Race, Age, Gender, Attorney Type, and Income on Violent and Non-Violent Felonies in North Carolina

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Senior Honors Thesis

Political Science

University of North Carolina at Chapel Hill

April 16th 2021

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Acknowledgements

I am extremely thankful for all of those who have believed in me over the past year and a half as I worked on this thesis. I want to thank Dr. Frank Baumgartner for his guidance, advice, and support. I would also like to thank Dr. Evelyn Huber for always encouraging new ideas and reminding everyone in the political science thesis cohort they were capable of finishing their projects. Another thank you to Rachel Porter and Dr. Leah Christiani who were the first professors to introduce me to quantitative Political Science research. I would also like to thank graduate student Marty Davidson for all his help with data collection and reviewing my analysis and code when I was struggling. I also would have never completed this project without my thesis committee. Lastly, I would like to thank my incredibly supportive family, friends, peers, and mentors who never doubted my abilities. I am very grateful to have a such an amazing support system who believe in me no matter how much I doubt myself.

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Abstract

Many studies have found possible disparities in every step of the United States judicial system, indicating the system that is meant to be free and fair for all is the opposite. North Carolina's Structured Sentencing implementations are meant to limit these disparities and create a universal guidance for sentencing individuals at every offense level. This study aims to address any disparities that may remain with North Carolina's Structured Sentencing by examining how individuals are sentenced for multiple offense levels. This study will analyze how race, age, sex, attorney type, and income influence sentencing outcomes for nonviolent and violent felonies in the state of North Carolina. This study will also aim to answer how the influences of these characteristics differ among violent offenses and non-violent offenses. The data comes from the North Carolina Administrative Office of the Courts Database and includes felonies A-D for the violent felony category and Class I felonies for the nonviolent category. The study will analyze the disparities for multiple punishment possibilities, including active prison time, intermediate punishment, and community punishment. The results find race, gender, age, attorney type, and prior points influence how harsh of a sentence the defendant will receive but that income does not. This study also finds violent offenses to have larger disparities compared to nonviolent offenses. This suggests North Carolina's structured sentencing that is meant to limit inequalities in sentencing outcomes is not effective.

Introduction

As of June 2020, the United States leads the world in prison population and incarceration rates, both of which have been growing over the past few decades. One must wonder, what makes the United States' judicial system different from the rest of the world to the point where individuals are sentenced for extensive periods of time and at alarming rates. Defendants in the United States judicial system face a lengthy process, from the time defendants are arrested to the time they are sentenced, with many legal barriers in between. While many factors go into the judge's sentencing decision, including if the individual has a prior record, multiple charges, and the severity of the crime, there may be other factors influencing how harsh a judge is on a defendant due to inherent biases. While these extralegal factors should not influence the judge's decision, prior research suggests they do. With increasing prison populations in the United States, it is essential to look at factors potentially creating inequality in the criminal justice system. In this thesis, I will question how race, age, sex, attorney type, and income influence sentencing outcomes for nonviolent and violent felonies in the state of North Carolina. How do the influences of these characteristics differ among violent offenses and non-violent offenses? What punishments are imposed on which individuals?

Literature Review

Extralegal Factors

Race and the Judicial System

Many studies, including Brennan and Spohn (2008), have demonstrated that the United States prison system disproportionally overrepresents minority offenders across various offense levels. Schlesinger (2005) looked at drug crimes in highly populated counties across the nation

and found black defendants are 80% more likely to be denied bail compared to their white counterparts and Hispanic defendants are 67% more likely. In addition to being denied bail at higher rates, Hispanic defendants received 48% higher bonds than black defendants and 26% higher than white defendants. Schlesinger suggests this strong disparity among defendants of color is due to the stereotype of Latinx, Hispanic, and black involvement in the drug trade. Sacks and Ackerman (2015) found quantitative differences between race and bond amounts. They found black defendants, in comparison to their white counterparts, had a 25% greater probability to receive bond amounts in the $5,000-$25,000 range, 148% greater probability for $25,000-$50,000, and 136% greater probability for a bond amount over $50,000. The same study found Hispanic defendants, in comparison to their white counterparts, 30% less likely to receive a bond in the $0-$5000, 156% greater probability for $25,000-$50,000, and 173% greater probability of receiving a bail amount over $50,000.Brennan and Spohn (2008) suggest overrepresentation of minorities in prison systems is enhanced by the fact that white defendants are five times more likely to receive community punishment over incarceration than black defendants and eight times more likely than Hispanic defendants. They found Hispanic defendants in their study on drug offenses were more likely than black defendants to receive harsher sentences, indicating that not only is there a racial disparity among whites and defendants of color, but there is also a sentencing disparity among all defendants of color. Shumpert (2016) used data from crack and cocaine crimes in South Carolina to find black defendants had a 20.4% chance of being sentenced to over 10 years in prison, minorities labeled other had a 20.7% chance, and white defendants only had a 15.6% chance. In contrast, black defendants had a 41.1% chance of being sentenced to up to four years in prison, minorities labeled other had a 40.1% chance, and whites had a 44.2%. Previous research proves minority defendants are at a disadvantage in every step of

the judicial system, from arrest to bail to incarceration lengths, suggesting a serious problem with inherent racial biases in the judicial system

Age and the Judicial System

Existing research on how age influences judicial outcomes has a wide range of findings. Demuth and Steffensmeier (2004) found the relationship between age and sentencing to have an inverted U relationship with younger and older defendants less likely to have to pay bail than peak-aged defendants. Another study conducted by Steffensmeier almost sixteen years later finds the same curvilinear relationship with defendants over fifty and under twenty-one receiving the least severe sentences and those between twenty-one and thirty-four receiving the harshest (Steffensmeier et. al., 2016). In this study, they found this curvilinear relationship was present for all genders and ethnicities, excluding young black males who had the same sentencing outcomes as young adult black males. Helms and Jacobs (2002) find a similar curvilinear relationship across 7 states and 337 jurisdictions. They found the peak age, or the age in which the relationship between age and sentencing outcome goes from a positive relationship to a negative relationship, was 38.1 years old. Doerner and Demuth (2010) found that when controlling for other factors, younger defendants receive harsher sentences. Specifically, the odds of incarceration of individuals over 60 are 40% lower than those who are age 18-20. Of those that are incarcerated, individuals over 60 receive 16% shorter sentences than those 18-20. This trend of lower incarceration rates and lower incarceration times are consistent throughout their findings; they are just stronger on the ends of the age spectrum. Steffensmeier and Motivans (2000) used data from Pennsylvania to find a similar relationship between age and sentencing. They found defendants in their 60s were 25% less likely to be incarcerated than defendants aged 21-29 and received, on average, sentences eight months shorter than defendants aged 21-29.

Defendants in their 70s were 30% less likely to be incarcerated than defendants aged 21-29 and received, on average, sentences thirteen months shorter. While these studies find younger defendants to have harsher outcomes, other studies find younger defendants to have some of the least harsh outcomes. Wingerden, Wilsem, and Johnson (2016) found the only statistically significant age influence was for defendants younger than 21 who received 12% shorter prison sentences compared to defendants aged 21 to 30. Previous studies show age has some influence on judicial outcomes; however, there are conflicting results on if that influence is positive, negative, or curvilinear.

Gender and the Judicial System

Research almost universally finds the same result when looking at the relationship between gender and criminal outcomes; women are more likely to receive lenient outcomes when compared to their male counterparts. Steffensmeier and Demuth (2004) completed a two-year study analyzing the relationship between gender and pretrial outcomes. They found female defendants are 37% less likely than males to face pretrial detention and receive bail amounts 17% lower than males. Doerner and Demuth (2010) find the odds of incarceration for females are 42% lower than the odds of incarceration for males. They also find when females are incarcerated, they receive sentences 25% shorter than males. Steffensmeier and Motivans (2000) found female defendants are 14% less likely to be incarcerated and when incarcerated, they receive sentences 7 months shorter on average. According to previous research, women receive leniency in every aspect of the judicial system.

Attorney Type and the Judicial System

The right to an attorney is an amendment to the United States Constitution as a way to create equal opportunity for all defendants in the judicial system, but some studies show attorney

type may play an unfair role in a defendants' outcome. Many studies use attorney type as a visual cue for a judge to determine the income status of a defendant, arguing those with private defenders have a higher income than those with court-appointed public defenders. Sacks and Ackerman (2015) used data from New Jersey to find a defendant with a public defender was 11% more likely than a defendant with a private defender to receive the lowest bail set of $0-$5000. However, a defendant with a public defender was 20% more likely than a defendant with a private defender to receive bail between $25,000-$50,000. In this study, the public defender was also 30% less likely than the private defender to receive the highest level of $50,000 plus. This study shows a defendant with a public defender is more likely to receive the lowest bond amounts overall when compared to a defendant with a private defender. Turner and Johnson (2007), found among the data on Hispanic defendants, those with a public defender received higher bond amounts than those with a private defender. Clarke and Koch (1976) completed a study in North Carolina and found attorney type did not influence the likelihood of conviction but influenced if a defendant would go to prison after the conviction. Cohen (2014) found no statistical relationship between public and private defenders in sentencing outcomes but did find defendants who had been assigned their attorney by the court were convicted and sentenced to prison at higher rates and received longer sentences than those who found their own attorney. Overall, most studies suggest attorney type has an influence on a defendant's likelihood of conviction, bond amounts, and sentencing lengths.

Income and the Judicial System

While most research uses attorney type as a determinate of a defendant's income on their sentencing outcome as it is a visible measure, this study will also be using an income variable to have a more accurate estimate of income. Patrick and Marsh (2011) used income data in a study

on the sentencing outcomes of sex offenders. This study found defendants with higher incomes received longer sentences on average; however, defendants in this study were classified as high income if they made over $20,000 which is not an accurate grouping. Mustard (2001), who had a larger sample size and more accurate income data, found defendants with lower incomes receive substantially longer sentences. Specifically, defendants with an income of less than $5,000 received sentences 6.2 months longer than those with incomes between $25,000 and $35,000. This study argues individuals with higher incomes can spend more on an experienced and well-performing attorney to receive a more favorable sentencing outcome. However, this study also finds at a certain income threshold, the defendants with the highest incomes do not receive reductions in sentencing length.

Plea Deals and the Judicial System

Berdejó (2018) finds white defendants are 25 times more likely than black defendants to see their charge reduced or dropped altogether. This study also found white defendants with felony charges saw their charges reduced to a misdemeanor charge 14.56% more often than blacks, indicating a strong racial difference in who receives plea deals. Frenzel and Ball (2008) found sex and age of the defendant have no significant influence on if they receive a negotiated plea deal. Edkins (2011) conducted a study specifically analyzing certain characteristics on the likelihood an attorney was to recommend a plea deal to a defendant and how effective the plea deal was. They found gender and attorney type did not affect an attorney's recommendations, the likelihood of guilt, perceived chances of conviction, or the plea they felt they could obtain for their defendant. However, Edkins did find attorneys perceived black defendants to be 14% more likely to be convicted and therefore would offer plea deals more often to keep their clients out of court. These plea deals were more likely to contain some jail time and longer sentences than

compared to plea deals for white defendants. Champion (1989) did a study on leniency in plea bargaining and found that 93% of cases in their study that were dropped had a defendant with a private defender (Champion 1989). The same study found that of the convictions with plea deals, 41% of the defendants had a private defender and 59% had a public defender.

Nonviolent and Violent Crimes in the Judicial System

There is little research on how disparities differ when comparing violent crimes to non-violent crimes. Berdejó (2018) finds for felony offenses, black defendants are 11.8% more likely than white defendants to be incarcerated but in misdemeanor charges, black defendants are 19.38% more likely to be incarcerated than white defendants. This indicates there is a difference between offense types and the level of disparities in sentencing outcomes. Tonry and Melewski (2008) suggest minority defendants are more likely to be charged, incarcerated, and receive harsher sentences than their white counterparts in drug charges of all class levels. This indicates the disparities may not be among violent and nonviolent crimes but rather drug charges and non-drug charges. Steffensmeier and Motivans (2000) found age to have a varying effect on outcomes when comparing violent or property offenses to drug charges. They found defendants over 60 received shorter prison sentences compared to younger defendants; however, the prison terms were 7-14 months shorter for violent or property crimes and only 2-3 months shorter for drug offenses. This indicates age disparities may be larger for violent crimes compared to nonviolent crimes. In the same study, they find women are less likely to commit violent crimes and men are more likely to commit high-level crimes, but they do not look at their sentencing outcomes specifically.

Previous literature proves the judicial system has flaws in every step of the process from arrests to sentencing. The literature supports the claim that judges have inherent biases towards

defendants they may or may not be aware of when sentencing a range of offenses. Despite this, the literature lacks evidence on how income influences a defendant's sentencing outcomes as income data is typically not available. With the data collected from Dr. Frank Baumgartner, this study will look at an estimated income value for each defendant instead of just using attorney type for a socio-economic variable. The literature is also limited when discussing these characteristics on plea deals for offenses. Plea deals are just as important as sentencing outcomes as they allow for defendants to receive lesser charges or get out of prison early. This is why this research project will be looking at these characteristics in sentencing outcomes and plea deals. Lastly, this research project will compare non-violent and violent crime disparities to each other on two levels, misdemeanor and felony. This is something most studies do not focus on however, there is research proving some groups of defendants are overcharged in certain crimes.

Legal Factors

As prior research indicates, judges are consciously and unconsciously biased by characteristics of a defendant's case which will influence the sentencing outcome for an individual. To limit this variation of sentencing outcomes for similar offenses, North Carolina implemented a structured sentencing system for felonies and misdemeanors in 1994 (North Carolina Sentencing and Policy Advisory Commission). The committee that developed the structured sentencing guidelines argues the grid provides a rational basis for sentencing, enhances the integrity of the judicial system, and limits cruel and unusual sentencing. The structured sentencing grid contains a range of sentence lengths and sentencing types for a specific class and level of crime, a defendant's prior points, and the degree of harm (aggravated, presumptive, or mitigated) caused by the crime. The grid has consistently been updated, with the last major update being in 2013. The grid is meant to provide a structured approach to sentencing

outcomes to limit a judge from using their biases to handout out harsher sentences to certain groups of individuals.

While structured sentencing in North Carolina is meant to limit unfair sentencing outcomes, there is research indicating prior points, which are taken into consideration in the structured sentencing grids, are biased in itself. King's research suggests prison populations are increasing drastically due to defendants with lower-level crimes receiving multiple prior points, thus increasing their minimum sentencing length for future crimes (2018). They found that prison sentences nearly doubled with each additional prior felony a defendant had. They also found that when you control for prior points, an individual's prison sentences should decrease over time, indicating that a major reason for prison population escalation is the increasing criminal records of individuals. Yinzhi Shen and other researchers conducted a study in North Carolina from 1972 to 2016 after recognizing that crime rates have dropped in the United States but incarceration rates have stayed high (2020). They find individuals who reached the peak likelihood of committing a crime during the 1980s and 1990s have higher rates of incarceration due to the accumulation of prior points. Due to the sentencing structure in North Carolina, individuals with prior points, no matter the crime, are automatically sentenced to harsher sentences, therefore increasing their time in prison. When considering these possible disparities among prior points, it is important to recognize how easily an individual can accumulate enough prior points that will push them into a new column on the structured sentencing grid. For example, an individual who is charged with one Class H or I felony, which are typically nonviolent drug offenses, is given two points, which if you look at Figure 1, pushes them into the second column and increases their minimum sentence length.

Given this vast background of literature on individual characteristics on judicial outcomes, it is important to recognize the lack of research on how income influences judicial outcomes and the variation of harshness among different crime levels. While there isn't much research on these topics, it has been proven that there are extralegal influences on sentencing outcomes across the judicial system and it is important to further examine these extralegal influences with an individual's income and if the outcomes differ among offense type. My study aims to show that despite the structured sentencing implementation in North Carolina, certain individuals are still at a large disadvantage in the judicial system that is meant to be fair for everyone.

Theory and Hypotheses

Most prior research indicates minority offenders are overrepresented in the United States' prison systems. Most research focuses on the disparities between white and black offenders and glosses over the disparities towards Hispanic defendants. Despite this, the vast majority of research finds minority defendants are more likely to receive harsher outcomes, in all stages of the judicial system, when compared to their white counterparts. Some research suggests this disparity may be due to inherent and social biases that portray minority individuals as more dangerous or more likely to commit several crimes throughout their lifetime. I expect to find this common racial disparity of harsher outcomes for minority defendants all categories of my study.

Research also shows an overwhelming consensus that female defendants are less likely to receive more severe outcomes than male offenders of the same charge, both in pre-trial outcomes and post-trial sentencing. This extralegal factor may influence sentencing outcomes due to societal stereotypes that women are not as likely to commit crimes as men, women should be at home taking care of their home, husband, and children, or that women are just not as dangerous

as men. I expect to find a similar relationship between gender and sentencing harshness in my study across all categories.

Prior research on age influencing the severity of outcomes in the judicial system contradicts each other; some researchers indicate defendants 18-29 will have higher bond amounts and worse trial outcomes than older defendants and others say there is a curvilinear relationship. This theory may be due to the fact that individuals younger than 21 may be seen as more innocent than older defendants and the court may treat them with leniency in hopes they can correct their mistakes. As an individual gets older, this stereotype disappears as individuals are held accountable for their actions and sentenced accordingly, however, once a defendant reaches a certain age, the court may not see them as a threat and sentence them less harshly. With this in mind, I expect to see a positive relationship between age and sentencing harshness among all offense categories in my study.

The type of attorney a defendant uses in court is a visible indicator of income level for the judge to use when granting sentence outcomes. This assumes defendants with a court-appointed defender are of a lower socio-economic class than those with a private defender. However, it is important to note that attorney type is not a direct indicator of one's socio-economic status. Despite this, prior research suggests attorney type has some influence on a defendant's sentencing outcome, whether that is due to the income status the attorney type may suggest or due to the quality of service the attorney can provide. Prior research suggests defendants with private defenders receive shorter sentences and are less likely to be incarcerated. However, literature also indicates defendants with court-appointed defenders receive longer sentences than defendants who use attorneys they hire on their own. I expect to find defendants with a court-appointed defender will receive harsher outcomes than those with non-court

appointed attorneys. I also expect to find defendants with a public defender will receive harsher sentences than those with a private defender.

While the literature on how income influences sentencing outcomes is limited and conflicting, studies find income has some sort of impact on the judicial system. Individuals with higher incomes have access to more resources to hire better attorneys and look presentable in court. Individuals with higher incomes may also have more reliable witnesses to speak on their behalf in court including notable employers, neighbors, and friends. Judges may also inherently believe defendants with higher incomes will be more successful in staying out of criminal activity after they complete their sentencing and individuals with lower incomes will fall back into crime. With these biases and influences in mind, I expect to find individuals with lower incomes will be more likely to receive harsher sentences when compared to those with higher incomes.

While there is no literature exclusively comparing the disparities of race, age, sex, income, and attorney type among violent and non-violent crimes, there is some research with varying offense types. These studies indicate misdemeanors have larger disparities in sentencing outcomes for race and sex than felonies. These disparities may occur because judges unconsciously allow inherent biases to influence sentencing when the stakes are not as high. The judge may find the sentencing outcome of non-violent crimes to be lower stakes, just like in the misdemeanor studies, allowing them to sentence based on their inherent biases more often. Therefore, I expect disparities to be larger among all independent variables for nonviolent crimes when compared to violent crimes.

Hypotheses:

H1: Black and Hispanic defendants are more likely to receive harsher sentences than their white counterparts in both nonviolent and violent crimes.

H2: Male defendants are more likely to receive harsher sentencing outcomes than female defendants in both nonviolent and violent crimes.

H3: . There will be a positive relationship between age and sentencing harshness in both nonviolent and violent crimes.

H4: Defendants with a court-appointed defender will be more likely to receive the harshest sentencing outcomes than defendants with other attorney types.

H5: Defendants with a public defender will be more likely to receive harsher sentencing outcomes than defendants with privately retrained defenders.

H6: Defendants with lower incomes will receive harsher sentences than defendants with higher incomes.

H7: Nonviolent charges will have larger disparities for every independent variable compared to violent charges.

Research Design

When looking at judicial outcomes it is important to consider legal factors that should influence outcomes as well as to look for influential extralegal factors. With this in mind, I will control for the seriousness of the offense, given that the more severe a crime is, the harsher the sentence will be. However, for this study, the seriousness of offense will already be accounted for as each analysis will be one offense category and the sentencing outcomes will be analyzed with a harshness variable specific to each offense class and prior points. North Carolina also conducts their structured sentencing based on prior points of a defendant and therefore, I will

control for a defendant's prior points. I will also be controlling for the judicial district as each district will have a different judge who may have different sentencing outcomes. I will be analyzing if race, gender, age, attorney type, and income influence sentencing outcomes while controlling for offense level, judicial district, and prior points.

For this study I will be using data from the North Carolina Administrative Office of the Courts' (NCAOC) database with information on every criminal case in North Carolina's 100 counties. I will be using the data from 2013 to 2019 for quantitative analysis. I have chosen to look at the state of North Carolina due to its implementation of structured sentencing. Structured sentencing is meant to allow judges to easily sentence defendants based on their prior points, offense level, and offense category. North Carolina updated these structured sentencing approaches in 2013, which is why this study will not look at data from before 2013. I will be using this dataset for the following variables: offense charge, arrest history, race, age, sex, attorney type, prior points, judicial district, and sentencing outcome. Cases were dropped from this study if they did not have complete information or did not have a date of disposition, meaning the case is still open.

For the income variable, I will be using a variable created by Dr. Frank Baumgartner and University of Michigan PhD candidate Marty Davidson. The variable is created from the NCAOC's address variable and data on housing property values for every neighborhood in the United States. Marty Davidson used the datasets to develop a geographical cluster based on house value, with each cluster only consisting of neighboring homes with similar housing values. A new cluster is created when the housing values drastically change, indicating a difference in wealth among the homes. This allows for grouping of neighboring homes of similar economic status. The clusters were then sorted from rich to poor based on the values of the home. In

addition, the variable also considers the age of the defendant as a young person will not make the same income as the older individuals living in the same home. From there, the variable generates an estimated income variable, which is what I will be using.

For this analysis I have picked two categories to analyze and then compare: non-violent felony and violent felony. The non-violent felony category will include all charges of felony possession of cocaine, methamphetamine, SCH I-VI controlled substances, heroin, and marijuana which are all felony Class I. Individuals charged with these crimes face penalties of community punishments, intermediate punishments, and active prison time. The violent felony category does not have a singular offense charge or offense class with large enough observations in the dataset so I will be using all Class A-C felonies in one group and all Class D and E felonies in a second. Class A-C felonies are the highest level of charges in the system, including capital murder (Class A), other homicides, violent sexual assaults, and other serious crimes. Punishments range from 44 months in prison for a Class C to life in prison without parole or the death penalty for those convicted of a Class A felony. The punishments for individuals in Class D and E felonies category range from twenty months of intermediate punishment to 128 months of active punishment. I have decided to split the violent felony category into two categories due to the extreme variance in crime type and structured sentencing outcomes. By splitting the data into these groups, I can look at different groups of individuals who have committed similar crimes, are roughly comparable to each other, and face similar sentencing outcomes, while still maintaining a large enough group to ensure a statistically accurate comparison.

For this study I will create a harshness variable for each offense category by comparing the outcome of the defendant's sentenced punishment to the worst possible sentencing outcome they could have received given their offense level and prior points. Each of the worst possible

outcomes for the felony offenses, or the denominator of the harshness variable, will be derived from the presumptive range of the prior points and class level. The presumptive range was chosen instead of the aggravated or mitigated range because it is a middle level and most charges are sentenced as a presumptive crime. I will develop the harshness variables based on the North Carolina structured sentencing grids (Figures 1 and 2) which were updated in 2013. When creating the variable, I will take the highest sentencing outcome in the presumptive range of each prior point and class level and multiply it by how many charges a defendant has for that level. If a defendant has multiple charges of varying classes in the same category, specifically the violent felony categories, I will do the same thing for each class level and add them together. This will create a denominator that represents an outcome in which the defendant is sentenced the maximum amount for every single offense they are charged for. I will then take the actual sentencing outcome of the defendant and put it in the numerator to create a harshness ratio. I will do this for all four possible punishment outcomes in the two structured sentencing grids: active, intermediate, community, and active. This will ensure I do not add together maximum or real outcomes for different punishment types as they are very different. For example, a defendant is charged with two counts of a Class C felony, has five prior points, and is sentenced to 75 months of active prison time. Given the scenario above and the North Carolina structured sentencing grid, the harshness variable will look like this: $\frac{75}{83*2}$. This gives the hypothetical defendant a harshness variable of .4518 This indicates the defendant's punishment was 45.18% of what it could have been and did relatively well considering the outcome they faced. The harshness variable will consider punishment harshness in this order from least to highest punishment: fine, community punishment, intermediate punishment, and active punishment. When creating the harshness categories of fine, community, intermediate, and active punishments, I grouped any

punishments coded as “Community/Active/Intermediate,” “Community/Intermediate,” “Active/Intermediate,” and “Intermediate” as the intermediate group as it is the middle punishment level for these outcomes. I understand grouping such drastically different punishment groups can be a flaw in this study; however, the results will still be representative as an intermediate punishment is a middle ground. When creating this harshness variable, I removed any data with a negative maximum outcome as this was concluded to be an error in the data collection. I also removed any outcomes that resulted in the death penalty or life in prison as there was not a way to correctly code a numerical variable to these outcomes in a justifiable way and without creating a drastic outlier.

Using the harshness variable, the analysis will look at the influence of each independent variable on sentencing outcome. Then, I will compare non-violent and violent offenses to analyze if the disparities among the different categories are stronger for certain crimes. The harshness variable allows me to make this comparison analysis because looking solely at sentencing length would not be accurate as the highest sentencing outcome for one offense level may be the lowest for another. When comparing the different offense types I will be looking to see which offense category, non-violent or violent, will have the largest disparities in the independent variables.

Figure 1: Sentencing Grid for Felonies Committed in North Carolina On or After October 2013 (NCJB 2018)

***** Effective for Offenses Committed on or after 10/1/13 *****

FELONY PUNISHMENT CHART

PRIOR RECORD LEVEL

OFFENSE CLASS	I 0-1 Pt	II 2-5 Pts	III 6-9 Pts	IV 10-13 Pts	V 14-17 Pts	VI 18+ Pts	DISPOSITION
A	Death or Life Without Parole Defendant Under 18 at Time of Offense: Life With or Without Parole						
B1	A	A	A	A	A *Life Without Parole*	A *Life Without Parole*	*Aggravated Range*
	240 - 300	*276 - 345*	*317 -397*	*365 - 456*			
	192 - 240	**221 - 276**	**254 - 317**	**292 - 365**	**336 - 420**	**386 - 483**	**PRESUMPTIVE RANGE**
	144 - 192	*166 - 221*	*190 - 254*	*219 - 292*	*252 - 336*	*290 - 386*	*Mitigated Range*
B2	A	A	A	A	A	A	
	157 - 196	*180 - 225*	*207 - 258*	*238 - 297*	*273 - 342*	*314 - 393*	
	125 - 157	**144 - 180**	**165 - 207**	**190 - 238**	**219 - 273**	**251 - 314**	
	94 - 125	*108 - 144*	*124 - 165*	*143 - 190*	*164 - 219*	*189 - 251*	
C	A	A	A	A	A	A	
	73 – 92	*83 - 104*	*96 - 120*	*110 - 138*	*127 - 159*	*146 - 182*	
	58 - 73	**67 - 83**	**77 - 96**	**88 - 110**	**101 - 127**	**117 - 146**	
	44 - 58	*50 - 67*	*58 - 77*	*66 - 88*	*76 - 101*	*87 - 117*	
D	A	A	A	A	A	A	
	64 - 80	*73 - 92*	*84 - 105*	*97 - 121*	*111 - 139*	*128 - 160*	
	51 - 64	**59 - 73**	**67 - 84**	**78 - 97**	**89 - 111**	**103 - 128**	
	38 - 51	*44 - 59*	*51 - 67*	*58 - 78*	*67 - 89*	*77 - 103*	
E	I/A	I/A	A	A	A	A	
	25 - 31	*29 - 36*	*33 - 41*	*38 - 48*	*44 - 55*	*50 - 63*	
	20 - 25	**23 - 29**	**26 - 33**	**30 - 38**	**35 - 44**	**40 - 50**	
	15 - 20	*17 - 23*	*20 - 26*	*23 - 30*	*26 - 35*	*30 - 40*	
F	I/A	I/A	I/A	A	A	A	
	16 - 20	*19 - 23*	*21 - 27*	*25 - 31*	*28 - 36*	*33 - 41*	
	13 - 16	**15 - 19**	**17 - 21**	**20 - 25**	**23 - 28**	**26 - 33**	
	10 - 13	*11 - 15*	*13 - 17*	*15 - 20*	*17 - 23*	*20 - 26*	
G	I/A	I/A	I/A	I/A	A	A	
	13 - 16	*14 - 18*	*17 - 21*	*19 - 24*	*22 - 27*	*25 - 31*	
	10 - 13	**12 - 14**	**13 - 17**	**15 - 19**	**17 - 22**	**20 - 25**	
	8 - 10	*9 - 12*	*10 - 13*	*11 - 15*	*13 - 17*	*15 - 20*	
H	C/I/A	I/A	I/A	I/A	I/A	A	
	6 - 8	*8 - 10*	*10 - 12*	*11 - 14*	*15 - 19*	*20 - 25*	
	5 - 6	**6 - 8**	**8 - 10**	**9 - 11**	**12 - 15**	**16 - 20**	
	4 - 5	*4 - 6*	*6 - 8*	*7 - 9*	*9 - 12*	*12 - 16*	
I	C	C/I	I	I/A	I/A	I/A	
	6 - 8	*6 - 8*	*6 - 8*	*8 - 10*	*9 - 11*	*10 - 12*	
	4 - 6	**4 - 6**	**5 - 6**	**6 - 8**	**7 - 9**	**8 - 10**	
	3 - 4	*3 - 4*	*4 - 5*	*4 - 6*	*5 - 7*	*6 - 8*	

A – Active Punishment I – Intermediate Punishment C – Community Punishment

Numbers shown are in months and represent the range of minimum sentences

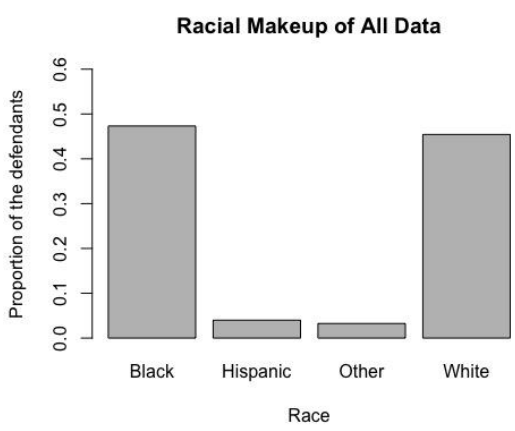
Revised: 09-09-13

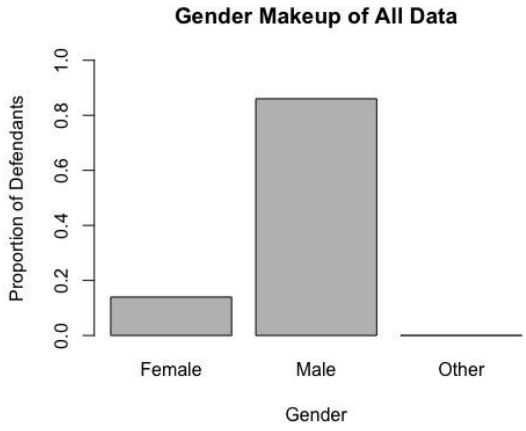
Data

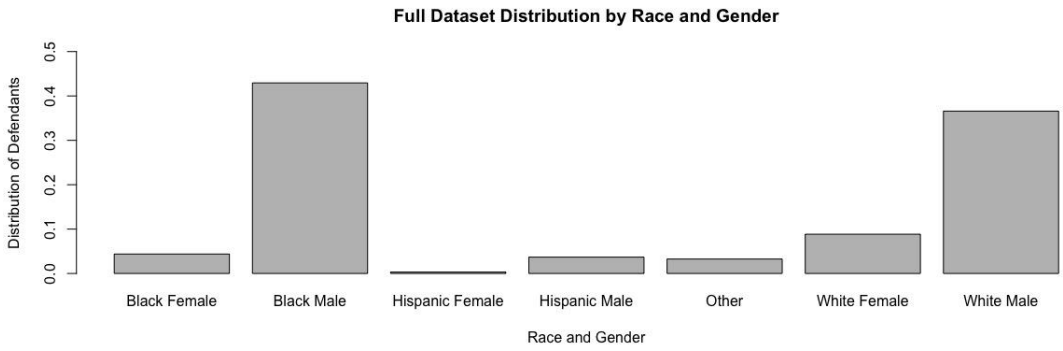
This dataset includes all defendants in North Carolina who were charged from 2013 to 2019 with at least one offense in the five categories used in this study. The dataset does not include individuals with more than six initial charges from the five categories used in this study, leaving 446,098 defendants in the dataset. The race variable is coded as black, Hispanic, white, and other with the other category consisting of defendants who identify as Asian, Indian, other, or did not share their information. Attorney type is coded as an appointed attorney, a private attorney or defending themselves, a public attorney, waived their right to an attorney, or missing. The variable for attorney type in this dataset groups together privately retained attorneys and individuals who decide to represent themselves and will be coded as "private or self." I recognize this is a limitation to this study as the abilities and knowledge of a private attorney are drastically different than the abilities and knowledge of an individual who is defending themselves.

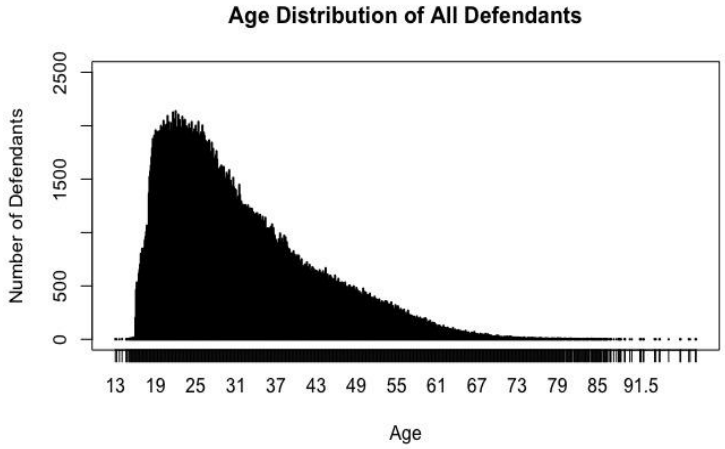
Of the entire dataset, 47.32% identify as black, 4% identify as Hispanic, and 45.43% identify as white. Of these defendants, 13.96% are female and 86% are male. Of these defendants, 4.38% identify as a black female, .32% identify as a Hispanic female, 8.85% identify as a white female, 42.94% identify as a black male, 3.68% identify as a Hispanic male, 36.58% identify as a white male. Of the entire dataset, 27.34% of the defendants used an appointed defender, 20.4% used a private defender or defended themselves, 17.28% used a public defender, 17.6% waived the right to a defender, and 17.36% were missing data on district defender type. The average age of all defendants was 31.68 years old, the youngest defendant was 13 and the oldest was 99.70. The average male defendant was 32.02 years old and the average female was 29.59 years old. The average black defendant was 30.84 years old, the average Hispanic defendant was 27.51 years old, and the average white defendant was 33.02 years old. The average income variable, in

thousands, for all defendants is 33.63 with a minimum of 4 and a maximum of 308.53. The average income for male defendants was 33.42 and the average income for female defendants was 35.038. The average income for black defendants was 28.41, the average income for Hispanic defendants was 32.611, and the average for white defendants was 39.21.





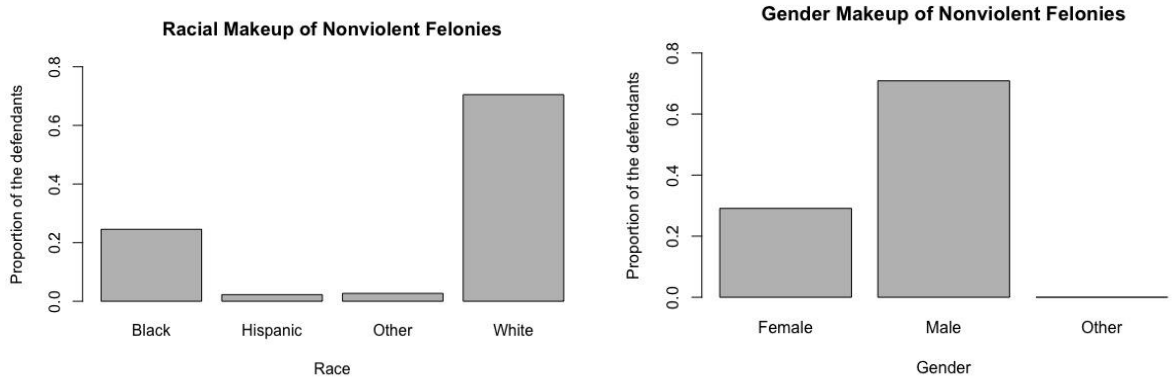


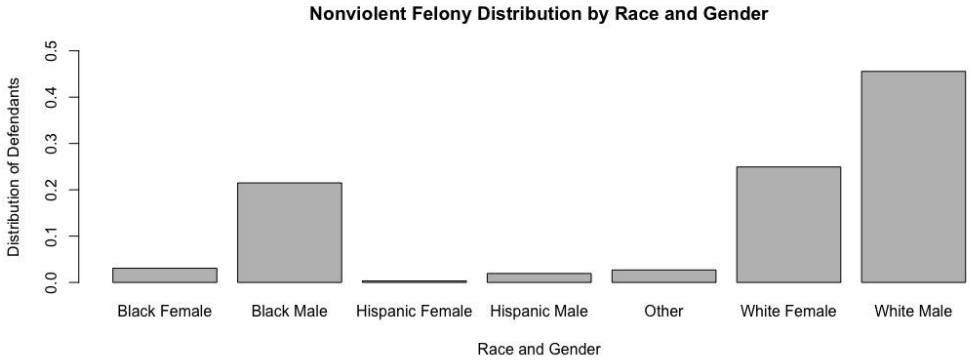


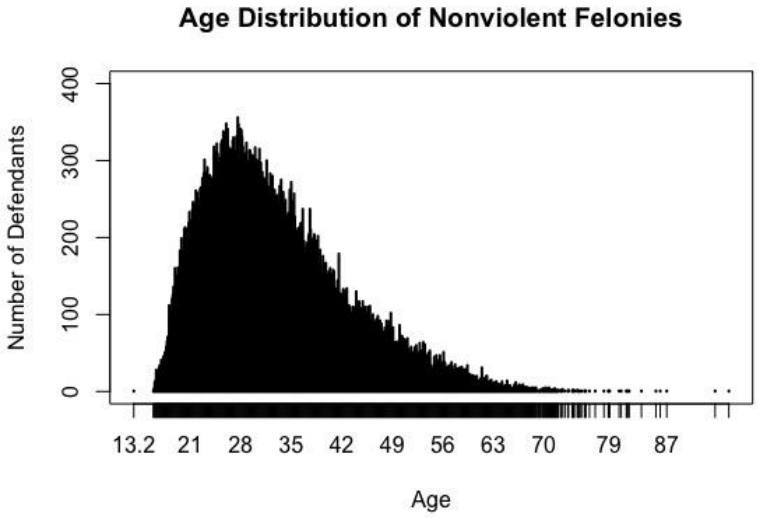
Felonies

The nonviolent felony category consists of 69,959 individuals who were charged for felony possession of cocaine, methamphetamine, SCH I-VI controlled substances, heroin, and marijuana which are all felony Class I. Of these defendants, 24.55% identify as black, 2.26% identify as Hispanic, and 70.5% identify as white. Of these defendants 29.1% are female and 70.89% are male. Of these defendants, 3.06% identify as a black female, .32% identify as a Hispanic female, 24.93% identify as a white female, 21.49% identify as a black male, 1.94% identify as a Hispanic male, and 45.56% identify as a white male. Of the defendants in the nonviolent felonies' category, 46.3% used an appointed defender, 14.6% used a private defender or represented themselves, 20.74% used a public defender, 8.4% waived the right to a defender, and 9.9% do not have data on the type of district defender used. The average age of defendants in this category was 32.95 years old, with the youngest defendant aged 13.20 and the oldest age 95.6 years old. The average male defendant was 33.11 years old and the average female defendant was 32.55 years old. The average age of a black defendant was 31.98 years old, the average of a Hispanic defendant was 28.03 years old, and the average age of a white defendant

was 33.54 years old. The average income variable, in thousands, of defendants in this category was 34.559, with a minimum of 4.068 and a maximum of 294.493. The average income of a male defendant was 34.669 and the average income of a female defendant was 35.046. The average income of a black defendant was 28.144, the average income of a Hispanic defendant was 32.613, and the average income of a white defendant was 37.192.

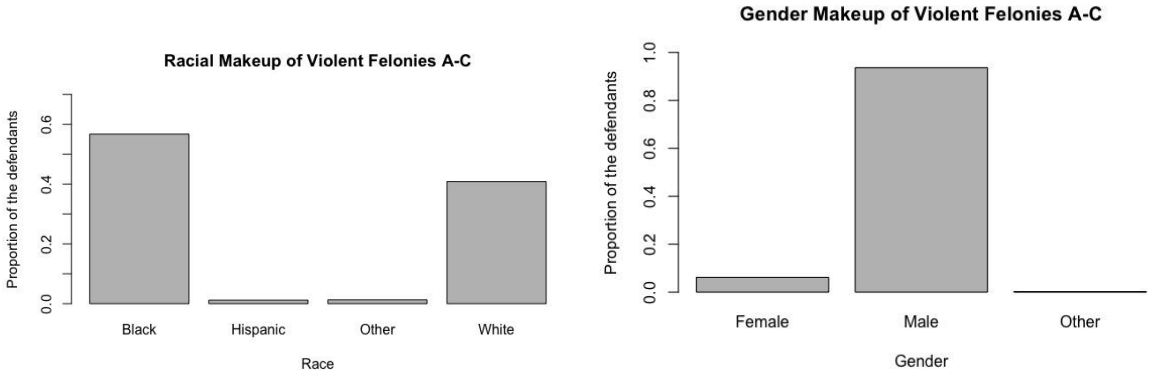


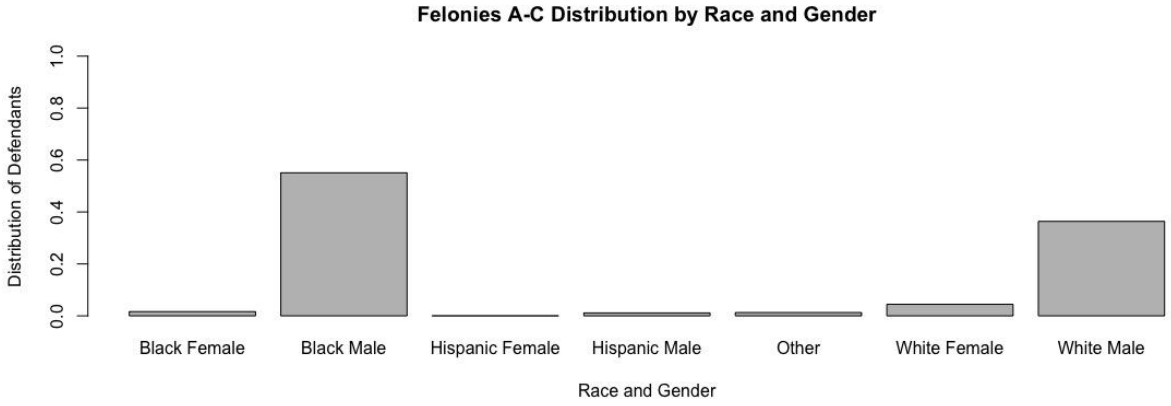


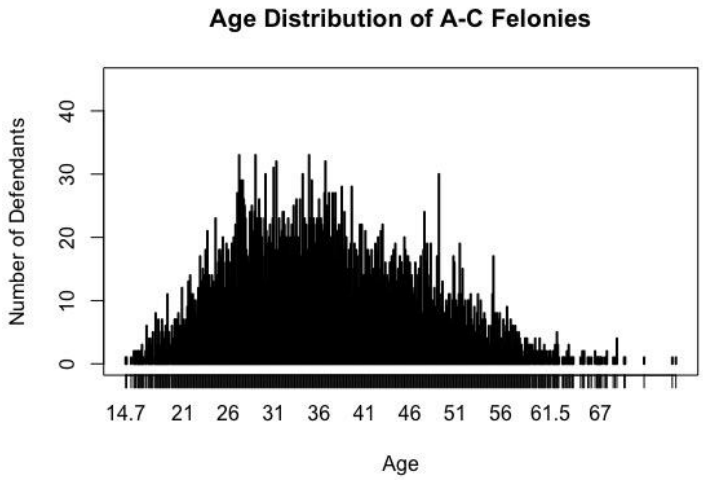


The first violent felony category consists of 6,429 defendants charged with Class A, B, and C felonies in the database. Class A felonies are exclusively first-degree murder cases. Class B1 felonies include second-degree murder and serious sexual offense. Class B2 felonies include some second-degree murders, attempted sexual assaults, and human trafficking of children. There are many Class C felonies including serious assaults, manufacturing methamphetamines, and some serious property crimes. While not all of these crimes would be deemed 'violent', they will all be included in this category because they are all equivalent in the severity of the crime. Due to structured sentencing in North Carolina, all defendants convicted of A-C felonies will receive prison time. Of these defendants, 56.7% identify as black, 1.18% identify as Hispanic, and 40.83% identify as white. Of the defendants, 6.16% are female and 93.65% identify as male. Of these defendants, 1.63% identify as a black female, .05% identify as a Hispanic female, 4.45% identify as a white female, 55.08% identify as a black male, 1.14% identify as a Hispanic male, and 36.38% identify as a white male. Of the defendants in this violent felony category, 4.2% used an appointed defender, .7% used a private defender or defended themselves, 2% used

a public defender, .3% waived their right to a defender, and 92.7% do not have data on the type of district defender used. The average age of defendants in this category was 37.04, with the youngest defendant aged 14.70 and the oldest 75.30. The average male defendant was 37.04 years old and the average female was 39.49 years old. The average black defendant was 36.61, the average Hispanic defendant was 30.44, and the average white defendant was 37.82 years old. The average income variable, in thousands, of defendants in this category was 30.529, with a minimum of 4.235 and a maximum of 209.664. The average income of male defendants was 30.301 and the average income of female defendants 34.17. The average income of black defendants was 26.095, the average income of Hispanic defendants was 30.450, and the average income of white defendants was 36.416.

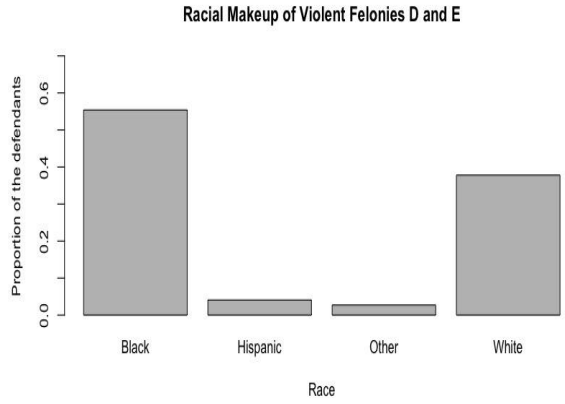


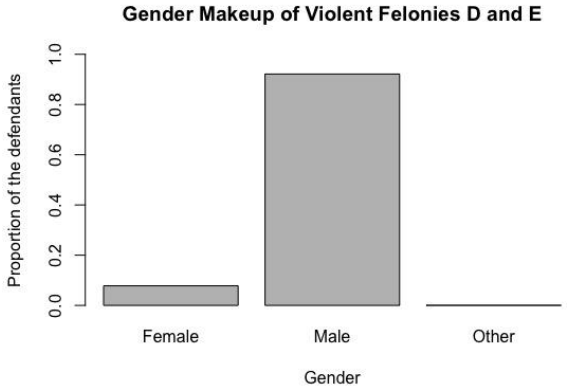


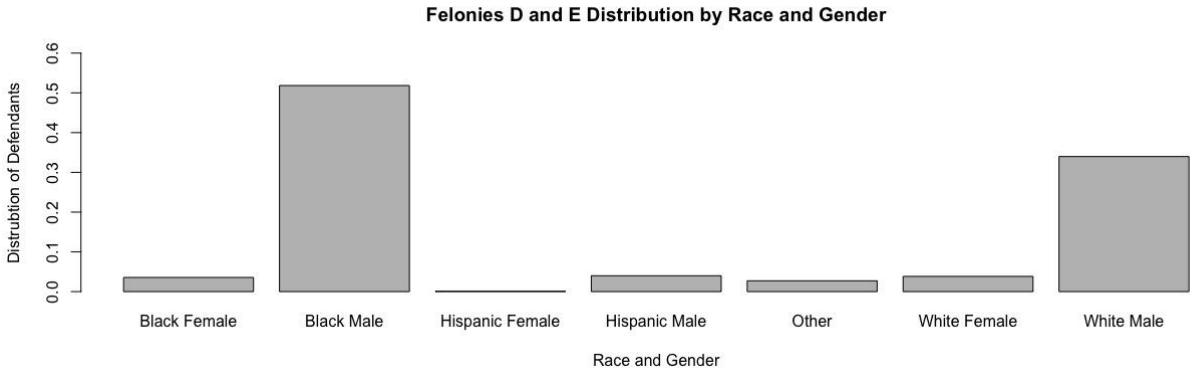


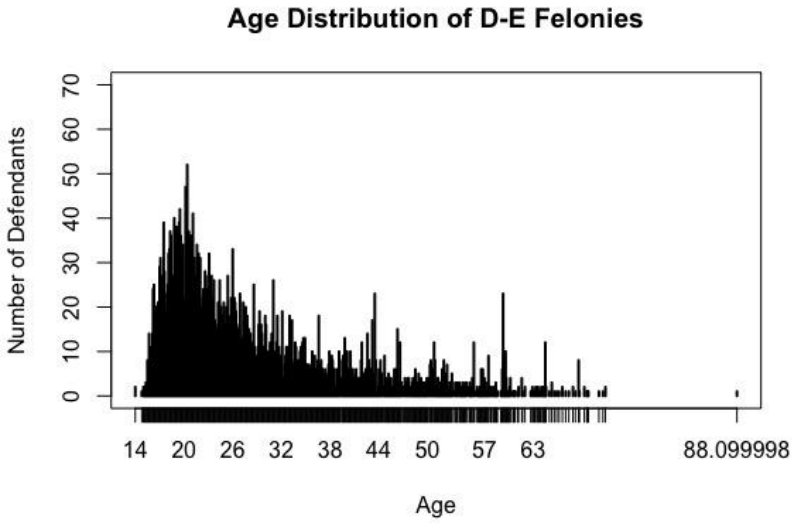
The second violent felony category consists of 4,859 individuals who were charged with a Class D or E felony. Of these defendants, 55.4% identify as black, 4.07% identify as Hispanic, and 37.81% identify as white. Of the defendants, 7.8% are female and 92.14% are male. Of the defendants, 3.56% identify as a black female, .08% identify as a Hispanic female, 3.8% identify as a white female, 51.84% identify as a black male, 3.99% identify as a Hispanic male, and 34% identify as a white male. Of the defendants in this violent felony category, 31.18% used an appointed defender, 5.7% used a private defender or defended themselves, 17.31% used a public defender, 3.5% waived their right to a defender, and 42.3% did not have data on the type of district defender used. The average age of a defendant in this category was 28.85 years old with the youngest aged 14 and the oldest 88.10 years old. The average male defendant was 28.73 years old and the average female was 30.29 years old. The average black defendant 25.1 years old, the average Hispanic defendant was 26.2 years old, and the average white defendant was 34.69 years old. The average income variable, in thousands, of all defendants in this category was 32.39, with a minimum of 4 and a maximum of 172.99. The average income of male defendants was 32.46 and the average income of female defendants was 31.53. The average

income of black defendants was 26.99, the average income of Hispanic defendants was 32.997, and the average income of white defendants was 40.779.









Results

The regression used to analyze the data does not include or distinguish outcomes in which the defendant is convicted of a crime with a different offense level to what they were charged with. In most cases, when this occurs a defendant is convicted of a lower level offense class than the one they were arrested or charged for but sometimes a defendant can be convicted of a higher offense class. To see what groups of individuals were convicted of a lesser offense than what they were charged with, I created tables to show how each race was convicted given the charge they were facing. Table 1 shows 18% of white defendants were convicted of the charge they were facing or of a higher-level felony, 0.10% were convicted of a lesser felony charge, 2.45% were convicted of a lesser misdemeanor charge, and 78% had a charge dropped all together. Table 2 shows that 18.76% of black defendants were convicted of the charge they were facing or a higher-level felony, 0.25% were convicted of a lesser felony, 2.77% were convicted of a lesser misdemeanor, and 77.63% had a charge dropped completely. Table 3 shows 16.61% of Hispanic defendants were convicted of the charge they were facing or a higher-level

felony, 0.22% were convicted of a lesser felony, 3.27% were convicted of a lesser misdemeanor, and 79.2% had that charge dropped completely. Most of the charges that were dropped all together were I level Felonies, which makes sense as these are the lowest level of charge looked analyzed. The tables show that it was more common for black defendants to be convicted of the charge they were facing, followed by white defendants, and then Hispanic defendants. Hispanic defendants were more likely to be convicted of a lesser misdemeanor, followed by black defendants, and the white defendants. Hispanic defendants were also more likely to have the charge dismissed, followed by white defendants, and then black defendants.

Table 1. Conviction for White Defendants Charged at Various Offense Levels

Charged With:	Convicted of Charge or Higher	Convicted of Lesser Felony	Convicted of Lesser Misdemeanor	Multiple Levels	Dismissed	Total	Total N
A	55.93	3.39	-	-	40.68	100.00	59
B	1.67	31.67	-	-	66.67	100.00	120
C	67.06	0.39	-	-	32.55	100.00	510
D	53.15	4.83	-	-	42.02	100.00	952
E	65.87	-	-	.17	33.97	100.00	2414
I	15.84	-	2.58	1.51	80.07	100.00	80682
Total	18.00	0.10	2.45	1.44	78.00	100.00	84737

Table 2. Conviction for Black Defendants Charged at Various Offense Levels

Charged With	Convicted of Charge or Higher	Convicted of Lesser Felony	Convicted of Lesser Misdemeanor	Multiple Levels	Dismissed	Total	Total N
A	60.24	3.61	-	-	36.14	100.00	83
B	9.26	33.33	-	-	57.14	100.00	54
C	66.00	0.22	-	0.22	33.55	100.00	453
D	48.37	2.83	-	0.19	48.60	100.00	246
E	56.99	-	0.14	0.07	42.80	100.00	2841
I	12.39	-	3.26	0.68	83.67	100.00	33150
Total	18.76	0.25	2.77	0.59	77.63	100.00	39227

Table 3. Conviction for Hispanic Defendants Charged at Various Offense Levels

Charged With	Convicted of Charge or Higher	Convicted of Lesser Felony	Convicted of Lesser Misdemeanor	Multiple Levels	Dismissed	Total	Total N
A	83.33	-	-	-	16.67	100.00	6
B	4.17	25.00	-	-	70.83	100.00	24
C	56.96	-	-	-	43.04	100.00	79
D	54.91	0.58	-	-	44.51	100.00	173
E	58.65	-	-	-	41.35	100.00	208
I	9.59	-	3.88	0.79	85.74	100.00	2658
Total	16.61	0.22	3.27	0.67	79.22	100.00	3148

Felonies

Violent Felonies A-C

Active Outcomes

When creating the harshness variables, I threw out any with a negative value, as this ratio is always positive, as well as any individuals who had been sentenced to life in prison or death. For the violent felony category including offense levels A-C, this means I got rid of five observations of individuals sentenced to death, 93 observations of individuals sentenced to life without parole, and 97 observations with negative ratios. This left me with 334 observations of individuals who received an active prison sentence, 0 observations of individuals who received a community punishment or a fine, and 6 individuals who received an intermediate punishment. This severely decreases my observation size. When controlling for prior points and judge, as shown in Table 4, the intercept remains statistically significant, indicating the average defendant receives a harshness variable of 1.02, or that their sentence is 2% worse than their worst possible outcome. This occurs because the average defendant must receive a sentence in the aggravating range instead of the presumptive range, which is how I made the harshness variable. The data indicates the sentencing outcomes for Hispanic males are statistically significant and that they

receive outcomes that are on average, 22% harsher than white defendants. The sentencing outcomes for male defendants are also statistically significant with outcomes that are, on average, 18.5% harsher than female defendants. Prior points are also statistically significant, indicating that on average, individuals receive sentences that are 3.25% less harsh as their prior points increase. This means individuals with higher prior points receive more lenient active sentences in this category.

Overall, the data in this category suggests, with and without holding the judge constant, the average defendant does better than their worst possible active outcome. However, when controlling for judge and prior points, the average defendant does worse than their worst possible active outcome. With and without controlling for judge and prior points, the data shows Hispanic defendants have a statistically significant sentencing outcome that is higher than white defendants. The only regression that does not indicate a statistically significant relationship between gender and outcome is the regression only holding the judge constant; however, the other two regressions show male defendants receive harsher outcomes on average. Prior points are also a statistically significant indicator of outcome when included in the regression, with prior points and sentencing harshness having a negative relationship. None of the regressions showed a statistically significant relationship between age, income, attorney type, or black defendants and sentencing outcome.

Table 4. Felonies A-C Active Outcomes Holding Prior Points and Judge Constant

```
Residuals:
     Min       1Q   Median       3Q      Max
-1.22422 -0.26937 -0.04226  0.26344  0.91243

Coefficients:
                              Estimate Std. Error t value Pr(>|t|)
(Intercept)                   1.028514   0.175261   5.868 1.09e-08 ***
race_Black                   -0.029252   0.053024  -0.552  0.58156
race_Other                    0.066360   0.147480   0.450  0.65304
race_Hispanic                 0.223344   0.081556   2.739  0.00651 **
gender_Male                   0.185713   0.080203   2.316  0.02121 *
log(Income)                   0.022972   0.040017   0.574  0.56634
Defendant_Age                 0.001853   0.001951   0.950  0.34282
attorneytype_Other            0.048771   0.051481   0.947  0.34416
attorneytype_Private or Self 0.043063   0.102519   0.420  0.67473
attorneytype_Public           0.030160   0.067717   0.445  0.65634
attorneytype_Waived           0.038603   0.126255   0.306  0.75999
PriorPoints                  -0.032512   0.013254  -2.453  0.01469 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.398 on 322 degrees of freedom
  (6095 observations deleted due to missingness)
Multiple R-squared:  0.07788, Adjusted R-squared:  0.04638
F-statistic: 2.472 on 11 and 322 DF,  p-value: 0.005524
N= 334
```

Violent Felonies D-E

Active Outcomes

For the violent felonies Class D-E, there were no defendants who were sentenced to life in prison or death and there were no observations with a negative harshness variable. Of this category, 1384 defendants received an intermediate punishment, 941 received an active punishment, and no defendants received a fine or community punishment. Table 5 shows active outcomes for felonies D and E when holding judge and prior points constant. The table shows the average defendant receives an outcome that is on average 28% better than their worst possible outcome, or 72% of their worst possible outcome. This indicates that on average, defendants in this category receive a better active outcome than what they could receive. This table shows the outcomes of Hispanic defendants and defendants who do not identify as white, black, or Hispanic are statistically significant. Hispanic defendants receive a sentencing outcome

that is 9% worse than white defendants and defendants who identify as other receive outcomes 12.4% worse than white defendants. While not statistically significant, on average, black defendants receive outcomes 3.4% worse than white defendants. The table also shows gender to be a statistically significant indicator of sentencing outcome with male defendants receiving, on average, sentencing outcomes that are 7.9% worse than females. Age is also a statistically significant indicator, with an average harshness increase of .005 with each additional year. Attorney type also some statistically significant influence on harshness outcome, with defendants who used a public defender receiving a sentencing outcome that is 6.1% better than those with an appointed defender. Defendants who waived their right to an attorney received an outcome 10.1% better than those with an appointed defender. Lastly, prior points are statistically significant with a harshness value of .051. This means as defendants' prior points increase, their active sentencing outcome for this range of felonies will be 5.1% worse for each additional point.

After running the regression, the data shows the average defendant receives a statistically significant outcome better than their worst possible outcome. The regression also shows statistically significant outcomes for individuals who do not identify as white, black, or Hispanic, with all three regressions showing a worse outcome for these individuals compared to white defendants. The outcome for Hispanic defendants was statistically significant and worse off when compared to whites when holding both constant. The outcome for black defendants was not significant for active outcomes in this category. This category also found male defendants consistently and statistically significantly received harsher sentences compared to female defendants. Age was also a statistically significant indicator for all three regressions, showing older individuals receive harsher outcomes. Defendants who waived their right to an attorney or used a public defender had a statistically significant outcome that was more lenient when

compared to defendants with an appointed defender. Prior points had a statistically significant and positive relationship to sentencing harshness for active outcomes in this category. Income, black defendants, and defendants with private defenders or who represented themselves did not have statistically significant relationships with active outcomes.

Table 5. Felonies D-E Active Outcomes Holding Judge and Prior Points Constant

```
Residuals:
    Min      1Q  Median      3Q     Max
-0.7832 -0.1264  0.0000  0.1143  0.7920

Coefficients:
                              Estimate Std. Error t value Pr(>|t|)
(Intercept)                  0.7233163  0.2353513   3.073  0.00220 **
race_Black                   0.0339858  0.0224373   1.515  0.13028
race_Other                   0.1240612  0.0481956   2.574  0.01025 *
race_Hispanic                0.0961710  0.0416155   2.311  0.02111 *
gender_Male                  0.0799382  0.0301472   2.652  0.00819 **
log(Income)                  0.0010847  0.0145469   0.075  0.94058
Defendant_Age                0.0050081  0.0009260   5.408 8.64e-08 ***
attorneytype_Other           0.0140792  0.0216964   0.649  0.51659
attorneytype_Private or Self-0.0386333  0.0383898  -1.006  0.31458
attorneytype_Public         -0.0610998  0.0238879  -2.558  0.01074 *
attorneytype_Waived         -0.1013892  0.0478912  -2.117  0.03459 *
PriorPoints                  0.0514256  0.0054267   9.476  < 2e-16 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.2273 on 729 degrees of freedom
  (3976 observations deleted due to missingness)
Multiple R-squared:  0.3551,  Adjusted R-squared:  0.2197
F-statistic: 2.623 on 153 and 729 DF,  p-value: < 2.2e-16
N = 883
```

Intermediate Outcomes

For Felonies D-E, defendants may face intermediate punishments instead of solely active punishments as these crimes are middle-level felonies. When controlling intermediate outcomes for prior points and judges, not much really changes, as shown in Figure 6. The intercept variable, or average defendant, does not have a statistically significant sentencing outcome. The sentencing outcomes for black and Hispanic defendants are statistically significant and moving in the same direction, black defendants receive, on average, a sentencing outcome that is 16.4% better compared to whites and Hispanic defendants receive, on average, a 25.5% harsher

sentencing outcome than white defendants. The outcome for male defendants is also still statistically significant, with male defendants receiving an outcome that is 25% harsher than female outcomes. Age is also still statistically significant, with each additional year of age increasing the harshness outcome of an individual by 1%. Lastly, prior points are a statistically significant indicator of sentencing outcomes, with each additional prior point improving a defendant's sentencing outcome by 8%.

The regression finds black defendants receive a statistically significant and better intermediate outcome when compared to white defendants and Hispanic defendants receive a statistically significant and worse intermediate outcome when compared to white defendants. Male defendants also receive a statistically significant and worse intermediate outcome when compared to female defendants in this category. Age has a positive and statistically significant relationship with harshness outcome for intermediate punishments. Attorney type and income are not statistically significant for this category.

Table 6. Felonies D-E Intermediate Outcomes Holding Judge and Prior Points Constant

```
Residuals:
     Min       1Q   Median       3Q      Max
-1.40685 -0.31384 -0.05483  0.17949  3.15444

Coefficients:
                             Estimate Std. Error t value Pr(>|t|)
(Intercept)                   0.17576    0.60494   0.291 0.771460
race_Black                   -0.16414    0.04381  -3.747 0.000188 ***
race_Other                    0.08708    0.10831   0.804 0.421577
race_Hispanic                 0.25524    0.09916   2.574 0.010179 *
gender_Male                   0.25052    0.05096   4.916 1.02e-06 ***
log(Income)                   0.02231    0.03166   0.705 0.481089
Defendant_Age                 0.01008    0.00171   5.893 5.02e-09 ***
attorneytype_Other            0.15249    0.04400   3.465 0.000550 ***
attorneytype_Private or Self 0.07636    0.06967   1.096 0.273278
attorneytype_Public           0.03564    0.05399   0.660 0.509387
attorneytype_Waived           0.06568    0.09668   0.679 0.497073
PriorPoints                  -0.08262    0.01099  -7.519 1.14e-13 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.5765 on 1108 degrees of freedom
  (3583 observations deleted due to missingness)
Multiple R-squared:  0.3552,  Adjusted R-squared:  0.258
F-statistic: 3.655 on 167 and 1108 DF,  p-value: < 2.2e-16
N = 1276
```

Nonviolent Felonies

Active Outcomes

The nonviolent felony category consists of multiple drug charges that are Class I felonies. For this group, there were no negative ratios or defendants who received life or death sentences. 4198 individuals received an intermediate punishment, 2142 individuals received a community punishment 1 individual received a fine, and 8 individuals received an active punishment. Due to the small number of individuals who received an active punishment in this group, I will not be looking at these outcomes.

Intermediate Outcomes

The average defendant, as shown in Table 7, has a statistically significant harshness variable of 2.5, indicating the outcome is 150% worse than the worst possible outcome. This

suggests that the average defendant who in this category is sentenced using the aggravated range instead of the presumptive range, which is what I used to create this ratio. None of the race variables are statistically significant influences in this category; however, the data suggests that black defendants receive harsher outcomes compared to whites and Hispanic defendants receive better outcomes compared to whites. The defendant's age is statistically significant, with every additional year older the defendants receive an outcome .38% worse. When compared to an appointed defender, individuals who use a private defender or defend themselves receive sentencing outcomes that are on average 10% better.

Table 7. Nonviolent Felonies Intermediate Outcomes Holding Judge and Prior Points Constant

```
Residuals:
    Min      1Q  Median      3Q     Max
-5.5090 -0.2385  0.0453  0.1477  8.6227

Coefficients:
                              Estimate Std. Error t value Pr(>|t|)
(Intercept)                  2.5306862  0.0918496  27.552  < 2e-16 ***
race_Black                   0.0338189  0.0313046   1.080 0.280079
race_Other                  -0.0658835  0.0677344  -0.973 0.330786
race_Hispanic               -0.1488359  0.0911135  -1.634 0.102454
gender_Male                  0.0246828  0.0246045   1.003 0.315844
gender_Other                -0.1856419  0.6471031  -0.287 0.774221
log(Income)                  0.0127873  0.0229020   0.558 0.576645
Defendant_Age                0.0038378  0.0012531   3.063 0.002211 **
attorneytype_Other          -0.0632051  0.0354142  -1.785 0.074395 .
attorneytype_Private or Self-0.1006100  0.0390716  -2.575 0.010066 *
attorneytype_Public         -0.0164109  0.0342825  -0.479 0.632186
attorneytype_Waived         -0.0128722  0.0445700  -0.289 0.772746
PriorPoints                  0.0101468  0.0084419   1.202 0.229469
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.6369 on 3333 degrees of freedom
  (66332 observations deleted due to missingness)
Multiple R-squared:  0.1551,  Adjusted R-squared:  0.08087
F-statistic: 2.089 on 293 and 3333 DF,  p-value: < 2.2e-16
N = 3627
```

Community Outcomes

The average defendant, as shown in Table 8, receives a community punishment outcome 170% worse than the worst possible outcome given the harshness variable of 2.738. This suggests individuals in this category are being sentenced in the aggravating range instead of the presumptive range, which is how I created the harshness variable. The only other statistically significant variable is the outcome of black defendants who, on average, receive an outcome 10% better than white defendants. The data also suggests that Hispanic defendants receive a better outcome than white defendants, but this is not statistically significant.

Table 8. Nonviolent Felonies Community Outcomes Holding Judge and Prior Points Constant

```
Residuals:
    Min      1Q  Median      3Q     Max
-2.4843 -0.2032  0.0067  0.1941  4.3534

Coefficients:
                              Estimate Std. Error t value Pr(>|t|)
(Intercept)                  2.7380077  0.0644034  42.513  < 2e-16 ***
race_Black                  -0.1008840  0.0223435  -4.515 6.77e-06 ***
race_Other                  -0.0484712  0.0432954  -1.120 0.263066
race_Hispanic               -0.0296088  0.0478437  -0.619 0.536088
gender_Male                  0.0265397  0.0181419   1.463 0.143683
log(Income)                 -0.0299470  0.0158217  -1.893 0.058558 .
Defendant_Age               -0.0001500  0.0009494  -0.158 0.874487
attorneytype_Other          -0.0088608  0.0264806  -0.335 0.737956
attorneytype_Private or Self-0.0013605  0.0246536  -0.055 0.955999
attorneytype_Public         -0.0146596  0.0271425  -0.540 0.589200
attorneytype_Waived         -0.0107337  0.0316901  -0.339 0.734873
PriorPoints                 -0.0437617  0.0253842  -1.724 0.084895 .
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.3377 on 1691 degrees of freedom
  (68023 observations deleted due to missingness)
Multiple R-squared:  0.2929,  Adjusted R-squared:  0.1909
F-statistic: 2.871 on 244 and 1691 DF,  p-value: < 2.2e-16
N = 1936
```

Discussion

This study expands on existing literature with the operationalizing of sentencing harshness for multiple forms of punishment, the addition of new independent variables, and the breakdown between violent and nonviolent crimes. Most prior studies have not looked at the structured sentencing grid in a way that analyzes the harshness within a defendant's possible sentencing range if looking at a sentencing grid at all. This study expands on the prior literature that focuses solely on one judicial outcome (jail time, probation length, fine, bond amount, etc.) and only on one set of crimes. Examining the disparities among North Carolina's structured sentencing system allows judges and government officials to see that even with a structured grid, certain groups of individuals are at a disadvantage or advantage in the judicial system. Using a harshness ratio allows for this analysis within the structured sentencing grid as it does not look solely at the sentencing length, but rather looks at the individual's worst possible outcome and compares it to what they actually received. The harshness variable is what will allow me to compare the disparities among my nonviolent and violent crime groups.

This study also uses a wide range of independent variables to increase the degree of accuracy as prior research focusing on one identity characteristic shows there is a wide range of extralegal influences. This study also includes an income variable based on the defendant's address, an independent variable most studies have not been able to use in their study due to lack of resources or replacing the income variable with attorney type. I have also included judge and prior points in my analysis to address any potential influences they may have on sentencing outcomes as prior research suggests they do.

The results of this study suggest there is a statistically significant relationship between prior criminal record points and the sentencing harshness for the felonies in the violent category,

or felonies A-E, but not for the nonviolent felonies. The study finds a negative relationship for active outcomes in felonies A-C and intermediate outcomes for felonies D-E but a positive relationship for active outcomes in felonies D-E. Overall, the statistically significant findings indicate that prior points indicate a disparity in harshness in the standardization of outcomes in North Carolina. This study finds the negative relationship between prior points and harshness outcome doesn't suggest defendants with more prior points receive shorter sentencing lengths, but it suggests the more prior points an individual has the outcome defendants receive compared to the sentence they are facing is lower. As figure 1 shows, the range grows significantly larger as an individual increases in prior points.

The study finds defendants' individual characteristics to confirm some hypotheses and contradict others. The study finds a mixed relationship between race and sentencing harshness, making it hard to determine if H1 is supported or not. All of the regressions that found a statistically significant relationship for race and sentencing harshness for black defendants found a negative relationship, suggesting black defendants receive a more lenient sentence compared to white defendants. These statistically significant results were found in violent and nonviolent felonies and among intermediate and community punishments. The active punishments for A-C felonies also found a negative relationship, but it was not statistically significant. This contradicts H1 that black defendants receive harsher sentencing in comparison to white defendants and goes against most prior literature suggesting black defendants face the worst outcomes in the judicial system. The statistically significant regressions for Hispanic defendants found a positive relationship, indicating Hispanic defendants receive a harsher outcome compared to white defendants. These findings match most of the literature that considers Hispanic defendants in their studies on racial disparities. These statistically significant results

were only found for violent felonies and both active and intermediate outcomes. The nonviolent felonies found no significant relationship but suggested a negative relationship for all punishment types. Overall, this supports the second part of H1 that Hispanic defendants receive worse outcomes compared to white defendants; however, it is only for violent. Both of these findings, or lack thereof, may be due to the already drastically different racial makeup of defendants in these crime groups. As the section describing the dataset suggests, the racial makeup of nonviolent felonies is significantly whiter than the violent felony categories with around 70% white in nonviolent and around 40% in violent. This may suggest that there are already racial disparities in who gets charged with certain crimes, which is not something this study looks at.

Of the fifteen regressions run, eight found the relationship between gender and sentencing harshness to be statistically significant and all fifteen found males to receive harsher sentencing outcomes compared to females. This supports H2 that male defendants receive harsher sentencing outcomes in violent categories; however, none of the regressions for nonviolent felonies found a statistically significant relationship. This suggests that for violent crimes with higher maximum sentencing outcomes, judges are inclined to sentence females to more lenient outcomes because they see them as more innocent. This lenience does not continue for lower-level crimes as the maximum outcome is already lower than the higher-level offenses. The study also found a statistically significant relationship between age and sentencing harshness for both nonviolent and violent crimes and active and intermediate punishments, supporting H3. This relationship was still found to be significant when holding constant prior points, which can also be an indicator of age as older defendants are more likely to have more prior points. Most of the regressions found a harshness increase between .1% and .4% for each additional year of age.

This supports the theory that judges will sentence older individuals to harsher sentences as they feel they can be held accountable for their crimes and that younger defendants deserve a break as they are learning how to navigate the world.

The outcomes for the relationship between attorney type and sentencing harshness vary drastically among offense type and punishment type. The relationship between attorney type and sentencing harshness for public defenders is statistically significant for the active punishments of felonies D-E, or violent felonies, and is a negative relationship. This suggests defendants in the felony D-E category receive more lenient active outcomes compared to defendants with a court-appointed defender. While not significant, all but two regressions suggest a more lenient outcome for defendants with a public defender compared to a court-appointed one, supporting H4. The relationship between attorney type and sentencing harshness is statistically significant for defendants with a private defender or who are defending themselves in the nonviolent felony category and for intermediate outcomes. The relationship in these regressions is negative, once again suggesting defendants who are facing a nonviolent felony with an intermediate sentencing outcome receive more lenient sentencing outcomes when using a private defender or defending themselves when compared to a court-appointed defender, once again supporting H4. Defendants who waived their right to an attorney had a statistically significant relationship between attorney type and sentencing harshness for felonies D-E and when they were facing active punishments. This relationship was also negative, indicating those who waived their right to a court defender received more lenient punishments in this category, compared to court-appointed defenders, upholding H4. H5 cannot be confirmed or denied as there is not a category in which both public and private defenders have a statistically significant relationship with sentencing harshness. Overall, I am not surprised by the results of the relationship between attorney type and

sentencing harshness as most prior research also finds a wide range of results, whether attorney type isn't significant at all or various attorney types have negative or positive influences. This study suggests that attorney type is only important and statistically significant for certain crimes and punishment outcomes.

The fifteen regressions do not find income to have a statistically significant relationship with sentencing harshness, so therefore H6 cannot be confidently proven or disproven. However, all of the regressions for violent active and intermediate punishments and nonviolent intermediate punishments found a positive relationship with income and sentencing harshness. This suggests that as a defendant's income rises, their sentencing harshness will increase. The nonviolent community outcome regressions found a negative relationship that also was not significant but indicated that as a defendant's income increases, their community sentencing will become more lenient. This suggests wealthy defendants are only able to use their money to influence sentencing outcomes when the stakes are low, but this study doesn't support the significance of this theory. This is contradictory to most of the prior research on income, but this research is limited and narrow in scope. These findings do suggest that future research should consider looking at the influence of income on various sentencing types (active prison time, probation, community service, etc.) as it would be interesting to see if there is an influence based on punishment type.

When analyzing H7, I look first at the statistically significant relationships and compare those and then move to the nonsignificant relationships. First, the average sentencing outcome was significant for all the regressions when holding prior points and judge constant except for intermediate outcome felonies D-E. When looking at these outcomes, violent felonies facing active outcomes had a lower harshness variable on average compared to the nonviolent averages

of both intermediate and community outcomes. The average defendant in violent felonies received a harshness variable of .723, meaning they do better than their worst possible outcome, or 1.02, meaning they only did slightly worse than their worst possible outcome. The nonviolent felonies had average harshness variables of 2.53 for intermediate punishments and 2.73 for community punishments, indicate the average defendant for nonviolent felonies received a much harsher outcome than their worst possible outcome. When looking solely at the statistically significant relationships between race and sentencing harshness, the nonviolent community category has the lowest racial disparities with a harshness ratio of -.10 compared to the violent intermediate of -.164, which goes against H7. This suggests racial disparities are larger for violent crimes, especially as the not significant relationships between race and harshness ratio have a significantly higher harshness ratio for Hispanic defendants facing violent felonies. The highest, not significant finding, for nonviolent felonies is a harshness outcome of -.1488 and the highest for violent felonies, which is significant, is .255 and .2233. While also not finding a statistically significant relationship between gender and sentencing harshness for nonviolent crimes, the harshness ratio variables are much higher, and statistically significant, for the violent felonies with a high value of .0265 for nonviolent and a low value of .079 for violent. Both violent and nonviolent felonies have statistically significant age relationships, but once again, violent felonies have a higher harshness ratio, indicating there is a larger age disparity in violent felonies compared to nonviolent felonies. Without looking at significance levels, defendants with a private defender or who defended themselves face a stronger disparity in sentencing outcomes when compared to an appointed defender for nonviolent crimes compared to violent crimes. Defendants who used a public defender or who waived their right to an attorney faced stronger disparities in sentencing outcomes compared to an appointed attorney with violent crimes

compared to nonviolent crimes. Overall, while not looking solely at statistically significant results, H7 is rejected and can suggest the opposite, disparities are stronger for all of these characteristics in violent crimes compared to nonviolent crimes. Perhaps this occurs because judges find it harder to disregard inherent biases for violent crimes as they may already consider certain groups of individuals more violent than others and act on these perceptions. These disparities may be weaker for nonviolent crimes as judges who are sentencing defendants don't have the added perception of risk to society due to the level of crime. There is almost no prior research comparing violent and nonviolent crimes specifically, but this is a step in the right direction to analyze if judges feel they can get away with stronger disparities for certain crimes compared to others.

Conclusion

Structured sentencing in North Carolina was implemented to provide judges with universal guidelines on sentencing individuals based on the class level, the nature of the crime, and prior points of a defendant. These characteristics, argued by the North Carolina Judicial branch, are the only characteristics that should be taken into consideration when determining a judicial outcome as they help define the defendant's risk to society. While the grid provides a set range of sentencing outcomes for a judge to choose from, there are still disparities within those minimum and maximum ranges. This study showed some individual characteristics are influences in varying crime levels and over multiple punishment types while others are only influential for certain types of crimes and punishments. This indicates, that despite North Carolina's best efforts to standardize the system, there are still disparities putting certain groups of people at a disadvantage in a system that is supposed to be fair and equal. The only solution to this problem, proven by previous research and this study, is to reform the judicial system in a

way that a judge, attorney, or jury does not allow for inherent biases to influence judicial outcomes.

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