

THE ROAD TO PRISON: INCARCERATION DISPARITY AND ITS UNDERLYING
FACTORS

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THE ROAD TO PRISON: INCARCERATION DISPARITY AND ITS UNDERLYING FACTORS

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Abstract

When comparing the incarceration rate in the United States to that of other countries, there is a substantial difference. In addition to leading the world in incarcerated population, there is a disparity in the incarceration rates of the United States with respect to race as well. Using data gathered from the National Longitudinal Survey of Youth, I analyzed the probability of sentencing to a correctional facility based on the independent variables of race (black, Hispanic, nonblack/non-Hispanic), highest grade completed, number of times suspended, income, and number of parents in the household. It was found that race plays a role in probability of sentencing to a correctional facility, in addition to income, educational attainment, and presence of the mother in the household.

KEYWORDS: (Incarceration, Race, Disparity, Predictors)

JEL CODES: (J15, J16, K42)

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ON MY HONOR, I HAVE NEITHER GIVEN NOR RECEIVED
UNAUTHORIZED AID ON THIS THESIS

Signature

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Introduction

Never since the Civil Rights Movement of the 1960s and 1970s has race been at the forefront of so many political and social discussions. Now there is steady contention surrounding race relations in the United States, whose topics include police shootings, national monuments, and incarceration. We are at a pivotal time in our country's history in which the very foundation of the United States is being called into question. Not a day goes by without there being a report on the latest conflict concerning race relations and the history of our nation. The climate now is especially volatile, and is approaching a boiling point. The most recent event that has gained media attention were the protests in Charlottesville, Virginia in August of 2017, where one side desired to keep a monument to preserve what they believe is an important symbol of national history and the other side alternatively pleading their case that these symbols of America's dark past are no longer acceptable to be displayed on government or public property. It has been said that history repeats itself, and the current social climate is no exception.

Conflicts between races are not the only issues that are present. Videos of police brutality have made their way to the front page of mainstream and social media. Many articles, such as Frederick McKissack's 2016 article on the current situation in Chicago, aptly nicknamed "Chiraq," discuss the potential underlying factors behind these shootings, which are not only black on black shootings, but also police shootings. Among these factors is unemployment, where "Almost half – 47 percent – of young black men from the ages of 20 and 24 were out of school and unemployed in 2014," (McKissack, 2016).

High profile shootings and elevated crime rates are important to address, but another important issue that is worth considering is that of disparity in incarceration rates among different races, specifically blacks, whites, and Hispanics. Data from the Sentencing Project provides motivation to further investigate disparity in incarceration rates. According to their data, obtained from the Bureau of Justice Statistics, blacks in the United States are incarcerated at a rate of 1408 per 100,000 population, Hispanics at a rate of 375 per 100,000 population, and whites at a rate of 275 per 100,000 population (Nellis, 2016). These statistics warrant further investigation, and it is important to consider the potential underlying factors of this disparity. While there *may* be underlying contributing factors to this disparity, just because something *may* contribute, does not mean that can be said with certainty that it *does*. The goal of this research paper is to understand the disparity in incarceration rates and the likelihood that someone will be incarcerated in their lifetime, and what factors go into calculating this probability. The factors examined are: race, specifically black, Hispanic, or nonblack/non-Hispanic; income; level of education; exclusionary discipline during schooling, which specifically will be suspension and expulsion; and number of parents in the household.

In addition to researching the disparity in incarceration rates, research has been done on racial bias and sentencing with regards to the effects that race has on sentencing and has shown that when the death penalty is the verdict, blacks are sentenced at significantly higher rates than whites in a mock-juror trial (Glaser et al., 2015). While research performed on the impact of race on the outcome of trials is one thing, it is a completely different issue when considering criminal sanctions that have already been completed and what the current populations in prisons look like as a result.

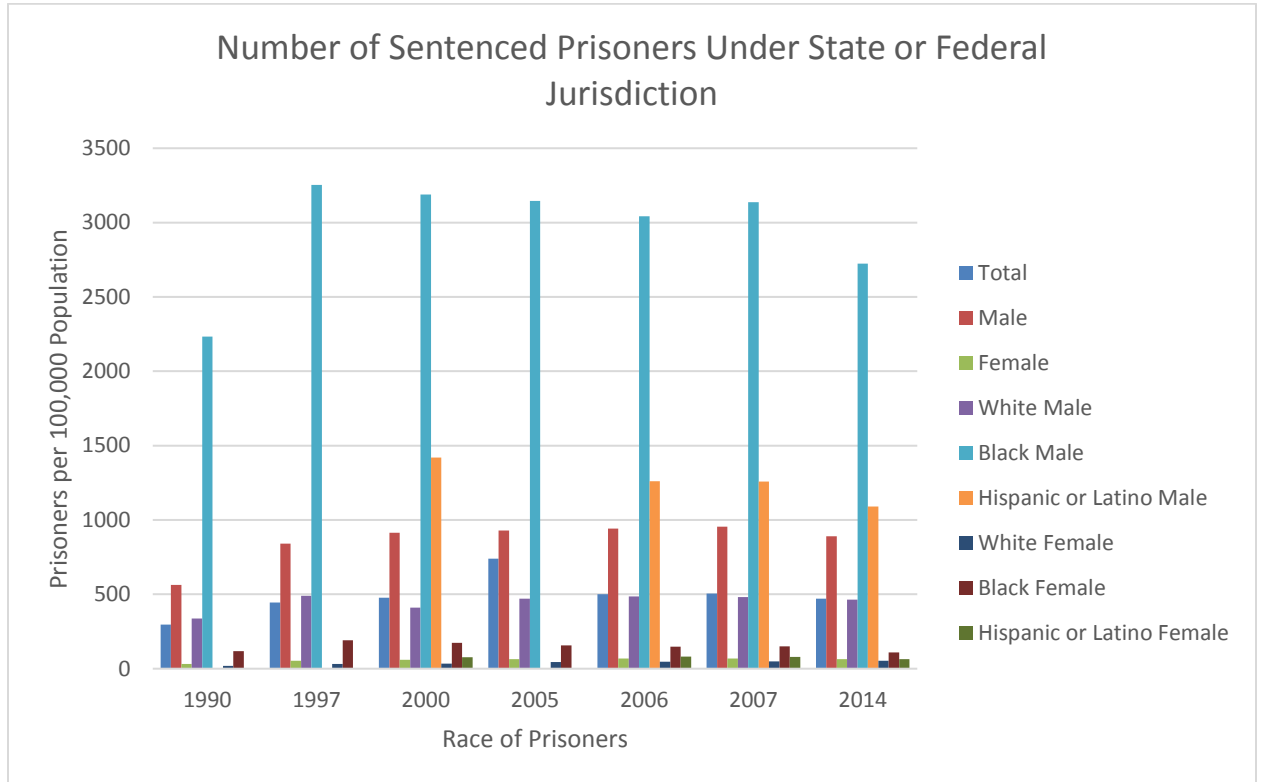
According to the Bureau of Justice Statistics Prisoner Series, there has been a marked increase in incarceration rates in the United States over the past forty years. The United States is the world leader in incarcerated persons, incarcerating 670 per 100,000 of its citizens. In total, there are now 2.2 million people in the criminal justice system that are either in jail or prison, with nearly another 3.8 million that are on some form of probation (Sentencing Project, 2016). While these statistics are staggering enough, the demographic information is even more shocking. Of the incarcerated population in the United States, 33.8% are white, 35.4% are black, 21.6% are of Hispanic descent, and 9.2% are represented by other races (Sentencing Project, 2016). At first glance this may not seem that shocking; in fact, it could seem unremarkable. Blacks do make up slightly more of the incarcerated population than whites, and Hispanics do not appear to make up as much as one may initially anticipate, but this quickly changes when you consider the population demographics of the United States. According to the CIA World Factbook (2017), the population demographics of the United States pertinent to this study are as follows: Whites make up 72.4% of the population, people of Hispanic descent make up 16.3%, and blacks make up 12.6%. Considering these population demographics, the information regarding the composition of America's prisons has become decidedly more surprising. This shift in perspective is a prime example of why it is so important to look deeper into the information presented, because it can be decidedly more revealing than at first glance.

Knowing that this disparity is greater than initially anticipated, the question then arises of what the underlying causes are. This problem has been present for decades in American society, and as stated in the introduction, not since the 1960s and 1970s has

there been such a prominent surge in civil rights demonstrations. Other reports and statistics include information that states that African Americans are incarcerated at a rate 5.1 times that of whites, while Latinos are incarcerated at a rate of 1.4 times that of whites. This study also lists three main reasons for this disparity. These include harsh policies directed at drug-related offenses which disproportionately affect blacks in the United States, implicit racial biases that affect judges, and structural disadvantages that predispose blacks before they even enter into the criminal justice system (Simon, 2016). The Bureau of Justice Statistics also has stated that the chances of a black male born in 2001 going to jail is 32%, while the chances of a Latino male going to jail is 17%, and a white male 6% (Quigley, 2010). Finally, in a report published by the Obama White House Administration (2016), the economic perspectives on incarceration were broken down, including demographic implications. With approximately 2.2 million currently incarcerated in the United States, this number is steadily growing despite decreasing crime rates. "...Crime rates have fallen sharply; between 1980 and 2014 violent crime rates fell by 39 percent and property crime rates fell by 52 percent." The disparity again becomes evident when it notes that although blacks and Hispanics represent roughly 30% of the United States population, they represent a significantly larger portion of the incarcerated population, representing 50% of that population. Arrest rates also have shown themselves to be a contributing factor of increased incarceration rates, however what needs to be analyzed closer are the underlying factors that contribute to this, such as education and exclusionary discipline. (Obama White House, 2016). Figure 1 will give a visual representation of the disparity in incarceration rates, in both jails as well as prisons.

The graph shows prisoners per 100,000 population for both male and female, as well as black, Hispanic or Latino, and white. (Bureau of Justice Statistics, 2014).

Figure 1



The inspiration behind the undertaking of this research project is the apparent disparity in incarceration rates represented in the aforementioned data from the Bureau of Justice Statistics and the Sentencing Project. After researching decision making in mock juror trials and levels of guilt of defendants of different races, the results shown in the study were, when the death sentence was in question, blacks were significantly more likely to be convicted than their white counterparts (Glaser et al., 2015). This experiment will be further detailed in the literature review section of this paper. Other sources have found that there is a disparity in the rate of incarceration, and have analyzed data on a state-by-state basis to determine the exact severity of this inequality, (Nellis, 2016).

Significant research has been done on the impact of gender, race, education, and recidivism on incarceration. The objective of this project, however, is to combine the independent variables of race, level of education, number of exclusionary discipline measures taken by schools, income, and number of parents in the household on the dependent variable of the probability of being sentenced to a correctional facility. While correlation does not imply causation, it can be expected that many of these variables will be at least moderately significantly correlated. Even mere correlation shows the possibility of some relationship. The goal of this paper is to determine which of these variables are correlated to the probability that one will be incarcerated at some point in their life.

Another aspect that is important to consider and that could potentially affect future incarceration rates is the idea of the “School to Prison Pipeline” (STPP). This term is often used by certain social movements and parties determined to prove that the system is specifically targeting certain groups of people and funneling them into the criminal justice system. However, the question remains whether this is simply sensationalistic wording used to incite rage and get a reaction for change that may or may not be warranted, or if it is an accurate depiction of the current state of affairs of the American school system. According to research, “... these findings provide substantial evidence that the school-to-prison pipeline is not simply a metaphorical or political concept. Rather, there is substantial research evidence supporting the claims most frequently made concerning the STPP,” (Skiba et al., 2014). Knowing this brings up another important question regarding this research paper – how significantly does the current structure of

the institutions in the United States affect future incarceration of its citizens? For this reason, exclusionary discipline measures will also be included as a variable in the study.

Using empirical data from the National Longitudinal Survey of Youth (abbreviated NLSY), the effect of each of the independent variables of race, income, level of education, disciplinary action during schooling, and number of parents in the household on the probability of incarceration will be analyzed. This information will then be used to determine how much each individual independent variable affects this probability, and what are statistically significant and what are merely spurious correlation.

Literature Review

Overview and Motivation

Racial inequality has long been an important subject of discussion. Many articles in mainstream media point to institutional racism that is once again growing in prominence. Unemployment, crime, and racism on the part of the criminal justice system are all factors that require attention (McKissack, 2016). There has been significant research regarding racial inequality, ranging from Implicit Attitude Testing to test the perspectives of the general population of the United States to examining history and how decisions made by those that came before us may have been influenced by race (Project Implicit, 2011). It is imperative that, to conduct meaningful research, it must have a firm foundation which can be built upon previously performed research. Regarding incarceration and sentencing, there have been many studies performed. These studies range from the impact of gender on sentencing decisions (Koons-Witt et al., 2014), to the influence of race on the outcome of a sentencing trial (Glaser et al. 2015), to age affecting the length of sentences (Steffensmeier et al. 1998), and other potential underlying factors that influence the aforementioned variables (Heitzeg, 2009). These underlying factors include: education, where it is also worthwhile to consider the quality and type of student; number of times a student has been subject to exclusionary discipline in school, which are suspension and expulsion; the number of parents in a household; and income and the role that it plays in what has commonly become known as the School to Prison Pipeline (Heitzeg, 2009; McCormack, 2013). Many of these studies have found that these variables are in one way or another correlated to incarceration, but a determination of causation is more difficult to find. As such, in this research paper, the effects of the

underlying factors of disparity in incarceration rates will be examined by running a regression and analyzing the effect of each independent variable on the probability that one will be incarcerated at some point in their life.

First, there will be discussion on the findings of the impact that gender has on incarceration, followed by the impact that race has on incarceration. Next, there will be discussion of the roles that education and exclusionary discipline play in what has become known as the School to Prison Pipeline. Finally, the impact that income, as well as the number of parents in the household have on the probability that one will be incarcerated at some point in their life will be discussed.

Gender Effects

Gender is the strongest factor when it comes to sentencing, with males experiencing harsher sentencing decisions than their female counterparts, (Warren et al., 2012, Koons-Witt et al., 2014, Steffensmeier et al., 1998). Effects of gender also become apparent when race is considered. When sentencing decisions are made, race is a more significant factor for males than it is for females. In other words, the race of the defendant played a role in how they were sentenced for males, with the severity being contingent upon the race of the defendant, but for females the sentencings were consistent across all races (Steffensmeier et al., 1998). Research was conducted regarding the interaction of race, gender, and age on criminal sentencing (Steffensmeier et al., 1998). The researchers conducting the analysis had three primary hypotheses when investigating the effects of gender and race on sentencing. First, they believed that offenders who were young, black, and male would be sentenced more harshly than whites. Second, they hypothesized that sentences for blacks will be more severe than for their white or female

counterparts. And finally, they hypothesized that race would have an impact on sentencing for males, but the effects of race would not be nearly as severe for females. Data was found in support of their hypothesis. After the strongest effect of gender, race was second, with black offenders being sentenced slightly more harshly than whites. Finally, they found that the odds of incarceration for blacks was one and a half times that of their white counterparts, and that ages 21-29 receive the harshest sentences, while offenders under 21 and over 50 will receive slightly more lenient sentences. (Steffensmeier et al., 1998).

After collecting data and analyzing the differences, researchers found that the average female sentence was 34 months while the average male sentence was 58 months (Koons-Witt et al., 2014). Males were also younger overall than the females in the study. Also, researchers found that females typically had a less severe criminal history, as well as a lower probability of being sentenced to prison than did males. Black females had a probability of being imprisoned of .38, while white females had a probability of .33. Black males had a .45 probability, while their white counterparts had a .38 probability (Koons-Witt et al., 2014). Another research project found that males are 14 times more likely to be sentenced to prison than are their female counterparts (Warren et al., 2012). While gender effects were shown to be the strongest when it comes to sentencing, race effects were concluded to be the second strongest contributing factor (Steffensmeier et al., 1998).

Impact of Race on Sentencing

Race, which was shown by the aforementioned study to be the second strongest contributing factor when it comes to sentencing, is the primary focus of much of the research regarding incarceration. Whether it be the likelihood that a black male is arrested, what types of crimes are committed, or population demographics of prisons. Younger defendants are more likely to be sentenced to jailtime than are older defendants, and blacks and Hispanics have significantly higher rates of incarceration than whites. The incarceration rates of these minority groups are “six to eight times that of white offenders” further demonstrating how important research in this field is (Warren et al., 2012). Yet another study by Lisa Stolzenberg in 2013 conducted research into the cost of being young, black, and male. The researchers’ hypothesis was threefold: First, they hypothesized that offenders who were young, black, and male would be sentenced more harshly than their white and Hispanic counterparts. Second, they hypothesized that the severity of sentences would be harsher for black than white, and for male defendants than female defendants. Finally, they hypothesized that race would vary across ages, or in other words that race would have an effect on male defendants, but would be relatively constant across ages for female defendants. In a meta-analysis, it was found that blacks have a 42% higher chance of receiving severe sanctions while controlling for other variables. To find this information, researchers measured prior records with three variables, which were the number of prior felony convictions, the number of prior misdemeanor convictions, and the number of prior prison admissions. They also included other extralegal variables such as whether they were of Hispanic descent, what their gender and age were, and the type of attorney. Using a logistic and Ordinary Least

Squares regression to estimate different models depending on the measurement of their dependent variables, they found that black defendants received more severe punishments whereas Hispanics were not punished more severely than non-Hispanics. Finally, it was acknowledged that further research needs to be done for more conclusive results (Stolzenberg et al., 2013).

Given the results of race being a contributing factor in judgments, the question then arises of just how much of a role race plays. A mock-juror survey was conducted to determine whether there was implicit racial bias exhibited by a jury (Glaser et al., 2015). In this study, a triple-murder case was presented to a random population of people, with questions about the defendant's level of guilt following the carefully-constructed scenario. The researchers chose names that would typically be stereotyped as either black or white names, as well as manipulated the punishments that would follow. The punishment was either life without parole or the death penalty. Researchers found that when the punishment was life without parole, participants were not any more inclined to sentence blacks than they were whites (both sentenced at a rate between 65% and 70%). However, when the death penalty was brought into the picture, participants were significantly more likely to convict black defendants (80.0%) than they were white defendants (55.1%) (Glaser et al., 2015). In addition, a meta-analysis that analyzed racial bias in juror decision making found that a small, although significant effect of racial bias is present in all the studies that they analyzed (Mitchell et al., 2005).

As shocking as those results may be, they are only one side of the multifaceted issue of racial disparities in the United States criminal justice system. According to a report by Human Rights Watch in 2000, it was found that black male drug users were 13

times more likely than white male drug users to be sentenced to jail, despite the estimated usage being the same for both groups. There are many underlying factors such as decision-making on the part of the police officer, as well as legal factors such as prosecutors, judges, and juries. Black defendants are given longer sentences and sentenced to death more frequently than their white counterparts as well (Mitchell et al., 2005, Austin and Allen, 2000; Mustard, 2001; Williams & Holcomb, 2001). This may be due to the advent of the war on drugs beginning in 1971. This combined with the increase in longer mandatory minimums of prison sentences for crimes involving drugs sparked an increase in the number of persons incarcerated who would stay incarcerated. The United States has the highest incarceration rate in the world with more than 2.3 million people in prisons or jails (Wagner and Rabuy, 2017) and even more under some form of governmental supervision.

Impact of Education and Zero-Tolerance Policies

Among this research about the underlying factors of increased incarceration rates is the notion of the school-to-prison pipeline. This term is used to describe what has been considered systematic discrimination on behalf of the American school system in which certain students are funneled down a path which essentially leads them to prison. This type of discrimination can be racial discrimination, income discrimination, or family discrimination. This speaks to the importance of analyzing the STPP, because understanding the effects of the underlying factors of this pathway could provide insight into potential solutions, or bring to light problems with the school system. While detractors of this will state that the term STPP is a buzzword or terminology designed to get a reaction, others are adamant that this term is more than just shock value. Still others

acknowledge both sides and objectively seek to determine whether what is known as the STPP has merit. One article regarding the STPP discusses exclusionary disciplinary measures and whether these play a role in increasing the probability that kids who are subject to exclusionary discipline will also have a greater probability of being incarcerated. This research discusses several negative impacts that extreme disciplinary measures have on children long term. They present the case that these measures have no measureable impact on the safety in schools, but do have several negative effects. These effects include racial disproportionality, an increase in the number of suspensions and expulsions, increases in dropout rates of students, and several legal issues that arise. (Heitzeg, 2009). In this article, the authors also discussed the increasing levels of incarceration and potential contributing factors to this. Among these factors include the advent of the war on drugs beginning in 1971. This combined with the increase in longer mandatory minimums of prison sentences for crimes involving drugs sparked an increase in the number of persons incarcerated who would stay incarcerated. As previously established, the United States has the highest incarceration rate in the world with more than 2.3 million people in prisons or jails (Wagner and Rabuy, 2017) and even more under some form of governmental supervision. Policies such as zero tolerance and the “three strikes” policy have also done little but create a higher potential for youth to wind up in the criminal justice system (Heitzeg et al., 2009).

When investigating the population of the criminal justice system, it was found that 1 in 35 adults is under some form of supervision and 1 in 100 are in prison. One in 36 Latino adults are in prison. Perhaps most shocking is the statistic that 1 in 15 black men are in prison, and 1 in 9 black men ages 20-34 are incarcerated (Bureau of Justice

Statistics, 2007). These disparities are greater with respect to youth (Heitzeg, 2009). This study, however, acknowledges that at the time of its publication there had yet to be a study that was able to identify a direct correlation between zero-tolerance policies and an increase in the safety of schools. Harsh disciplinary methods also contributed to higher dropout rates, especially with respect to minority students, but this study acknowledges that this could also be fueled by poverty and segregation within school systems. This information sets up this research paper by bringing up the question of how other external factors such as finances and race affect the school to prison pipeline.

Another article by Skiba et. al discusses both sides of the term school to prison pipeline, particularly the intention around the title of STPP. It adopts the position that the term STPP is little more than a buzzword, and seeks to use research done by other authors to determine whether this term is warranted. The authors begin by saying that the term implies causality. The researchers then proceed to discuss the increasing rate of severe disciplinary action and analyzing who is really at risk by these extreme measures. It is concluded that minorities are disproportionately at risk after analyzing data from the national level all the way down to local level. The authors of this article drew conclusions that a positive social climate led to improvements in students' academic achievement, whereas exclusionary discipline (suspensions and expulsions) contributed to negative perceptions of school climate and therefore decreases in academic achievement. They also found that educational opportunity and engagement have “consistently been found to be two of the strongest predictors of academic achievement,” (Skiba et al., 2009). Conversely, there was also empirical data to support that if students were subject to increased measures of exclusionary discipline, they had a higher

probability of dropping out. In addition to this elevated dropout risk, they also described several other negative outcomes such as incarceration. There is a racial disproportionality that is stronger for African Americans when it comes to exclusionary discipline and the juvenile justice system. Although there is some correlation between these factors, this does not mean there is any sort of causation. Skiba et al. proposed an alternate hypothesis that considered finances. Poverty status could potentially have been causative of an increase in suspension rates as well as the increase in dropout probability. Finally, the quality of the student in question also could be a significant contributing factor to whether they will eventually drop out and face potential legal troubles. Students deemed to be low achieving are at higher risk of facing exclusionary discipline measures such as suspension and expulsion, but they also face many other issues that could lead to potential legal troubles such as academic engagement, dropout, and ultimately incarceration (Skiba et al. 2009).

Skiba et. al also address the question of directionality. Do schools really target students of color or of low achieving dispositions, or does these students' misbehavior force them to use severe disciplinary tactics on these students who will inevitably find themselves in a negative situation in the future? Skiba et al. sought to answer the question of "to what extent do data support the claim of directionality that school practices and expulsion themselves create further risk for negative school and life outcomes?" They found that there was substantial empirical support for each of the following themes regarding the concept of the STPP. First, researchers found that the tactics of exclusionary discipline in school is commonplace and ever increasing, even with matters that are normally everyday disciplinary issues. It was also found that

exclusion affects minority students more than their white counterparts. While it has been extensively researched for African Americans, it is acknowledged that there needs to be more research, particularly with respect to Hispanic/Latino and Native American students (Skiba et al., 2014). Exclusionary discipline in schools is also shown to be a risk factor for future negative outcomes, including incarceration. Although it seems like a solution to a short-term problem, this solution is something that could in fact have some very long-range consequences for students. This provides motivation to construct a sort of path analysis, in which all possible outcomes of exclusionary discipline measures are closely examined, and probabilities of each are determined. The conclusion of this research is that there is merit and empirical data to support the use of the term “School to Prison Pipeline.” Education of youth is of paramount importance and may have a significant effect with regards to eliminating the STPP. For a ten percent increase in the high school graduation rate, there is a projected nine percent drop in arrest rates, and a ten percent increase in wages for non-college educated students. This could lead to a ten to twenty percent reduction in crime rates. In conclusion, not only is education important, but income as well. (Obama White House, 2016).

This further establishes a foundation for this research paper. By reviewing research on whether there is merit to the term STPP, further motivation is provided for the study of how severe the impacts of exclusionary discipline are. This paper will use empirical data to run a regression and analyze the results. Additionally, it will analyze correlation of the independent variables of race, exclusionary discipline, income, and number of parents in the household with the dependent variable of probability of sentencing to a correctional facility. From this, strength of this relationship and whether

the independent variables are accurate predictors of the probability of incarceration can be determined by running a regression and analyzing the data.

Hypothesis

I hypothesize that the data will show that there is a correlation between the independent variables of race, education, exclusionary discipline, number of parents in the household, income, and the dependent variable of probability of incarceration. Because these variables are all so closely related, there will likely be the issue of collinearity in data analysis, and as such I will need to take measures to account for this. Based on previous research, my expectations are that race will be the strongest variable, followed by level of educational attainment, income, amount of exclusionary discipline, and number of parents in the household. With respect to the survey, I expect there to be a slight bias in favor of whites as opposed to people of color, with the explicit question of whether there is racial bias in the United States showing that general perception supports this statement.

Methodology

Overview

The purpose of this research paper is to analyze the effects of specific independent variables on a single dependent variable. The dependent variable in this experiment is the probability of sentencing to a correctional facility. This can be analyzed with respect to each of the independent variables to find how this probability of sentencing is related to each individual independent variable. The purpose of having probability of incarceration as the dependent variable is to provide an estimation of the probability that someone will become incarcerated at some point in their life based on certain circumstances. Using the National Longitudinal Survey of Youth (NLSY), a population of people, some of which have been incarcerated and others who have not, will be analyzed to find common contributing factors to sentencing to a correctional facility. Demographic information of these subjects will also be gathered from the NLSY. Using this information and sample of subjects, it will then be possible to determine what effect, if any, the independent variables have on the probability of sentencing.

Variables, Coding, and Model

The independent variables in this research project are as follows: race, categorized by black, Hispanic/Latino, and nonblack/non-Hispanic; education level, measured in the maximum grade completed, including college; exclusionary discipline, which is described as either suspension or expulsion; number of parents in the household; and income. Given that race was established as the second strongest factor that played into sentencing (Steffensmeier et al., 1998) it is important to analyze its individual effects in

terms of the subcategories. It will be interesting to see how severe the effects of race are on probability of incarceration. In order to account for race, dummy variables must be used. Dummy variables are placeholders for variables that cannot be accounted for numerically. Values of 1 and 0 will be used: 1 for the race that is in question, 0 for the races that are not part of the category of race in question, and this process must be repeated for each race. Educational attainment is also an important factor to consider, as education can lead to a reduction in crime, which may also lead to a reduction in incarceration (Obama White House, 2016). The category for education will describe the probability of incarceration based on the level of educational attainment for the subjects in question. This is an important factor to consider in order to determine whether higher levels of education can lead to reduced probability of incarceration. To account for maximum level of educational attainment, numerical values will be assigned for grade, including college. Third, exclusionary discipline will be analyzed to determine whether suspension or expulsion have any effect on the probability of incarceration, and if so, how severe this effect is. To quantify exclusionary discipline, dummy variables will be assigned, 1 for the variable that is in question, 0 for the other, and then the roles will be reversed to account for the other disciplinary measure.

Fourth, income will also be an important variable to analyze, and assigning numerical values for income reported by subjects will provide insight into how much income affects the probability of incarceration. The final variable in question is the number of parents in the household. Binary variables will be assigned for the number of parents in the household, with 1 representing both parents being in the same household,

and 0 representing that one or neither parent was present in the household at the time of the survey.

Next, there will be a description of the model behind this data analysis. Given that much of the data used in this investigation is binary, a logit model must be used to ensure accurate results. This data is available to be viewed by the public on the National Longitudinal Survey of Youth on their website (<https://www.nlsinfo.org/content/cohorts/nlsy97>). Data regarding income, number of parents in the household, and education were all collected over time. There is annual data available, but for this project, where the influence on analysis stems from previously conducted cross-sectional data analysis, certain periods of time were selected to focus on, beginning in 1979, which marks the beginning of data recorded by NLSY, to 2014, the most recent year of data recording. The model is as follows, with y representing the dependent variable of probability of incarceration, and income, education, exclusionary discipline, parents in the household, and race all representing the independent variables at each specific interval. This model has been simplified to include just the variables, however the intervals will be more specifically covered in the data and analysis portion of this paper.

$$y = \beta_0 + \beta_1\text{Black} + \beta_2\text{Hispanic} + \beta_3\text{TimesSuspended} + \beta_4\text{HGCMay1} + \beta_5\text{Income} + u$$

In order to analyze data and determine what the relationship is, if any, between the dependent variable of probability of incarceration and the independent variables, a logit regression will be run with the data, determining how each individual independent variable relates to the dependent variable. By doing this, the exact effect that each

variable has on the dependent variable will be easily interpreted, in addition to whether it is statistically significant.

Data and Analysis:

The model ran for the logit regression of the core dataset in this paper is shown below:

$$y = \beta_0 + \beta_1 \text{Black} + \beta_2 \text{Hispanic} + \beta_3 \text{TimesSuspended} + \beta_4 \text{HGCMay1} + \beta_5 \text{Income}$$

with the supplemental models for analysis being:

$$y = \beta_0 + \beta_1 \text{motherliving} + \beta_2 \text{black} + \beta_3 \text{hispanic} + \beta_4 \text{timessuspended} + \beta_5 \text{income} + \beta_6 \text{gender} + \beta_7 \text{HGCmay1}$$

$$y = \beta_0 + \beta_1 \text{fatherliving} + \beta_2 \text{black} + \beta_3 \text{hispanic} + \beta_4 \text{timessuspended} + \beta_5 \text{income} + \beta_8 \text{gender} + \beta_8 \text{HGCmay1}$$

$$y = \beta_0 + \beta_1 \text{Suspended} + \beta_2 \text{Expelled}$$

The descriptions for the meaning of each variable in the above models are as follows:

The variables for race are not abbreviated, and are binary variables, meaning they were coded as a 1 if the survey respondent was categorized as a member of the race in question, and a 0 if not. At the time the survey was used, there were no options for multi-racial responses, and as such survey respondents are either one or the other. Times Suspended is the variable for the number of times survey respondents were suspended. This is a quantifiable number and not a binary variable. Highest grade completed (abbreviated as HGCMay1) measures the level of educational attainment of survey participants. This variable is also a quantifiable number. Income is the income for the previous year as reported by survey respondents, and is a quantifiable variable (measured in dollars). Father Living and Mother Living in the supplementary equations are also both binary variables, with 1 meaning that the parent in question is living, and 0 if they are not. Gender is another binary variable, with 1 being male and 0 being female. Finally, the variables for both Suspended and Expelled represent exclusionary discipline

and are binary variables coded as 1 for if the survey respondent has ever been suspended or expelled, and 0 if they have not.

When running the logit regression of the model for the core variables, there were a total of 911 observations. The variables that came back as statistically significant based on this regression were income and highest grade completed, with number of times suspended coming back as statistically significant when considered with a 90% confidence interval. The statistical significance of each of these independent variables was 0.000, 0.014, and 0.089, respectively. The number of times suspended was worth analyzing briefly, which is why it is included in the supplemental data analysis. Supplemental regressions including the variables for gender, whether the mother was living, and whether the father was living were also performed.

Primary Analysis

First is the discussion on the results from the primary logit regression, followed by the supplemental regressions. The regression table for primary data analysis is shown below. In this data table, the variables are as follows: the dependent variable is whether or not the survey participants have been sentenced to a correctional facility and the independent variables being their race, whether black or Hispanic compared to a nonblack and non-Hispanic constant, the number of times they have been suspended, the highest grade completed (abbreviated HGCMay1), income, and the constant.

Table 1

Sentenced	Coefficient	Std. Error	P> z	95% CI
Black	.004	.199	.985	[-.386, .393]
Hispanic	-.142	.274	.604	[-.680, .396]
Times Suspended	.0166	.010	.089**	[-.003, .036]
HGCMay1	-.339	.056	.000***	[-.448, -.229]
Income (Per \$1000)	-.063	.026	.014***	[-.113, -.013]
Constant	2.266	.610	.000	[1.070, 3.462]
Number of Observations	911			
Prob>chi2	0			
Pseudo R-Squared	0.0655			

Because a logit regression was used instead of a traditional OLS regression, there were extra steps that needed to be taken to translate the coefficients given by the regression into more meaningful numbers. Because the numbers given as the coefficient were the log odds, I first needed to compute the e function by using the coefficient as the exponent. In other words, e^x (x =coefficient provided by regression). This gave me a number that I could work with in terms of probability. First, the impact that income has on the probability of incarceration will be discussed. For each dollar of additional income earned, there was a .0063% reduction in the probability of incarceration. Thinking on a larger scale, in terms of thousands of dollars of increased income, the results become more pronounced. For example, for each additional thousand dollars of income, there is a reduction in the probability of sentencing of 6.3%. With respect to level of educational attainment and highest grade completed, for each additional unit, or grade, of education completed, there was a decrease in the probability of incarceration by a factor of 1.4. This means that for each additional unit increase in number of times suspended there is a 40% increase in predicted odds of sentencing to a correctional facility. The results regarding education and income again support the findings stating

that increases in income and education lead to marked drops in incarceration rates (Obama White House, 2016). Finally, considering the impact of number of times suspended, for each additional time suspended, survey respondents experienced an increase in the probability of sentencing to a correctional facility by a factor of .017. While nominal and not statistically significant, supplementary data analysis will dive deeper into the impact that exclusionary discipline has on sentencing probability.

In the primary data analysis for race, the individual variables did not come back as statistically significant. However, even though race does not directly affect probability of sentencing to a correctional facility, which has also been demonstrated in the literature review of this portion, this does not mean that race does not have an effect on education or income. As a result, the supplementary analysis portion of this paper will focus on these independent variables more closely.

Supplementary Analysis

The primary objective of this paper is to analyze the effects of race on the probability of sentencing to a correctional facility, and while race did not prove to be statistically significant in the primary analysis with respect to sentencing, that does not mean that it does not still have an effect on the other variables that are closely related to probability of sentencing. This is why closer inspection is necessary regarding individual effects of race on the independent variables of income, highest grade completed, and number of times suspended. This will help to provide a deeper understanding for the underlying causes of increased probability of sentencing to correctional facilities. While initially this could appear as simply running various regressions until something statistically significant appears, the true objective is to take the variables of interest and

determine the effect that race has on these variables. This is done with the hope of igniting future research into mitigating the problem of mass incarceration in the United States.

First, consider the relationship between highest grade completed and race. To do this, a normal regression was run with the dependent variable being highest grade completed against the independent variables of black and Hispanic survey participants (see Table 2, below):

Table 2:

HGCMay1	Coefficient	Std. Error	P> z	95% CI
Black	-.251	.084	.003***	[-.415, -.086]
Hispanic	-.678	.097	.000***	[-.869, -.487]
Constant	10.984	.044	.000	[10.899, 11.069]
Prob>F	.000			
R-Squared	.018			
Adj. R-Squared	.017			

In this regression, the black and Hispanic survey participants were regressed against the constant of all other races. The regression results were statistically significant for both black and Hispanic survey participants, with values of 0.003 and 0.000, respectively. Additionally, the results came back with blacks showing a P-value of .7783, or a level of educational attainment of 77.83% of that of their nonblack and non-Hispanic counterparts. Hispanic survey participants showed a P-value of .5079, or a level of educational attainment of 50.79% of that of their nonblack and non-Hispanic counterparts. Based on this regression, minorities have a significantly lower level of educational attainment. Based on the primary analysis, which showed that the higher the highest grade completed for survey participants the lower the probability of sentencing to a correctional facility, it is clearly demonstrated that although race does not have an

apparent outright effect on sentencing, it affects education which in turn is associated with probability of sentencing to a correctional facility.

Exclusionary Discipline

Next, consider the effects of exclusionary discipline with regards to sentencing and expulsion. Table 3 shows the regression with respect to suspension, while Table 4 shows the regression with respect to expulsion:

Table 3:

Suspended	Coefficient	Std. Error	P> z	95% CI
Black	.867	.097	.000***	[.678, 1.056]
Hispanic	.056	.110	.609	[-.159, .271]
Constant	-.318	.049	.000	[-.414, -.221]
Prob>chi2	.000			
Pseudo R-Squared	.023			

Table 4:

Expelled	Coefficient	Std. Error	P> z	95% CI
Black	.624	.137	.000***	[.355, .893]
Hispanic	-.097	.193	.617	[-.475, .282]
Constant	-2.278	.084	.000	[-2.442, -2.115]
Prob>chi2	.000			
Pseudo R-Squared	.012			

The dependent variable was whether survey respondents were suspended and the independent variables were the races of survey respondents (black or Hispanic in comparison to their nonblack/non-Hispanic counterparts). After de-logging the coefficients, the odds of suspension with respect to race were 2.380 for black survey respondents and 1.058 for Hispanic survey respondents. Only the results for black survey respondents came back as statistically significant with a P-value of .000. The coefficient for black survey respondents show that the predicted odds for suspension increase by 138% when compared to their nonblack/non-Hispanic counterparts. In other words, by

being a minority in the United States school system, the odds are significantly higher with respect to suspension.

When analyzing the effects of race on expulsion, the variable that came back as statistically significant was whether the survey respondent was black, with a P-value of .000. The de-logged coefficient was 1.866, meaning that black survey respondents had a predicted odds of expulsion 86.6% higher than that of their nonblack/non-Hispanic counterparts.

Going to the root of the problem, exclusionary discipline could also be a factor in predicting sentencing, thus warranting further investigation into the School to Prison Pipeline discussed in the literature review section of this paper (Heitzeg, 2009; McCormack, 2013).

Highest Grade Completed and Sentencing

While the previous section shows the impact of exclusionary discipline on the probability of sentencing to a correctional facility, it is also important to consider at what point survey participants' educational careers stopped, and how that relates to whether or not they were sentenced to a correctional facility. By running a "bysort" command in Stata, survey participants were grouped together according to whether they had been sentenced to a correctional facility, with the subcategory being their level of educational attainment. In this method of data analysis, there were a total of 2,749 observations. Of the 2,749 survey participants, 2,436 had never been sentenced to a correctional facility, and 313 had. The average highest grade completed for survey participants who had not been sentenced to a correctional facility was 10.915, while the average highest grade completed for survey participants who had been sentenced was 10.102. Participants who

had not been sentenced had a minimum highest grade completed of 2 (second grade), and a maximum of 18 (through college and graduate), while survey participants who had been sentenced had a minimum of 3 (third grade) and a maximum of 15 (junior year of college). Given that the difference in the average level of educational attainment between survey participants who had been sentenced and who had not been sentenced was nearly a year, it can be seen again how important education is when considering sentencing. Additionally, the substantial difference in numbers of observations shows that the greater the level of educational attainment, the fewer the instances of sentencing to a correctional facility. This further supports the results found in the previous section regarding impact of continued education on sentencing, and additionally complements the statements found in the Obama White House document published in 2016 regarding the importance of education to mitigate the problem of mass incarceration in the United States.

Parents

As an additional measure of supplementary analysis, it was important to consider the impact that the number of parents had on the household, and how members of each race compared, statistically speaking. To do this, a logit regression with the binary variable of parents in the same household as the dependent variable and black and Hispanic binary race variables as the independent variables was run. The coefficients for black and Hispanic survey participants are compared to the nonblack/non-Hispanic constant, and must be de-logged for more accurate interpretation. A logit regression needed to be used because of the binary dependent variable. Table 5 shows the regression results for the effects of parents in the same household:

Table 5:

Parents Same Household	Coefficient	Std. Error	P> z	95% CI
Black	-1.065	.218	.000***	[-1.491, -.638]
Hispanic	-.279	.256	.274	[-.780, .221]
Constant	.879	.010	.000	[.683, 1.075]
Prob>chi2	.000			
Pseudo R-Squared	.028			

When analyzing this regression table, the only variable that came back as statistically significant was the independent variable of black survey participants, with a P-value of .000. The coefficient after de-logging was .345, or in other words black survey respondents were 34.5% as likely to have both parents in the same household as opposed to their nonblack/non-Hispanic counterparts. This again speaks to the importance of conducting further investigation than just the primary regression analysis, because even though race did not have what would be considered to be a statistically significant effect on incarceration in the primary regression, this supplementary analysis shows the impact that race has on the other independent variables, and how this relates to the primary regression.

Two supplementary logit regressions were run with the binary dependent variable of sentencing to a correctional institution against the independent variables of whether or not the mother was living; whether or not the father was living; whether the survey participant was black or Hispanic; the number of times the survey participant has been suspended; income; highest grade completed; and gender. Two separate logit regressions needed to be run because the independent variables of mother living and father living were not binary or related to the other. In other words, just because the mother was living does not mean that the father was as well, and vice versa. As such, the results for

each were slightly different, specifically when it comes to analyzing race effects on sentencing.

While these logit regressions could potentially have been used as the primary source of data for analysis, due to the smaller sample size, it was more appropriate to use them as a supplemental data analysis as opposed to primary. The initial regression that was run, with sentencing, the variables for race, number of times suspended, income, and highest grade completed provided me with 911 observations to analyze. These supplementary regressions, however, provided only 382 and 534 observations with respect to mother living and father living, respectively. As such, there is the potential that it was not representative of the entire sample population, a problem which will be further explained in the conclusions section of this paper. However, even though it does not have as large of a sample size as the primary regression, there is still information that can be gleaned from these survey responses. The model for this regression is as follows:

$$y = \beta_0 + \beta_1 \text{motherliving} + \beta_2 \text{black} + \beta_3 \text{hispanic} + \beta_4 \text{timessuspended} + \beta_5 \text{income} + \beta_6 \text{gender} + \beta_7 \text{hgcmay1}$$

$$y = \beta_0 + \text{fatherliving} + \beta_2 \text{black} + \beta_3 \text{hispanic} + \beta_4 \text{timessuspended} + \beta_5 \text{income} + \beta_6 \text{gender} + \beta_7 \text{hgcmay1}$$

See Tables 6 and 7 in the following sections for the individual regression tables specific to whether the mother was living and whether the father was living.

After running each respective regression, the variables that came back as statistically significant for both regressions were: race of survey participant (black, Hispanic, nonblack/non-Hispanic), and highest grade completed. In the regression with the variable for mother living included, the statistically significant factors were: mother living, race of survey participant (black, Hispanic, or nonblack/non-Hispanic), and

highest grade completed. In the regression where the dependent variable was father living, the variables that came back as statistically significant were race of survey participant (black, Hispanic, nonblack/non-Hispanic), income, and highest grade completed. These two regressions will be analyzed separately, followed by a discussion of the similarities and differences between the two, and what can be learned from the two separate regressions.

Impact of Presence of Mother

The impact of whether the mother was living on the probability of sentencing to a correctional facility will be discussed first. The regression table with the independent variable of whether the mother living is below, in Table 6.

Table 6:

Sentenced	Coefficient	Std. Error	P> z	95% CI
Mother Living	-.880	.411	.032***	[-1.685, -.075]
Black	-.082	.339	.808	[-.746, .582]
Hispanic	-.107	.460	.816	[-1.008, .794]
Times Suspended	-.018	.029	.535	[-.076, .039]
Income(Per \$1000)	-.029	.036	.417	[-.098, .041]
Gender	-.367	.336	.276	[-1.026, .293]
HGCmay1	-.323	.085	.000***	[-.489, -.156]
Constant	3.425	1.147	.003	[1.177, 5.673]
Prob>chi2	.002			
Pseudo R-Squared	.065			

When regressing sentencing to a correctional facility against the independent variable of whether the mother was living, the race of survey participants, the number of times suspended, income, gender, and highest grade completed, the variables that came back as statistically significant were whether the mother was living and the highest grade completed, with P-values of .032 and .000, respectively. After de-logging the coefficients, the results were as follows: survey participants who had mothers living had

41.5% the probability of sentencing to a correctional facility of their counterparts who did not have mothers living. In other words, the presence of a mother figure had a significant impact on their probability of sentencing to a correctional facility, with the presence of a mother significantly lowering this probability. When analyzing highest grade completed, for each additional unit of education completed, survey participants showed a 27.6% lower probability of sentencing to a correctional facility.

Impact of Presence of Father

To analyze the impact of the presence of the father, the same analysis was repeated, except instead of mother living as an independent variable, father living was used. See Table 7 below for the regression results.

Table 7:

Sentenced	Coefficient	Std. Error	P> z	95% CI
Father Living	-.365	.280	.193	[-.914, .185]
Black	-.245	.262	.349	[-.758, .268]
Hispanic	-.436	.386	.259	[-1.193, .321]
Times Suspended	.009	.013	.501	[-.017, .035]
Income (Per \$1000)	-.069	.033	.035***	[-.133, -.005]
Gender	-.319	.289	.269	[-.884, .247]
HGCmay1	-.311	.072	.000***	[-.452, -.169]
Constant	2.839	.914	.002	[1.047, 4.631]
Prob>chi2	.000			
Pseudo R-Squared	.065			

The two variables that came back as statistically significant in this regression were the income of the survey participant and the highest grade completed by the survey participant. After de-logging the coefficient for income, for each additional thousand dollars of income, survey participants experienced a 6.7% decrease in the probability of sentencing to a correctional facility. After de-logging the coefficient for highest grade completed, survey participants experienced a decrease in probability of sentencing to a

correctional facility by a factor of 26.7% for each additional year of education completed, according to this supplemental model and sample population.

Both of these regressions further exemplify what was demonstrated in the Obama White House report on the importance of education and income with respect to lowering the probability of sentencing to a correctional facility.

Reconciliations

The lack of race being the standout variable among contributing factors to increased probability of sentencing to a correctional facility in the primary regression could be due to several reasons. While the primary regression had the most observations, it is entirely possible that race did not have a direct effect on the results because it is so closely related with the other independent variables. Additionally, the time period that the data was collected from was before the crack cocaine epidemic and mandatory minimum sentencing enacted during the 1980s. This will be discussed more in-depth in the conclusion. With regards to the supplementary data analyses, there are also several reasons why race was not statistically significant. First and foremost, the lack of observations compared with the primary logit regression could potentially be a substantial contributing factor. This lack of observations creates a lack of representativeness within the sample population, and due to this the data could potentially not be suitable to serve as a consistent predictor for populations. This supplementary analysis is still useful to see what can be gleaned from this analysis. By performing this supplementary analysis, it was demonstrated that highest grade completed and income are consistent determining factors in probability of sentencing. In addition to this, by

performing these supplementary data analyses, we were able to see the individual effects that race has on the other statistically significant independent variables.

Conclusions

Before discussing the conclusions we can draw from this research, it is important to briefly summarize what was discovered in the data and analysis portion of this paper. In the primary logit regression, highest grade completed and income were the variables that were statistically significant while times suspended was marginally statistically significant. Contrary to the initial hypothesis, however, race was not statistically significant when considered with respect to probability of sentencing to a correctional facility. In the supplementary analyses, it was found that the statistically significant variables were whether the mother was living, highest grade completed, and income. With respect to parents in the household, suspension, and expulsion, whether the survey participant was black was statistically significant. Now knowing all the data and what the implications of it are, it is important now to further discuss the results, as well as account for any inconsistencies and make reconciliations accounting for these inconsistencies. In addition, it is also important to discuss the opportunities for future research that arise out of this project.

Using data gathered from the National Longitudinal Survey of Youth, there was a total of 12,687 observations. Once cutting it down to just respondents who had responded to the question of whether they had been sentenced to any sort of correctional facility, the number of respondents decreased to 2750. This number was further reduced when running regressions to analyze relationships between the dependent variables with dependent variable. Because of this, the regression for primary analysis had a total of 911 observations while supplementary analyses had observation numbers ranging from

337 to 1450. The lack of observations for analysis could lead to a lack of representativeness when it comes to the results.

Another reconciliation that must be made is the dates of the survey used. The National Longitudinal Survey of Youth has two options of surveys that can be used for data analysis. There is the NLSY 79, which is the survey used, and the NLSY 97. The distinction between these two surveys is the year that they were started in. The NLSY79 begin in 1979 and continued to 2014, while the NLSY97 began in 1997 and continued to 2015. There were several different reasons why I chose the NLSY79 survey over the NLSY97. First and foremost, the variable that I was most interested in was whether someone had ever been sentenced to a correctional facility. The NLSY79 had an option for this, whereas the NLSY97 did a year by year analysis, asking survey participants whether they had been sentenced to a correctional facility in the year since their last survey. While this can provide meaningful data, especially with regards to analyzing the immediate effects of major life changes, this was not the target of this research project. The NLSY 97 survey took more of an overarching view, looking at the big picture as opposed to a detailed longitudinal dataset. In addition, whether someone had ever been sentenced to a correctional facility had 2750 respondents in the NLSY79, while the NLSY97 had as little as 17 respondents for each year of data. Not only would this present a lack of representation, but it would make finding trends among a general population increasingly difficult.

Many objections may be raised as well with the age of the data used. Because the question of “Have you ever been sentenced to a correctional facility?” was only asked in the year of 1980, I needed to only use this year in my data analysis to ensure there was

consistency across all data points. As such, the highest levels of education were reported in 1980, income was reported for the previous year, and whether the mother or father was living was asked for the initial year of the survey as well. Because of this, only a relatively limited dataset remained, which again speaks to the issue of lack of representativeness and can also explain certain results of the analysis.

Another consideration that must be made about the timing of the survey is the year in which it was published, especially with respect to incarceration in the United States. With the prison populations seeing a substantial increase in population in the early 1980s and 1990s, the crack cocaine epidemic is largely to blame. The harsh punishments including mandatory minimums helped to contribute to this spike in population. With crack cocaine appearing in Los Angeles as early as 1981, the data in this research project is gathered from a time before the sharp increase in prison populations (DEA History Book, 1985-1990). With laws implemented that many believed were structured to harm minorities (the 100 to 1 sentencing, for example, which occurred when the sentencing punishment for possession of crack cocaine was one hundred times as severe as for that of possession of powder cocaine) the crack epidemic has become a landmark time for the rise in incarceration rates, especially due to the populations many believed the laws were targeted to single out, with minorities being more prone to having crack cocaine than powder cocaine. With federal prison populations doubling between 1980 and 1988 (Federal Bureau of Prisons, 2018), the data used in this research is not representative of the increase in incarceration during this time. This has both advantages and disadvantages. On the one hand, the data that was analyzed can be used to analyze factors aside from the aforementioned racially biased minimums

that contribute to incarceration. These include the effects of punishments that were enacted to target members of a certain demographic. Disadvantages, however, include the fact that because this drastic increase in incarcerated population is not included, the disparity between races becomes decidedly less apparent.

Opportunities for Future Research

This, however, leaves us with several opportunities for further research and other questions that we can ask. Knowing the substantial impact that increased education has on reducing probability of sentencing to correctional facilities, we can now examine additional measures that can be taken to help improve educational conditions. While exclusionary discipline did not prove to be a significant predictor of sentencing when grouped together with other variables, when regressed by itself against sentencing, the independent variables of whether survey participants had ever been suspended or expelled proved to be statistically significant. This can be seen in Tables 3 and 4 in the supplementary analysis section of this paper. Knowing this, it is important to ask what can be done with respect to education in the United States. My hope is that, although the data used in this research project is from before mandatory minimums and the crack cocaine epidemic of the 1980s, the data and analysis still shed light on areas that need to be focused on to help mitigate the effects of mass incarceration and the sentencing disparities that we have seen presented by the Sentencing Project. If mandatory minimums were removed, perhaps this could reduce the amount of people sentenced and thus cause a decrease in the current disparity described in the introduction. In addition, by improving education, that would not only decrease probability of sentencing to correctional facilities, but also improve the overall quality of life in the country. My

hope is to inspire further research with more recent data, in the hopes of finding definitive answers for what is causing the apparent disparity in incarceration rates, and work towards reducing mass incarceration and mitigating the damaging effects that it has, as well as the financial burden that comes with it.

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