58e-10
STATE_CODE cendiv	.2535033	.0503411	.1677861 .3638649



The variables on both levels are depicted in Table 3. The analyses conducted included bivariate analysis, and hierarchical linear modeling.

**Table 3.** HLM Final Model

pterm	Observed coefficient	Bootstrap std. err.	z	P> z	Normal-based [95% conf. interval]	
<b>race</b>						
black	5.527665	1.664104	3.32	0.001	2.266082	8.789248
hispanic	11.04201	3.647478	3.03	0.002	3.893082	18.19093
<b>region</b>						
Midwest	17.7469	1.3321	13.32	0.000	15.13603	20.35777
South	10.64041	1.939883	5.49	0.000	6.838305	14.44251
West	-2.641235	1.835385	-1.44	0.150	-6.238524	0.9560538
<b>race#region</b>						
black#Midwest	-7.699912	1.385013	-5.56	0.000	-10.41449	-4.985337
black#South	8.369613	1.458621	5.74	0.000	5.510768	11.22846
black#West	1.269315	1.311579	0.97	0.333	-1.301333	3.839963
hispanic#Midwest	3.376668	3.522896	0.96	0.338	-3.528082	10.28142
hispanic#South	24.94996	4.218418	5.91	0.000	16.68201	33.21791
hispanic#West	-0.0118108	3.292621	0.00	0.997	-6.465229	6.441608
<b>SEX</b>						
2. Female	-4.35423	0.5247003	-8.30	0.000	-5.382624	-3.325837
<b>age</b>						
age	0.6004173	0.02277	26.37	0.000	0.5557889	0.6450457
<b>race#c.age</b>						
black	-0.1684406	0.0356475	-4.73	0.000	-0.2383084	-0.0985727
hispanic	-0.337007	0.0605363	-5.57	0.000	-0.4556559	-0.2183581
_cons	15.5658	1.372504	11.34	0.000	12.87574	18.25586
<b>Random-effects parameters</b>		Observed estimate	Bootstrap std. err.	Normal-based [95% conf. interval]		
<b>cendiv: Identity</b>						
	sd(_cons)	0.0002714	0.0000594	0.0001767	0.0004168	
<b>STATE_CODE: Identity</b>						
	sd(_cons)	21.40185	0.6473683	20.16991	22.70903	
sd(Residual)		40.4725	0.513368	39.47872	41.49129	
LR test vs. linear model: chi2(2) = 20325.68			Prob > chi2 = 0.0000			

Of the sample population of marijuana offenders, a tabulation of race was conducted. White individuals accounted for 40.66% of the population with a marijuana conviction, Black individuals accounted for 51.64%, and Hispanic individuals accounted for 7.71% of the

population with a marijuana conviction. A tabulation of sex was conducted, and males accounted for 94.02% and women accounted for 5.98% of the population, resulting in a chi-squared output of 0.00, thus showing the difference amongst groups. A tabulation of age was conducted, and the youngest age convicted of a marijuana charge was 14 years old and the oldest age was 96 years old. A tabulation of education was conducted, and those with only a grammar school education accounted for 14.16% of the population, those with some high school education accounted for 40.67%, those with a high school diploma accounted for 30.27%, those with some college education accounted for 7.14%, and those with a college degree accounted for 0.84% of the population. Participant demographics are detailed in Table 4.

**Table 4.** Participant Demographics in percentages

Variable(s)	Percentage(s)
Race	
White	40.66
Black	51.64
Hispanic	7.71
Sex	94.2
Male	
Female	5.98
Age	
Youngest	
Oldest	14 y.o
Education	96 y.o
Grammar School	
Some H.S	14.16
H.S Diploma	40.67
Some College	30.27
College Degree	7.14
	0.84

## Chapter Eight: Discussion

As the findings have shown, those who are of minority status, male, or live in the South Atlantic census division have longer sentencing for marijuana related crimes. The findings show that the relationship between race, census divisions and sentence length were statistically significant. Thus, highlighting the importance of further research on the topic. The research allowed for the researcher to identify potential patterns within the study. The researcher observed the south region as having one of the highest sentencing patterns for all races. Inferences could be made that due to the south region having a higher amount of sentencing that their laws could potentially be stricter. The researcher questions if policies are needed to be amended or revised. Given that in certain parts of the country these factors appear to be heavily factored into sentencing, the researcher questions if marijuana policies are just, in their respective regions.

These findings are consistent with past empirical work. Past empirical work has stated that individuals with minority racial identities and live in communities highly populated by them have longer sentencing for marijuana arrests. Past empirical research has stated that “colorblindness” in policies could be reasons for higher marijuana arrests for individuals of minority status, thus providing possible context as to why race was such a statistically significant factor. These findings shed light on new perspectives that show regardless of where you live geographically, race is a huge factor.

The findings contribute to theory affirmation and development by informing and reaffirming race as a constant indicator for treatment and or punishment for those not of “majority” race. Findings also contribute to theory affirmation by perceptualizing how social constructs are created from racially charged motives by people. The findings inform both critical race theory and social constructivism by highlighting areas of limitations that could progress

around the world. The findings allow for the discussion not to be solely about marijuana but implications for treatment of all kinds to those of minority racial status.

## **Implications And Contributions**

### Anticipated Contributions to Social Policy

The analysis of recent data of inmate sentencing could contribute to social policy as it regards recent changes that have been occurring and identifies what still requires amendment. For example, findings indicated that race continues to be a factor in sentencing length but only in specific divisions, it could then be argued that change is occurring in a geographical manner, and emphasis would be better placed in areas still requiring a shift in laws and policies. Analyses in local and global policies as they relate to drug laws could set precedence for future policy analysis, such as policing and marijuana conviction expungement and or pardoning.

The findings from the research illuminate the disproportionate relationships within the judicial system. In this country, the justice system is held to the highest honor as it relates to treating individuals equally. However, the research has highlighted the contributing factors to disproportionality of the criminal justice system within the United States.

### Anticipated Contributions to Research

By conducting the research, there is an opportunity for the study design to be replicated in other countries to address similar concerns. It is anticipated that by conducting this research, discussions about legislation change will continue in the United States and be evoked in other countries around the world. It is also anticipated that this study will increase knowledge about unknown practices allowing researchers to analyze unexplored territory.

### Anticipated Contributions to Social Work Education and Policy

As the research will expand and strengthen the knowledge base, the research could greatly benefit and add to Social Work Education and Policy as well. This research could add to Social Work Education and Policy by informing practices and ensuring all practices used are rooted in unbiased processes. The research could also contribute to both Social Work Education and Policy by ensuring effectiveness within the field of social work as well.

Often race is a taboo subject to discuss on macro-level platforms (Anguelov, 2018). The completion of this study aims to break down those uncomfortable barriers in hopes of creating unbiased spaces. Implicit bias cannot always be maintained and or controlled, often due to individuals' upbringings and or false narratives that are highly and openly pushed on macro-level platforms (Anguelov, 2018). The expected outcome of this research will allow the production of an alternative narrative to be produced that shifts the focus from the individual to the systems in place that hinder seamless integration.

### **Areas of Future Research**

The researcher's goal for the research study is to produce awareness of the implications of race, sex, age and geographical factors on marijuana-related sentencing. The researcher also has a goal to provide additional insight for ongoing discussions about racism and discrimination within the criminal justice system. In light of recent findings, the researcher hopes to continue analyzing policies and their effects on those of minority status. The researcher hopes to use these findings as the precedence to examine relationships between school to prison pipeline and needed community resources; retroactive ameliorative relief- in light of legalization of marijuana across the United States; and recidivism reduction.

### Plan for Completion of the Dissertation

*Use this table as a template and input the steps and dates appropriate for your stage in the process*

	Aug '20	Apr '21	May '21	June '21	July '21	Aug '21	Sep '21	Oct '21	Nov '21	Dec '21	Jan '21	Feb '21
<b>Proposal defense</b>												
<b>IRB</b>												
<b>Sampling</b>												
<b>Data Collection</b>												
<b>Data Set Creation</b>												
<b>Data Cleaning</b>												
<b>Data Analysis</b>												
<b>Writing Results</b>												
<b>Writing Lit Review</b>												
<b>Writing Methods</b>												
<b>Writing Conclusion</b>												
<b>Submit dissertation Draft to Advisor</b>												
<b>Dissertation Editing</b>												
<b>Dissertation Defense</b>												

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## Appendix A

### **Restricted Data Access Application**

NACJD takes extensive precautions to avoid conditions that might lead to violation of confidentiality of respondent and subject data. Nonetheless, some datasets are not available for public-access download from the NAJCD or ICPSR websites because some risk of research participants' identity disclosure remains (e.g., variables used in conjunction with one another or linking to other data files). These data are placed into the Restricted Access Data Archive

Researchers can request access to restricted data by submitting a completed Restricted Data Use Agreement (RDUA) through ICPSR's online Data Access Request System (IDARS). The RDUA certifies the data will be used for research or statistical purposes only, and that the confidentiality of respondents or subjects will be protected.

Researchers will be required to fill in information for the following categories:

Investigator Information

Researcher Staff Information

Research Description

Data Selection

Data Format

Confidential Data Security Plan

IRB Review Approval

Additional Forms

Final Signature