The Effect of Defendant Gender in Violent Crime Sentencing: An Analysis of Federal Crime Sentences

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Abstract:

This study uses data from the United States Sentencing Commission (2014-2022) to analyze the effect of defendant gender on sentencing outcomes across crime types, with a focus on violent crime. Previous research has shown a consistent finding that female defendants receive leniency in crime sentencing, however, few studies focus on how this effect differs across crime types. Behaviors such as aggression and violence are often perceived to be inherently male traits, and individuals who cross gender expectations often face social sanctions. Women who commit violent crimes cross gender expectations and may face additional punishment. I hypothesize that female defendants will experience less leniency in sentencing for violent crimes compared to other crime types. Using data from the United States Sentencing Commission (2014-2022), I conduct logistic and linear regression analyses to study the effect of gender on the decision to incarcerate and sentence length in months for four crime categories: violent, drug, white-collar, and other crime. The results show that compared to male defendants, female defendants receive leniency across all four categories of crime, both in terms of the decision to incarcerate and sentence length. This leniency was most drastic for violent crime, with female defendants having 55% lower odds of incarceration and shorter sentences compared to male defendants. These findings show that the leniency experienced by female defendants in court sentencing remains a consistent finding in recent data and that this leniency varies by the type of crime. Researching how societal perceptions of gender and other demographic factors influence judicial decisions is crucial to promoting a fair justice system.

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Introduction

In the United States men commit more crimes than females and this disparity is most drastic for violent crimes, with 80% of violent crimes are committed by male offenders, and over 90% of homicides being committed by male perpetrators (Murder Accountability Project). While some theorists have argued that men are inherently more violent, others argue that men commit acts of aggression and violence to "prove" their masculinity and adhere to hegemonic masculinity. In the social system of gender, men are valued for showing traits such as power, courage, strength, aggression, and dominance. Men who can successfully adhere to hegemonic masculinity are praised and honored for being a "real man". Theorists argue men perform gender to legitimize masculinity and their role as a man. Aggression and violence can be a means for men to solidify their masculinity.

Men are expected to act in ways that perpetuate socially defined masculine ideals while women are expected to perpetuate feminine ideals (Wiest & Duffy, 2012). Women are expected to be nurturing, relational, submissive, caring, and motherly. Individuals are encouraged to conform to gender roles and those who do not often receive social sanctions.

Due to gendered expectations, male perpetrated violence is often seen as expected and excusable; others minimize it or blame it on external factors. Female perpetrated violence is not expected. Female perpetrators are breaking gender norms when committing violent acts. Women are expected to be nurturing and caring, not to act in violent ways.

Federal sentencing guidelines are designed to treat offenders equally and only base sentences on legally relevant factors. However, studies have shown extralegal factors such as an offender's race, socioeconomic status, and gender, all influence sentencing decisions (Steffensmeier et al, 2006; Doerner and Demuth, 2009; Wiest and Duffy, 2013; Messing and Heeren, 2009; Daly 1987). Criminologists argue there is a strong influence of gender on the treatment of offenders at all levels of the criminal justice system (Wiest & Duffy, 2012). Previous research has shown that female offenders receive leniency in crime sentencing (Doerner and Demuth, 2009; Rodriguez et al, 1006).

In this analysis, "leniency" refers to a reduced likelihood of incarceration and higher shorter sentence lengths compared to similar cases or individuals. Research has shown that in sentencing outcomes, female defendants receive more lenient sentences than male counterparts. Theorists point to gendered stereotypes portraying female offenders and less dangerous if released to explain this. However, some argue that female perpetrators of violent crime cross gender boundaries and may be further punished for breaking gender norms compared to female perpetrators of nonviolent crimes. Few studies have analyzed how leniency for female offenders differ between crime types. This study focuses on whether the leniency in sentencing experienced by female offenders differs when the crime is violent.

In the present study, I use data compiled by the United States Sentencing Commission (USSC) to examine the effects of extralegal factors such as gender, race, age on incarceration

and sentence length decisions in U.S federal courts. I analyze four categories of crime: violent, drug, white-collar, and other crime to examine how the effect of extralegal factors on sentencing outcomes differs when between these crime types.

Prior Research

Research dating back to the 1970s shows consistent findings that female offenders are treated more leniently than male counterparts in crime sentencing (Rodriguez et al. 2006; Doerner 2019; Doerner and Demuth 2010, 2014). Female offenders are less likely to be sentenced to prison, and when they are incarcerated, they receive significantly shorter sentences compared to male offenders (Doerner et al, 2019; Doerner and Demuth, 2014; Rodriguez et al. (2006). One meta-analysis of gender and sentencing research found, in studies controlling for prior record measures, 83% showed female defendants were less likely to be incarcerated and 62% showed female defendants received shorter sentences than males (Bontrager et al., 2013). Overall, decades of previous studies show consistent results where female defendants receive leniency for both the decision to incarcerate and the length of the sentence for those incarcerated.

Theoretical Framework

The present study is guided by two theories, the focal concerns perspective and the selective chivalry thesis.

The focal concerns perspective provides a strong framework to explain race and gender interactions during sentencing. The focal concerns perspective states the court makes decisions based on three main concerns: blameworthiness, community protection, and practical constraints

and consequences. Blameworthiness reflects culpability and includes legal factors such as criminal history and role in the offense (Steffensmeier et al, 2006; Gaub & Holtfreter, 2015). Community protection focuses on the need to protect the community; enough to incapacitate the offender and deter other potential criminals (Steffensmeier et al, 2006; Gaub & Holtfreter, 2015). Practical constraints and consequences include issues relevant to court contexts such as the caseload and prison capacity.

When considering views on blameworthiness and community protection, demographic factors are intricately linked. In a courtroom, an offender's race and gender are "used as cues to convey information about an offender's dangerousness or future culpability" (Gaub and Holtfreter, 2015). Stereotypes and prejudice of race and gender are intricately linked to views of blameworthiness and culpability.

The chivalry thesis precedes the focal concerns perspective and argues prevailing stereotypes about men and women underlie decisions resulting in milder sentences for women (Rodriguez et al, 2006). Chivalry thesis claim gender expectations portray women as nurturing, submissive, and motherly, which causes courts view women as not fully responsible for criminal behavior.

However, others have argued that the chivalry thesis does not apply to all women because gender-based sentencing leniency is influenced by the characteristics of the offender or details from the case. The selective chivalry thesis argues preferential sentencing outcomes are only applied to female offenders whose behavior and criminality does not violate gender expectations (Rodriguez et al, 2006). They explain this effect to be a "double edged sword", with evidence showing female defendants do not receive leniency or are treated more harshly when they do not

adhere to gender expectations (Doerner and Demuth, 2014; Daly 1987; Gaub & Holtfreter, 2015; Rodriguez et al, 2006).

Gender and Sentencing

While men are portrayed and dangerous and responsible for their crimes, women are stereotyped as fickle and childlike, and seen as not fully responsible for their criminal behavior (Rodriguez et al, 2006). “Women are thought to be less dangerous, less blameworthy, less likely to recidivate, and more likely to be deterred than men” (Doerner and Demuth, 2014; Spohn, 2002). Gendered expectations portray women as nurturing, relational, submissive, emotional, and motherly. Traits including aggression and violence are perceived as inherently male acts. The focal concerns perspective and chivalry thesis argue these stereotypes benefit women in crime sentencing, resulting in lenient sentences. Men may receive harsher sentences due to the belief that men fit the profile of a violent criminal better and incarceration is more appropriate for men than for women (Wiest and Duffy, 2012).

Feminine Ideals and Sentence Leniency

However, the selective chivalry thesis argues this leniency is stipulated and preferential sentencing outcomes are only applied to female offenders whose behavior and criminality does not violate gender expectations (Rodriguez et al. 2006). Women are not permitted to act violently, and when they do, it disrupts expectations of gendered behavior (Chesler 1993). Rodriguez et al. (2006) found that female offenders of violent crimes did not benefit from their gender while female offenders of property and drug offences crimes did recieve leniency due to gender.

Additionally, factors such as being married and having children have been shown to grant greater leniency for female offenders during sentencing (Doerner and Demuth, 2014; Daly 1987; Gaub & Holtfreter, 2015). One study showed court officials drew on categories of work and family to explain why some offenders deserve leniency, commonly stating offenders who provide economic support and care for dependents are deserve more lenient treatment (Daly, 1987)

Messing and Heeran (2009) found that the harshest penalties for female criminals were given to those who sway from traditional gender roles; women who are seen by the court as respectable—married, sober, nonviolent, and sexually "decent"—are likely to receive less severe sentences than their nontraditional counterparts. Women are given preferential treatment by the courts when they conform to traditional gender roles, but this treatment does not apply if they deviate from traditional gender roles, either by personal characteristics or the nature of the crime (Messing and Heeran, 2009). Gaub & Holtfreter (2015) explains this effect to be a "double edged sword", with female offenders treated more harshly if they do not adhere to gender expectations.

Although federal courts aim to sentence offenders on legal factors only, studies have shown extralegal factors such as race and gender influence sentencing outcomes. Theorists believe racial and gender stereotypes convey messages about a offenders blameworthiness and dangerousness which influence sentencing. Female offenders receive leniency as they are viewed as less dangerous and less culpable for their crimes.

However, theorists believe the leniency given to female offenders only apply when the offender adheres to feminine ideals. For female defendants, adherence to gender roles and feminine ideals may influence the amount of leniency they receive during sentencing.

Expectations

The purpose of the current study is to analyze whether gender-based sentencing leniency is influenced by the nature of the crime.

Previous research has shown female offenders receive leniency in sentencing compared to male offenders. However, the selective chivalry thesis and previous research suggest gender-based leniency does not apply when the female defendant has broken gender expectations.

Guided by gender-sentencing theories and previous studies, I develop a research question and hypothesis. Does the nature of the crime, violent or nonviolent, affect the amount of leniency a female defendant receives during sentencing? I hypothesize that female offenders of nonviolent crime will receive leniency, and female offenders of violent crime will not receive any leniency in sentencing outcomes.

Data

In the present study, sentencing data is obtained from the United States Sentencing Commission (USSC) Individual Datafiles from fiscal years 2014 – 2022. The datasets include all federal court cases received by the USSC with sentencing dates between October 2013 and September 2022.

The Commission collects information on federal criminal cases that involve at least one felony or Class A misdemeanor conviction. Cases where all charges were acquitted or dismissed are not included. Information from death penalty cases and cases where a diversionary sentence

is imposed are not included. All individuals in the data files were convicted as adults in the federal system.

The data files contain information pertaining to each individual offender case including demographic information, statute of conviction, sentencing information, and criminal history information along with several other legal variables.

This data contains rich information about cases and allows the control of many legal covariates. Additionally, federal sentencing guidelines are not as prone to variability compared to state courts (Doerner & Demuth, 2009). The large sample size provides an adequate number of cases of each subgroup included in analysis.

Methods

United States Sentencing Commission data from eight data files (fiscal years 2014 – 2022) were downloaded into SPSS, exported as csv files, then imported into R.

As the Commissions methodology changed beginning with data from fiscal year 2018, the provided supplementary data files for fiscal years 2014 – 2017 were used to allow analyses with current methodology. The four supplementary data files were downloaded into SPSS, exported as csv files, then imported into R and then merged with each original fiscal year dataset.

The datasets for all eight years were filtered to only include variables of interest, then merged into one large dataset. I chose to remove several cases from the sample. First, all noncitizens were removed from the sample (n = 277,201). Previous studies have shown that

cases for noncitizens differ significantly from cases for citizens, making comparison difficult (Demuth, 2002). Noncitizen cases may also be missing information such as prior criminal history (Doerner and Demuth, 2014). Second, offenders under the age of 18 were removed from the sample as their juvenile status may influence sentencing outcomes (n = 26,891).

Offenders who were sentenced in Guam, N Mariana Island, Puerto Rico, or the Virgin Islands were removed (n = 10,755). This was performed to allow dummy variables of the US region where sentencing took place. Lastly, cases where information was missing for any independent or dependent variables included in the models were removed.

Data cleaning, analyses, and visualizations were conducted using R version 4.2.1. The final dataset is a sample of 326,470 offenders who were sentenced in the federal courts between 2014 and 2022.

Dependent Variables

Consistent with previous research, sentencing outcomes are conceptualized as a two-stage decision process – the decision to incarcerate or not, and the sentence length.

To model the incarceration decision, logistic regression was performed with a dichotomous variable indicating 1 for a prison sentence and 0 for an alternate sentence (probation or alternative confinement).

To model sentence length, a linear regression predicting the sentence length in months is performed. The dependent variable used is a capped version of length of imprisonment to reduce outliers. All sentences longer than 470 months are capped at 469.99 (months) and sentences of life are given the value of 470 (months).

Independent Variables

Several extralegal variables and legal covariates are included in the analysis. Offender gender is dummy coded 1 for female offenders and 0 for male offenders. Race is coded as four dummy variables: Black, White, Hispanic, and Other. For the models, Black race is used as the reference category.

Education level is coded into four dummy categories: less than high school, high school graduate, some college, college graduate. Less than high school is used as the reference category.

Previous literature showed offenders who have children or are mothers receive leniency in court decisions. A variable indicating whether the offender has one or more reported dependents is used to test this effect. The variable is continuous and ranges from 0 to over 400 dependents reported. This variable is recoded into a dummy variable, coded as 0 if the dependent reported no dependents and 1 if the offender reported one or more dependents.

Dummy variables for United States regions are coded using a variable indicating the district where the offender was sentenced. Census region boundaries were followed to create dummy variables for South, Northeast, West, and Midwest regions.

Several legal variables are included in the model to control for legal factors influencing sentencing outcomes. A variable indicating whether the offender carried or used a firearm during the crime and received a SOC weapon enhancement or an 18§924(c) conviction is included. This variable is dummy coded to indicate 1 if the offender had a weapon charge and 0 if no weapon charge is present.

A variable indicating whether the case was settled through plea deal or trial is included in the models. This variable was dummy coded to indicate 1 for plea deal and 0 for trial. A variable indicating the offenders pre-sentence detention status is included. Categories for pre-sentence status included in custody, out on bail/bond, released on own recognizance, and other. Dummy variables for in custody, bail/bond, and released on own recognizance were created and cases of 'other' are removed. In custody is used as the reference category in the models.

To measure criminal history, a binary variable indicating 1 for a criminal history and 0 for no criminal history is included. Additionally, a continuous variable ranging from 1 though 99 indicating the offender's final offense level, as determined by the court, is included. A continuous variable indicating the number of counts the offender was convicted of, ranging from 1 through 999, is also included.

Crime Types

This analysis focuses on gender effects for different types of crime, focusing on violent versus nonviolent crime. For this study, cases are separated into four crime categories: Violent, Drug related, White Collar, and Other crime. The decision to incarcerate model and sentence length model is ran on each type of crime.

A variable indicating the primary type of crime is used to separate all cases into these categories. This variable includes 30 primary type of crime categories. The primary type of crime is generated from the primary guideline and the conviction with the highest statutory maximum. If an offender is convicted of multiple offenses, they are only classified in one category. All 3 crime types were assigned to Violent, Drug related, White Collar, and Other crime. A full

description can be found in Appendix A. An dataset for each crime category was created to use in the analysis.

Findings

Descriptives 1

Descriptive Statistics, 2014 - 2022.

	Violent Crime			Drug Crime			White Collar Crime			Other Crime		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Dependent Variables												
Sentence Length (months)	0	470	141.23	0	470	75.26	0	470	26.60	0	470	45.33
Incarceration Status												
Prison Sentence	0	1	0.98	0	1	0.95	0	1	0.72	0	1	0.89
No Prison Sentence	0	1	0.02	0	1	0.05	0	1	0.28	0	1	0.11
Independent Variables												
Gender												
Female	0	1	0.08	0	1	0.19	0	1	0.32	0	1	0.11
Male	0	1	0.92	0	1	0.81	0	1	0.68	0	1	0.89
Age	18	93	34.40	18	93	36.34	18	88	43.90	18	87	35.67
Race												
Black	0	1	0.41	0	1	0.34	0	1	0.32	0	1	0.36
White	0	1	0.31	0	1	0.32	0	1	0.47	0	1	0.35
Hispanic	0	1	0.12	0	1	0.31	0	1	0.14	0	1	0.24
Other	0	1	0.16	0	1	0.03	0	1	0.06	0	1	0.05
Education												
Less than High School	0	1	0.30	0	1	0.31	0	1	0.13	0	1	0.31
High School Graduate	0	1	0.43	0	1	0.44	0	1	0.30	0	1	0.43
Some College	0	1	0.22	0	1	0.22	0	1	0.34	0	1	0.20
College Graduate	0	1	0.05	0	1	0.03	0	1	0.23	0	1	0.05
Region												
South	0	1	0.38	0	1	0.47	0	1	0.45	0	1	0.49
Northeast	0	1	0.15	0	1	0.14	0	1	0.18	0	1	0.09
West	0	1	0.21	0	1	0.19	0	1	0.16	0	1	0.19
Midwest	0	1	0.26	0	1	0.20	0	1	0.21	0	1	0.23
Dependent Reported												
No Dependents	0	1	0.50	0	1	0.40	0	1	0.44	0	1	0.44
At least one Dependent	0	1	0.50	0	1	0.60	0	1	0.56	0	1	0.56
Gun Charge	0	1	0.44	0	1	0.25	0	1	0.01	0	1	0.03
Criminal History	0	1	0.94	0	1	0.91	0	1	0.69	0	1	0.89
Offense Level	2	43	28.07	1	43	24.95	1	43	16.67	2	43	18.21
Conviction												
Plea Deal	0	1	0.92	0	1	0.98	0	1	0.95	0	1	0.97
Trial	0	1	0.08	0	1	0.02	0	1	0.05	0	1	0.03
Pre-Sentence Status												
In Custody	0	1	0.90	0	1	0.73	0	1	0.25	0	1	0.71
Released	0	1	0.03	0	1	0.05	0	1	0.16	0	1	0.06
Bail or Bond	0	1	0.08	0	1	0.21	0	1	0.59	0	1	0.22
Crime Category N	30,507			125,551			62,685			107,727		

Note. Data: USSC Individual Offender Datafiles, 2014 - 2002.

Descriptive Statistics, 2014 - 2022.

	Violent Crime		Drug Crime		White Collar Crime		Other Crime	
	N	Percentage	N	Percentage	N	Percentage	N	Percentage
Dependent Variables								
Sentence Length (months	30507	1.00	125551	1.00	62685	1.00	107727	1.00
Incarceration Status								
Prison Sentence	29895	0.98	118678	0.95	45088	0.72	95871	0.89
Non Prison Sentence	612	0.02	6873	0.05	17597	0.28	11856	0.11
Independent Variables								
Gender								
Female	2478	0.08	23306	0.19	19954	0.32	11325	0.11
Male	28029	0.92	102245	0.81	42731	0.68	96402	0.89
Age	30507	1.00	125551	1.00	62685	1.00	107727	1.00
Race								
Black	12506	0.41	42383	0.34	20286	0.32	38848	0.36
White	9529	0.31	40459	0.32	29708	0.47	37676	0.35
Hispanic	3573	0.12	38328	0.31	8789	0.14	25902	0.24
Other	4899	0.16	4381	0.03	3902	0.06	5301	0.05
Education								
Less than High School	9299	0.30	39159	0.31	8416	0.13	33662	0.31
High School Graduate	13106	0.43	55445	0.44	18511	0.30	46385	0.43
Some College	6715	0.22	27141	0.22	21253	0.34	21832	0.20
College Graduate	1387	0.05	3806	0.03	14505	0.23	5848	0.05
Region								
South	11737	0.38	59235	0.47	27943	0.45	52710	0.49
Northeast	4613	0.15	17511	0.14	11239	0.18	9657	0.09
West	6292	0.21	23921	0.19	10270	0.16	20956	0.19
Midwest	7865	0.26	24884	0.20	13233	0.21	24404	0.23
Dependent Reported								
No Dependents	15232	0.50	49703	0.40	27517	0.44	47448	0.44
At least one Dependent	15275	0.50	75848	0.60	35168	0.56	60279	0.56
Gun Charge	13491	0.44	30817	0.25	911	0.01	3046	0.03
Criminal History	28542	0.94	114369	0.91	43539	0.69	96046	0.89
Offense Level	30507	1.00	125551	1.00	62685	1.00	107727	1.00
Conviction								
Plea Deal	27993	0.92	122518	0.98	59345	0.95	104367	0.97
Trial	2514	0.08	3033	0.02	3340	0.05	3360	0.03
Pre-Sentence Status								
In Custody	27349	0.90	92040	0.73	15790	0.25	76972	0.71
Released	801	0.03	6743	0.05	9971	0.16	6671	0.06
Bail or Bond	2357	0.08	26768	0.21	36924	0.59	24084	0.22
Crime Category N	30,507		125,551		62,685		107,727	

Note . Data: USSC Individual Offender Datafiles, 2014 - 2002.

Descriptives 2 (Percentage):

Violent crime had a sample of 30,507 cases including 2,478 females and 28,029 males (8% female). In the violent crime dataset, 41% of the offenders were Black (n = 12506), 31% of offenders were white (n = 9529), 12% of offenders were Hispanic (n = 3573) and 16% of offenders were other race (n = 4899). 30% of offenders had a less than high school education (n = 9299), 43% of offenders were high school graduates (n = 13106), 22% of offenders had some college education (n = 6715) and 5% were college graduates (n = 1387).

Drug crime had a sample of 125,551 cases including 23,306 females and 102,245 males (19% female). In the drug crime dataset, 34% of the offenders were Black (n = 42383), 32% of offenders were white (n = 40459), 31% of offenders were Hispanic (n = 38328) and 3% of offenders were other race (n = 4381). 31% of offenders had a less than high school education (n

= 39159), 44% of offenders were high school graduates (n = 55445), 22% of offenders had some college education (n = 27141) and 3% were college graduates (n = 3806).

White-collar crime had a sample of 62,685 cases including 19,954 females and 42,731 males (32% female). In the white-collar crime dataset, 32% of the offenders were Black (n = 20286), 47% of offenders were white (n = 29708), 14% of offenders were Hispanic (n = 8789) and 6% of offenders were other race (n = 3902). 13% of offenders had a less than high school education (n = 8416), 30% of offenders were high school graduates (n = 18511), 34% of offenders had some college education (n = 21253) and 23% were college graduates (n = 14505).

Other crime had a sample of 107,727 cases including 11,325 females and 96,402 males (11% female). In the other crime dataset, 36% of the offenders were Black (n = 38848), 35% of offenders were white (n = 37676), 24% of offenders were Hispanic (n = 25902) and 5% of offenders were other race (n = 5301). 31% of offenders had a less than high school education (n = 33662), 43% of offenders were high school graduates (n = 46385), 20% of offenders had some college education (n = 21832) and 5% were college graduates (n = 5848).

Models

Consistent with previous studies, this study uses a two-outcome sentencing decision model. The first model performs binary logistic regression on whether a defendant received a prison sentence. The second model performs multiple linear regression on the sentence length (in months) of the incarceration. Both models are run on each of the four crime types. This results in eight total models calculating the incarceration decision and sentence length for violent, drug, white-collar, and other crime. All models control for legal factors.

Model Results

Model 1: Crime Type and Decision to Incarcerate

Model 1: Decision to Incarcerate

	Violent Crime				Drug Crime				White Collar Crime				Other Crime			
Coefficients:	Estimate	Std. Error	Log Odds		Estimate	Std. Error	Log Odds		Estimate	Std. Error	Log Odds		Estimate	Std. Error	Log Odds	
(Intercept)	2.05	0.47	7.78	***	2.87	0.27	17.65	***	2.21	0.12	9.10	***	2.32	0.13	10.17	***
Sex (female)	-0.79	0.12	0.45	***	-0.59	0.03	0.55	***	-0.29	0.02	0.75	***	-0.61	0.03	0.54	***
AGE	0.00	0.00	1.00		0.00	0.00	1.00		-0.02	0.00	0.98	***	0.00	0.00	1.00	
Race (Black reference)																
White	-0.16	0.14	0.85		-0.35	0.04	0.71	***	-0.20	0.03	0.82	***	-0.40	0.04	0.67	***
Hispanic	-0.23	0.18	0.80		0.00	0.04	1.00		0.11	0.04	1.11	**	-0.06	0.04	0.94	
Other	0.14	0.16	1.15		0.00	0.08	1.00		-0.18	0.05	0.83	***	-0.27	0.06	0.77	***
Education (Less than HS reference)																
HSgrad	-0.02	0.14	0.98		-0.06	0.04	0.95		-0.11	0.04	0.90	**	-0.12	0.03	0.88	***
SomeCollege	-0.21	0.15	0.81		-0.17	0.04	0.84	***	-0.16	0.04	0.86	***	-0.22	0.04	0.81	***
CollegeGrad	0.00	0.24	1.00		-0.41	0.07	0.66	***	-0.11	0.04	0.90	**	-0.32	0.05	0.72	***
Region (South Reference)																
Northeast	-0.16	0.18	0.85		-0.06	0.04	0.94		-0.16	0.03	0.85	***	0.08	0.05	1.08	.
West	-0.19	0.15	0.83		-0.22	0.04	0.80	***	-0.06	0.03	0.94	.	-0.13	0.04	0.88	***
Midwest	0.37	0.14	1.44	**	0.01	0.04	1.01		-0.21	0.03	0.81	***	-0.01	0.04	0.99	
Dependents	0.09	0.10	1.09		0.12	0.03	1.13	***	-0.09	0.02	0.91	***	0.07	0.03	1.07	**
Gun Charge	0.22	0.13	1.25	.	0.46	0.06	1.59	***	-0.57	0.18	0.56	**	-0.32	0.09	0.73	***
Criminal History	0.09	0.14	1.10		0.47	0.04	1.60	***	0.47	0.02	1.59	***	0.65	0.03	1.91	***
OffenseLevel	0.17	0.01	1.18	***	0.17	0.00	1.18	***	0.21	0.00	1.24	***	0.18	0.00	1.20	***
Number of Counts	0.16	0.08	1.17	*	-0.01	0.00	0.99	***	0.09	0.01	1.10	***	0.04	0.01	1.04	**
Plea	-0.36	0.33	0.70		-1.10	0.25	0.33	***	-0.70	0.09	0.50	***	-0.63	0.10	0.53	***
Released	-3.60	0.17	0.03	***	-3.62	0.06	0.03	***	-3.52	0.06	0.03	***	-4.21	0.05	0.01	***
Bail_Bond	-3.65	0.15	0.03	***	-3.47	0.06	0.03	***	-3.33	0.06	0.04	***	-3.83	0.04	0.02	***
n	30,507				125,551				62,685				107,727			

Data: USSC Individual Offender, 2014 - 2022. Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Model 2: Crime Type and Sentencing Length

Model 2: Sentence Length

	Violent Crime			Drug Crime			White Collar			Other Crime		
Coefficients	Estimate	Std. Error		Estimate	Std. Error		Estimate	Std. Error		Estimate	Std. Error	
(Intercept)	-54.04	3.50	***	15.66	1.14	***	10.71	0.80	***	-26.73	0.82	***
Sex (Female)	-29.26	1.57	***	-14.80	0.32	***	-1.94	0.22	***	-0.93	0.32	**
Age	0.13	0.04	***	0.09	0.01	***	-0.02	0.01	**	0.18	0.01	***
Race (Black contrast)												
White	8.17	1.13	***	-1.81	0.31	***	-3.00	0.24	***	-2.32	0.24	***
Hispanic	-3.64	1.43	*	-5.42	0.33	***	-2.76	0.33	***	-4.27	0.26	***
Other	-0.53	1.42		-0.46	0.69		-4.75	0.46	***	-3.13	0.46	***
Education (Less than HS)												
Highschool grad	1.95	1.01	.	3.70	0.28	***	0.95	0.33	**	0.90	0.22	***
Some College	-1.27	1.22		-1.55	0.34	***	-1.24	0.33	***	-1.60	0.28	***
College Grad	-8.40	2.25	***	-7.36	0.74	***	-4.02	0.37	***	-3.60	0.47	***
Region (South contrast)												
Northeast	-37.55	1.29	***	-18.42	0.37	***	-7.81	0.29	***	-7.67	0.34	***
West	-23.42	1.27	***	-21.68	0.34	***	-4.03	0.30	***	-7.10	0.26	***
Midwest	-7.80	1.09	***	-2.96	0.32	***	-3.95	0.27	***	-2.56	0.24	***
Dependents	0.49	0.85		2.08	0.25	***	-0.20	0.21		0.67	0.19	***
Gun Charge	9.53	0.96	***	21.50	0.29	***	25.60	0.88	***	27.47	0.57	***
Criminal History	16.32	1.77	***	12.79	0.45	***	5.26	0.24	***	9.49	0.33	***
Offense Level	8.18	0.06	***	4.64	0.02	***	2.92	0.01	***	4.55	0.01	***
Number of Counts	5.71	0.17	***	0.34	0.04	***	0.33	0.02	***	2.28	0.08	***
Plea deal (Trial contrast)	-64.68	1.65	***	-64.23	0.80	***	-17.33	0.48	***	-21.72	0.54	***
Pre-Sentence Status (Custody contrast)												
Released	-24.28	2.69	***	-24.57	0.55	***	-19.00	0.34	***	-17.23	0.40	***
Bail_Bond	-36.67	1.64	***	-25.40	0.31	***	-19.46	0.26	***	-19.46	0.24	***
n	29,895			118,678			45,088			95,871		
	Multiple R-squared: 0.6363			Multiple R-squared: 0.6126			Multiple R-squared: 0.6212			Multiple R-squared: 0.6603		
	Adjusted R-squared: 0.6361			Adjusted R-squared: 0.6125			Adjusted R-squared: 0.6211			Adjusted R-squared: 0.6602		

Data: USSC Individual Offender, 2014 - 2022. Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Gender

Gender results show female defendants received leniency in all crime types and this effect was most drastic in violent crime. For each type of crime, female defendants had significantly lower odds of incarceration and received significantly shorter sentences than male counterparts. These results are significant and consistent with previous literature. The leniency was most drastic in violent crime, where female defendants had 55 lower odds of incarceration and significantly shorter sentences (b=-29.26) than male offenders. This finding was unexpected and rejected the null hypothesis.

While previous gender literature suggests female offenders do not receive sentence leniency when they commit violence, results show gender sentencing leniency had the most drastic effect in violent crime. Female defendants benefit from their gender in sentencing even when the crime is violent.

Race

Race had significance for the majority of sentencing outcomes. models use black defendants as the reference category and compare against white, Hispanic, and other race

defendants. Comparing sentencing outcomes from race across crime types, violent crime had fewer significant effects than drug, white-collar and other crime. White collar crime had the highest significant results, with all race results having significance. Other race defendants had no significant race effects in violent and drug crime sentencing.

For the incarceration decision results, there were no significant effects in race for defendants of violent crime. White and other race defendants had lower odds of incarceration in white-collar and other crime. White defendants also had 35% lower odds of incarceration for drug crimes. Hispanic defendants had 11% higher odds of incarceration for White Collar crime.

Race significantly influenced the majority of sentence length results. Across the sentence length results for violent, drug, white-collar, and other crime, nine of the twelve non-black race variables were statistically likely to receive shorter sentences. These results show a pattern where black offenders are more likely to receive longer prison sentences than non-Black offenders. Other race defendants had no significant race effects in violent and drug crime. The single positive result showed white defendants in violent crime received significantly longer sentences (b= 8.17). This is inconsistent with white defendants of drug, white-collar, and other crime where results show significantly lower incarceration odds and shorter sentences for white defendants.

Formal Education

Education results showed a pattern where defendants have more lenient sentencing outcomes when they have completed more formal education. For the incarceration models, results for drug, white-collar, and other crime show that compared to defendants without a high school diploma, defendants with a high school diploma, some college education, and college graduates all had lower odds of incarceration. All results were significant except for high school

graduates of drug crime. For violent crime, education results had no significance on incarceration decisions.

For the sentence length model, results show that compared to defendants without a high school diploma, defendants with some college education and college graduates were significantly likely to receive shorter sentences. For defendants with a high school diploma, results show for drug crime, white collar crime, and other crime, high school graduates were statistically likely to receive longer sentences than defendants without a high school diploma. This is an unexpected finding. Overall, results show that defendants with some college or a college degree recieve more lenient sentences.

Dependents

The only result where having a dependent benefited the defendant was in white collar crime. For defendants of white collar crime, having a dependent decreased odds of incarceration but did not effect sentence length. For drug and other crime, having a dependent significantly increased their odds of incarceration and likelihood of a longer sentence. Violent crime had no significant results from dependents.

Region

For all four crime types, defendants sentenced in the South are statistically likely to receive longer sentences than defendants sentenced in the Northeast, West, and Midwest.

For the incarceration decision, violent crime defendants sentenced in the South had lower odds of incarceration than in the Midwest. White collar defendants had higher incarceration odds in

the South than other regions. For drug and other crime, defendants had higher incarceration odds in the South than the West.

Discussion and Conclusion

The purpose of the current study was to build on existing research of the relationship between offender gender and sentencing outcomes by analyzing whether this relationship varies for violent versus nonviolent crimes.

Findings showed female offenders receive leniency across all crime types, and this leniency was most drastic for violent crimes. Female offenders received the most leniency in violent crime compared to drug, white collar, and other crimes. This finding was unexpected and rejected the null hypothesis. While previous gender literature suggests female offenders may not receive sentence leniency when they commit violence, results show gender sentencing leniency had the most drastic effect in violent crime. These results challenge the selective chivalry thesis and are consistent with the focal concerns perspective. Findings support that female defendants of violent crime benefit from their gender in sentencing and may benefit more than female defendants of non-violent crime types.

Findings for race show a pattern where black defendants are treated more harshly during sentencing decisions. For most types of crime, black defendants had harsher sentencing outcomes than non-black counterparts. Education showed a pattern where defendants without a high school diploma had harsher sentencing outcomes than defendants with higher education levels. Defendants with some college education or a college degree especially benefited from their education in sentencing outcomes.

The findings for dependents showed that the only crime type where defendants benefited from having a dependent was white collar crime. In drug and other crime, defendants received harsher sentencing outcomes when they had a dependent. Previous research has suggested that when defendants have children or dependents they support economically, they are given more lenient sentences (Doerner and Demuth, 2014; Daly 1987). These results show that defendants benefit in sentencing from having dependents only in white collar crime. This variable does have limitations; defendants self-report the number of dependents they have, and it is not specified the type of dependents.

Overall, defendants who are male, black and Hispanic, and have lower education levels are the likely to receive harsher punishments than their counterparts. The focal concerns perspective best explains these results; defendants with these characteristics may be viewed by the courts as more culpable for their crime or more dangerous if released. Future research should analyze the interaction between race and gender to further understand the effect of gender on violent crime sentencing.

There are limitations in the research to address. First, this study is not able to account for socio-economic status due as information was not present in the dataset. In prior years of federal data, a variable indicating defendant income was available, however over 50% reported an income of $0, making analysis difficult.

Additionally, the quantitative nature of this research limits the analysis of personal characteristics of defendants, such as their adherence to gender norms in appearance or lifestyle. Factors like marital status, parenthood, sexuality, and conformity to gendered appearance—identified in previous literature as influencing gender-based sentencing leniency—could not be examined in this study.

In conclusion, this study shows gender-based sentencing leniency influenced by the type of crime committed, with female defendants receiving the most leniency for violent crime. Extralegal factors including defendant gender, race, and education level all significantly influenced the sentences imposed by the courts.

A main goal of federal sentencing guidelines is to produce fair outcomes that minimize disparities from a defendant's demographic factors (USSC). However, this study found that extralegal factors including defendant's gender, race, and education level significantly influenced sentences imposed by federal courts. These insights show the necessity for ongoing research on federal sentencing decisions.

Bibliography

Datasets:

Murder Accountability Project. 1980-2014. Homicide Reports: FBI's Supplementary Homicide Report and Freedom of Information Act Data (Computer file). Murder Accountability Project [Distributor]. https://www.kaggle.com/datasets/murderaccountability/homicide-reports/data.

United States Sentencing Commission (USSC). 2014-2022. *Individual Datafiles* (Computer files). U.S. Sentencing Commission [Producer]. Washington, DC. https://www.ussc.gov/research/datafiles/commission-datafiles.

Software packages:

H. Wickham. ggplot2: Elegant Graphics for Data Analysis. Springer-Verlag New York, 2016.

Wickham H, François R, Henry L, Müller K, Vaughan D (2023). *dplyr: A Grammar of Data Manipulation*. R package version 1.1.4, https://CRAN.R-project.org/package=dplyr.

Wickham H, Averick M, Bryan J, Chang W, McGowan LD, François R, Grolemund G, Hayes A, Henry L, Hester J, Kuhn M, Pedersen TL, Miller E, Bache SM, Müller K, Ooms J, Robinson D, Seidel DP, Spinu V, Takahashi K, Vaughan D, Wilke C, Woo K, Yutani H (2019). "Welcome to the tidyverse." *Journal of Open Source Software*, *4*(43), 1686. doi:10.21105/joss.01686 https://doi.org/10.21105/joss.01686.

Wickham H, Girlich M (2022). *tidyr: Tidy Messy Data*. R package version 1.2.1, https://CRAN.R-project.org/package=tidyr.

References:

Chesler, Phyllis. 2005. *Women & Madness*. New York: Palgrave Macmillan.

Daly, Kathleen. 1987. "Discrimination in the Criminal Courts: Family, Gender, and the Problem of Equal Treatment ." *Oxford Academic*. Retrieved April 7, 2024 (https://academic.oup.com/sf/article-abstract/66/1/152/2231816?redirectedFrom=fulltext).

Doerner, Jill K. and Stephen Demuth. 2009. "The Independent and Joint Effects of Race/Ethnicity, Gender, and Age on Sentencing Outcomes in U.S. Federal Courts." *Taylor & Francis Online*. Retrieved April 28, 2024 (https://www.tandfonline.com/doi/full/10.1080/07418820902926197).

Gaub, Janne and Kristy Holtfreter. 2015. "New Directions in Intersections, Inequality, and Sentencing." *Taylor & Francis Online*. Retrieved March 3, 2023 (https://www.tandfonline.com/).

Messing, Jill Theresa and John W. Heeren. 2008. “Gendered Justice: Domestic Homicide and the Death Penalty.” *Sage Journals Home*. Retrieved April 1, 2024 (https://journals.sagepub.com/doi/10.1177/1557085108327657).

Rodriguez, Fernando S., Theodore R. Curry, and Gang Lee. 2006. “Gender Differences in Criminal Sentencing: Do Effects Vary Across Violent, Property, and Drug Offenses?” *Wiley Online Library*. Retrieved March 15, 2025 (https://onlinelibrary.wiley.com/doi/10.1111/j.1540-6237.2006.00383.x).

Spohn, Cassia, and David Holleran. 2006. “The Effect of Imprisonment on Recidivism Rates of Felony Offenders: A Focus on Drug Offenders.” Wiley Online Library. Retrieved April 28, 2024 (https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1745-9125.2002.tb00959.x).

Steffensmeier, Darrell, Jeffery Ulmer, and John Kramer. 2006. “The Interaction of Race, Gender, and Age in Criminal Sentencing.” Wiley Online Library. Retrieved January 28, 2024 (https://onlinelibrary.wiley.com/doi/10.1111/j.1745-9125.1998.tb01265.x).

Wiest, Julie and Mary Duffy. 2012. “The Impact of Gender Roles on Verdicts and Sentences in Cases of Filicide.” *Taylor & Francis Online*. Retrieved May 5, 2024 (https://www.tandfonline.com/doi/abs/10.1080/1478601X.2012.733873).

Appendix

Appendix A: Crime Type Categorization

The USSC has records 30 types of crime indicating the defendant's primary offense type. These crime types were separated into four categories: Violent, Drug, White-Collar, and Other crime.

Violent =

1. Murder
2. Manslaughter
3. Kidnapping/hostage
4. Sexual Abuse
5. Assault
6. Bank Robbery / Other Robbery

Drug =

- Drug Trafficking
- Drug Communication
- Drug Simple Possession

White-Collar =

1. Fraud
2. Embezzlement
3. Forgery/Counterfeiting
4. Bribery
5. Tax Offenses
6. Money Laundering

Other =

1. Arson
2. Firearms
3. Burglary/Breaking&Entering
4. Auto theft
5. Larceny
6. Racketeering/extortion
7. Gambling/lottery

8. Civil rights offenses
9. Immigration
10. Pornography/prostitution
11. Offenses in prison
12. Administration of justice-related
13. Environmental, game, fish, and wildlife offenses,
14. National defense offenses
15. Antitrust violations
16. Food and drug offenses
17. Traffic violations
18. Other offenses

Descriptives 1:

Descriptive Statistics, 2014 - 2022.

	Violent Crime			Drug Crime			White Collar Crime			Other Crime		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Dependent Variables												
Sentence Length (months)	0	470	141.23	0	470	75.26	0	470	26.60	0	470	45.33
Incarceration Status												
Prison Sentence	0	1	0.98	0	1	0.95	0	1	0.72	0	1	0.89
No Prison Sentence	0	1	0.02	0	1	0.05	0	1	0.28	0	1	0.11
Independent Variables												
Gender												
Female	0	1	0.08	0	1	0.19	0	1	0.32	0	1	0.11
Male	0	1	0.92	0	1	0.81	0	1	0.68	0	1	0.89
Age	18	93	34.40	18	93	36.34	18	88	43.90	18	87	35.67
Race												
Black	0	1	0.41	0	1	0.34	0	1	0.32	0	1	0.36
White	0	1	0.31	0	1	0.32	0	1	0.47	0	1	0.35
Hispanic	0	1	0.12	0	1	0.31	0	1	0.14	0	1	0.24
Other	0	1	0.16	0	1	0.03	0	1	0.06	0	1	0.05
Education												
Less than High School	0	1	0.30	0	1	0.31	0	1	0.13	0	1	0.31
High School Graduate	0	1	0.43	0	1	0.44	0	1	0.30	0	1	0.43
Some College	0	1	0.22	0	1	0.22	0	1	0.34	0	1	0.20
College Graduate	0	1	0.05	0	1	0.03	0	1	0.23	0	1	0.05
Region												
South	0	1	0.38	0	1	0.47	0	1	0.45	0	1	0.49
Northeast	0	1	0.15	0	1	0.14	0	1	0.18	0	1	0.09
West	0	1	0.21	0	1	0.19	0	1	0.16	0	1	0.19
Midwest	0	1	0.26	0	1	0.20	0	1	0.21	0	1	0.23
Dependent Reported												
No Dependents	0	1	0.50	0	1	0.40	0	1	0.44	0	1	0.44
At least one Dependent	0	1	0.50	0	1	0.60	0	1	0.56	0	1	0.56
Gun Charge	0	1	0.44	0	1	0.25	0	1	0.01	0	1	0.03
Criminal History	0	1	0.94	0	1	0.91	0	1	0.69	0	1	0.89
Offense Level	2	43	28.07	1	43	24.95	1	43	16.67	2	43	18.21
Conviction												
Plea Deal	0	1	0.92	0	1	0.98	0	1	0.95	0	1	0.97
Trial	0	1	0.08	0	1	0.02	0	1	0.05	0	1	0.03
Pre-Sentence Status												
In Custody	0	1	0.90	0	1	0.73	0	1	0.25	0	1	0.71
Released	0	1	0.03	0	1	0.05	0	1	0.16	0	1	0.06
Bail or Bond	0	1	0.08	0	1	0.21	0	1	0.59	0	1	0.22
Crime Category N	30,507			125,551			62,685			107,727		

Note. Data: USSC Individual Offender Datafiles, 2014 - 2002.

Descriptives 2: Percentages

Descriptive Statistics, 2014 - 2022.

	Violent Crime		Drug Crime		White Collar Crime		Other Crime	
	N	Percentage	N	Percentage	N	Percentage	N	Percentage
Dependent Variables								
Sentence Length (months	30507	1.00	125551	1.00	62685	1.00	107727	1.00
Incarceration Status								
Prison Sentence	29895	0.98	118678	0.95	45088	0.72	95871	0.89
Non Prison Sentence	612	0.02	6873	0.05	17597	0.28	11856	0.11
Independent Variables								
Gender								
Female	2478	0.08	23306	0.19	19954	0.32	11325	0.11
Male	28029	0.92	102245	0.81	42731	0.68	96402	0.89
Age	30507	1.00	125551	1.00	62685	1.00	107727	1.00
Race								
Black	12506	0.41	42383	0.34	20286	0.32	38848	0.36
White	9529	0.31	40459	0.32	29708	0.47	37676	0.35
Hispanic	3573	0.12	38328	0.31	8789	0.14	25902	0.24
Other	4899	0.16	4381	0.03	3902	0.06	5301	0.05
Education								
Less than High School	9299	0.30	39159	0.31	8416	0.13	33662	0.31
High School Graduate	13106	0.43	55445	0.44	18511	0.30	46385	0.43
Some College	6715	0.22	27141	0.22	21253	0.34	21832	0.20
College Graduate	1387	0.05	3806	0.03	14505	0.23	5848	0.05
Region								
South	11737	0.38	59235	0.47	27943	0.45	52710	0.49
Northeast	4613	0.15	17511	0.14	11239	0.18	9657	0.09
West	6292	0.21	23921	0.19	10270	0.16	20956	0.19
Midwest	7865	0.26	24884	0.20	13233	0.21	24404	0.23
Dependent Reported								
No Dependents	15232	0.50	49703	0.40	27517	0.44	47448	0.44
At least one Dependent	15275	0.50	75848	0.60	35168	0.56	60279	0.56
Gun Charge	13491	0.44	30817	0.25	911	0.01	3046	0.03
Criminal History	28542	0.94	114369	0.91	43539	0.69	96046	0.89
Offense Level	30507	1.00	125551	1.00	62685	1.00	107727	1.00
Conviction								
Plea Deal	27993	0.92	122518	0.98	59345	0.95	104367	0.97
Trial	2514	0.08	3033	0.02	3340	0.05	3360	0.03
Pre-Sentence Status								
In Custody	27349	0.90	92040	0.73	15790	0.25	76972	0.71
Released	801	0.03	6743	0.05	9971	0.16	6671	0.06
Bail or Bond	2357	0.08	26768	0.21	36924	0.59	24084	0.22
Crime Category N	30,507		125,551		62,685		107,727	

Note . Data: USSC Individual Offender Datafiles, 2014 - 2002.

Model 1: Crime Type and Decision to Incarcerate

Model 1: Decision to Incarcerate

	Violent Crime			Drug Crime			White Collar Crime			Other Crime		
Coefficients:	Estimate	Std. Error	Log Odds	Estimate	Std. Error	Log Odds	Estimate	Std. Error	Log Odds	Estimate	Std. Error	Log Odds
(Intercept)	2.05	0.47	7.78 ***	2.87	0.27	17.65 ***	2.21	0.12	9.10 ***	2.32	0.13	10.17 ***
Sex (female)	-0.79	0.12	0.45 ***	-0.59	0.03	0.55 ***	-0.29	0.02	0.75 ***	-0.61	0.03	0.54 ***
AGE	0.00	0.00	1.00	0.00	0.00	1.00	-0.02	0.00	0.98 ***	0.00	0.00	1.00
Race (Black reference)												
White	-0.16	0.14	0.85	-0.35	0.04	0.71 ***	-0.20	0.03	0.82 ***	-0.40	0.04	0.67 ***
Hispanic	-0.23	0.18	0.80	0.00	0.04	1.00	0.11	0.04	1.11 **	-0.06	0.04	0.94
Other	0.14	0.16	1.15	0.00	0.08	1.00	-0.18	0.05	0.83 ***	-0.27	0.06	0.77 ***
Education (Less than HS reference)												
HSgrad	-0.02	0.14	0.98	-0.06	0.04	0.95	-0.11	0.04	0.90 **	-0.12	0.03	0.88 ***
SomeCollege	-0.21	0.15	0.81	-0.17	0.04	0.84 ***	-0.16	0.04	0.86 ***	-0.22	0.04	0.81 ***
CollegeGrad	0.00	0.24	1.00	-0.41	0.07	0.66 ***	-0.11	0.04	0.90 **	-0.32	0.05	0.72 ***
Region (South Reference)												
Northeast	-0.16	0.18	0.85	-0.06	0.04	0.94	-0.16	0.03	0.85 ***	0.08	0.05	1.08 .
West	-0.19	0.15	0.83	-0.22	0.04	0.80 ***	-0.06	0.03	0.94 .	-0.13	0.04	0.88 ***
Midwest	0.37	0.14	1.44 **	0.01	0.04	1.01	-0.21	0.03	0.81 ***	-0.01	0.04	0.99
Dependents	0.09	0.10	1.09	0.12	0.03	1.13 ***	-0.09	0.02	0.91 ***	0.07	0.03	1.07 **
Gun Charge	0.22	0.13	1.25 .	0.46	0.06	1.59 ***	-0.57	0.18	0.56 **	-0.32	0.09	0.73 ***
Criminal History	0.09	0.14	1.10	0.47	0.04	1.60 ***	0.47	0.02	1.59 ***	0.65	0.03	1.91 ***
OffenseLevel	0.17	0.01	1.18 ***	0.17	0.00	1.18 ***	0.21	0.00	1.24 ***	0.18	0.00	1.20 ***
Number of Counts	0.16	0.08	1.17 *	-0.01	0.00	0.99 ***	0.09	0.01	1.10 ***	0.04	0.01	1.04 **
Plea	-0.36	0.33	0.70	-1.10	0.25	0.33 ***	-0.70	0.09	0.50 ***	-0.63	0.10	0.53 ***
Released	-3.60	0.17	0.03 ***	-3.62	0.06	0.03 ***	-3.52	0.06	0.03 ***	-4.21	0.05	0.01 ***
Bail_Bond	-3.65	0.15	0.03 ***	-3.47	0.06	0.03 ***	-3.33	0.06	0.04 ***	-3.83	0.04	0.02 ***
n	30,507			125,551			62,685			107,727		

Data: USSC Individual Offender, 2014 - 2022. Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Model 2: Crime Type and Sentencing Length

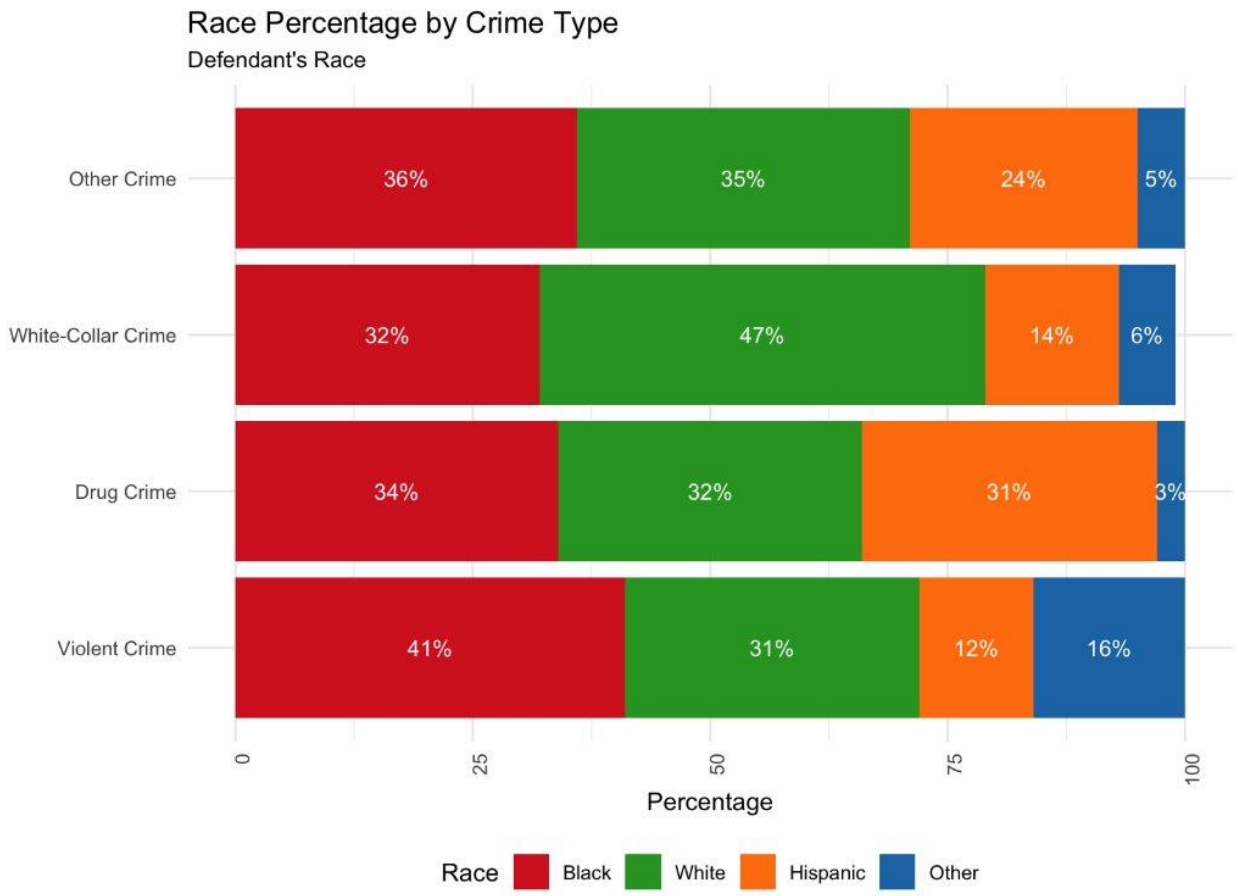
Model 2: Sentence Length

	Violent Crime			**Drug Crime**			**White Collar**			**Other Crime**		
Coefficients	Estimate	Std. Error		Estimate	Std. Error		Estimate	Std. Error		Estimate	Std. Error	
(Intercept)	-54.04	3.50	***	15.66	1.14	***	10.71	0.80	***	-26.73	0.82	***
Sex (Female)	-29.26	1.57	***	-14.80	0.32	***	-1.94	0.22	***	-0.93	0.32	**
Age	0.13	0.04	***	0.09	0.01	***	-0.02	0.01	**	0.18	0.01	***
Race (Black contrast)												
White	8.17	1.13	***	-1.81	0.31	***	-3.00	0.24	***	-2.32	0.24	***
Hispanic	-3.64	1.43	*	-5.42	0.33	***	-2.76	0.33	***	-4.27	0.26	***
Other	-0.53	1.42		-0.46	0.69		-4.75	0.46	***	-3.13	0.46	***
Education (Less than HS)												
Highschool grad	1.95	1.01	.	3.70	0.28	***	0.95	0.33	**	0.90	0.22	***
Some College	-1.27	1.22		-1.55	0.34	***	-1.24	0.33	***	-1.60	0.28	***
College Grad	-8.40	2.25	***	-7.36	0.74	***	-4.02	0.37	***	-3.60	0.47	***
Region (South contrast)												
Northeast	-37.55	1.29	***	-18.42	0.37	***	-7.81	0.29	***	-7.67	0.34	***
West	-23.42	1.27	***	-21.68	0.34	***	-4.03	0.30	***	-7.10	0.26	***
Midwest	-7.80	1.09	***	-2.96	0.32	***	-3.95	0.27	***	-2.56	0.24	***
Dependents	0.49	0.85		2.08	0.25	***	-0.20	0.21		0.67	0.19	***
Gun Charge	9.53	0.96	***	21.50	0.29	***	25.60	0.88	***	27.47	0.57	***
Criminal History	16.32	1.77	***	12.79	0.45	***	5.26	0.24	***	9.49	0.33	***
Offense Level	8.18	0.06	***	4.64	0.02	***	2.92	0.01	***	4.55	0.01	***
Number of Counts	5.71	0.17	***	0.34	0.04	***	0.33	0.02	***	2.28	0.08	***
Plea deal (Trial contrast)	-64.68	1.65	***	-64.23	0.80	***	-17.33	0.48	***	-21.72	0.54	***
Pre-Sentence Status (Custody contrast)												
Released	-24.28	2.69	***	-24.57	0.55	***	-19.00	0.34	***	-17.23	0.40	***
Bail_Bond	-36.67	1.64	***	-25.40	0.31	***	-19.46	0.26	***	-19.46	0.24	***
n	29,895			118,678			45,088			95,871		
	Multiple R-squared: 0.6363			Multiple R-squared: 0.6126			Multiple R-squared: 0.6212			Multiple R-squared: 0.6603		
	Adjusted R-squared: 0.6361			Adjusted R-squared: 0.6125			Adjusted R-squared: 0.6211			Adjusted R-squared: 0.6602		

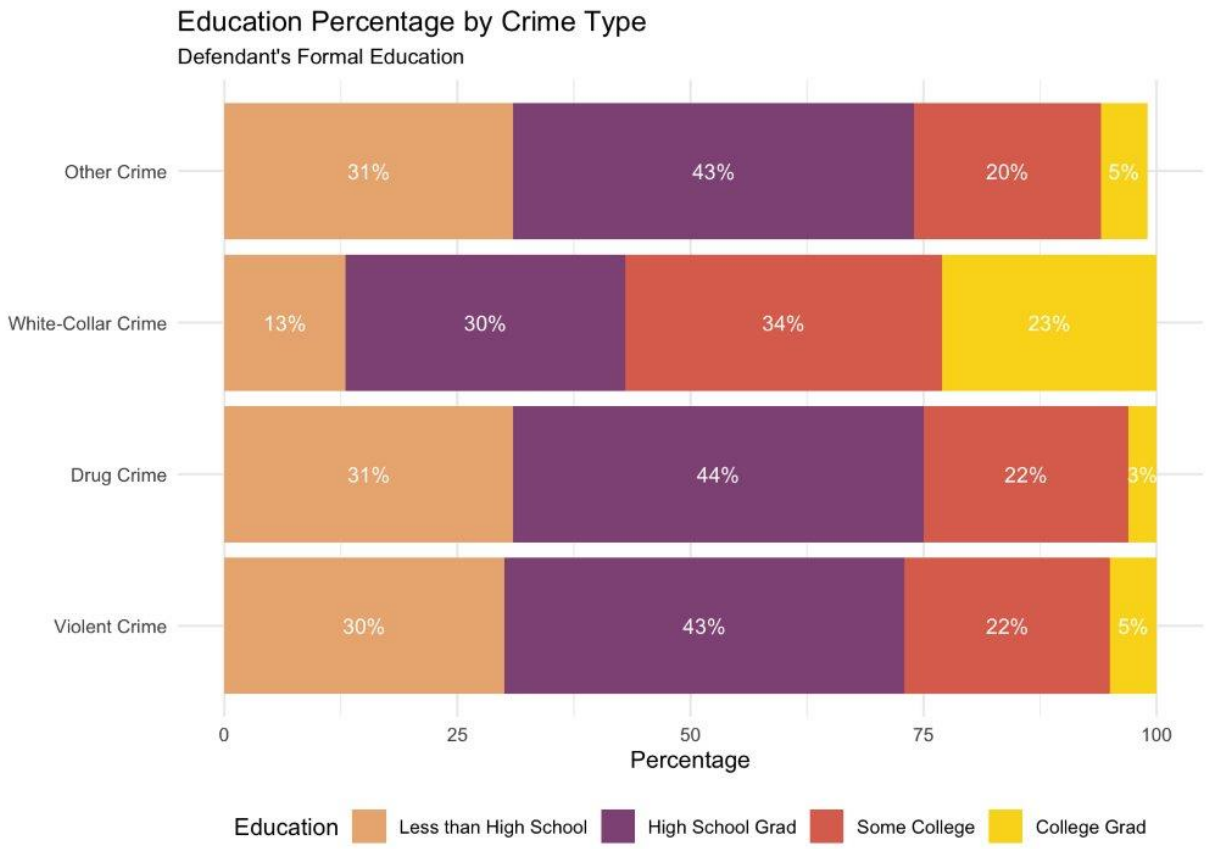
Data: USSC Individual Offender, 2014 - 2022. Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Visualizations

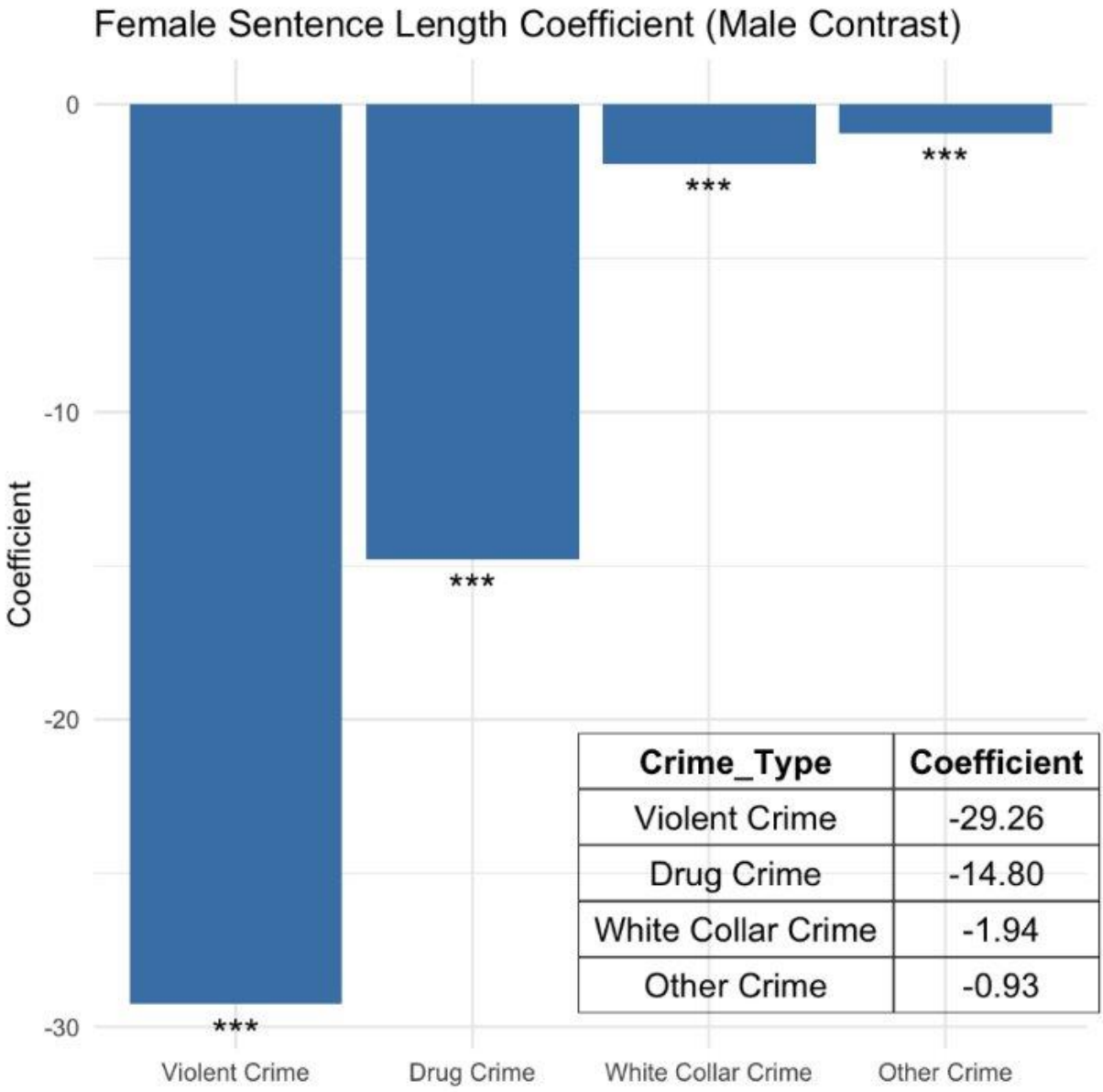
Appendix B:



Appendix C:

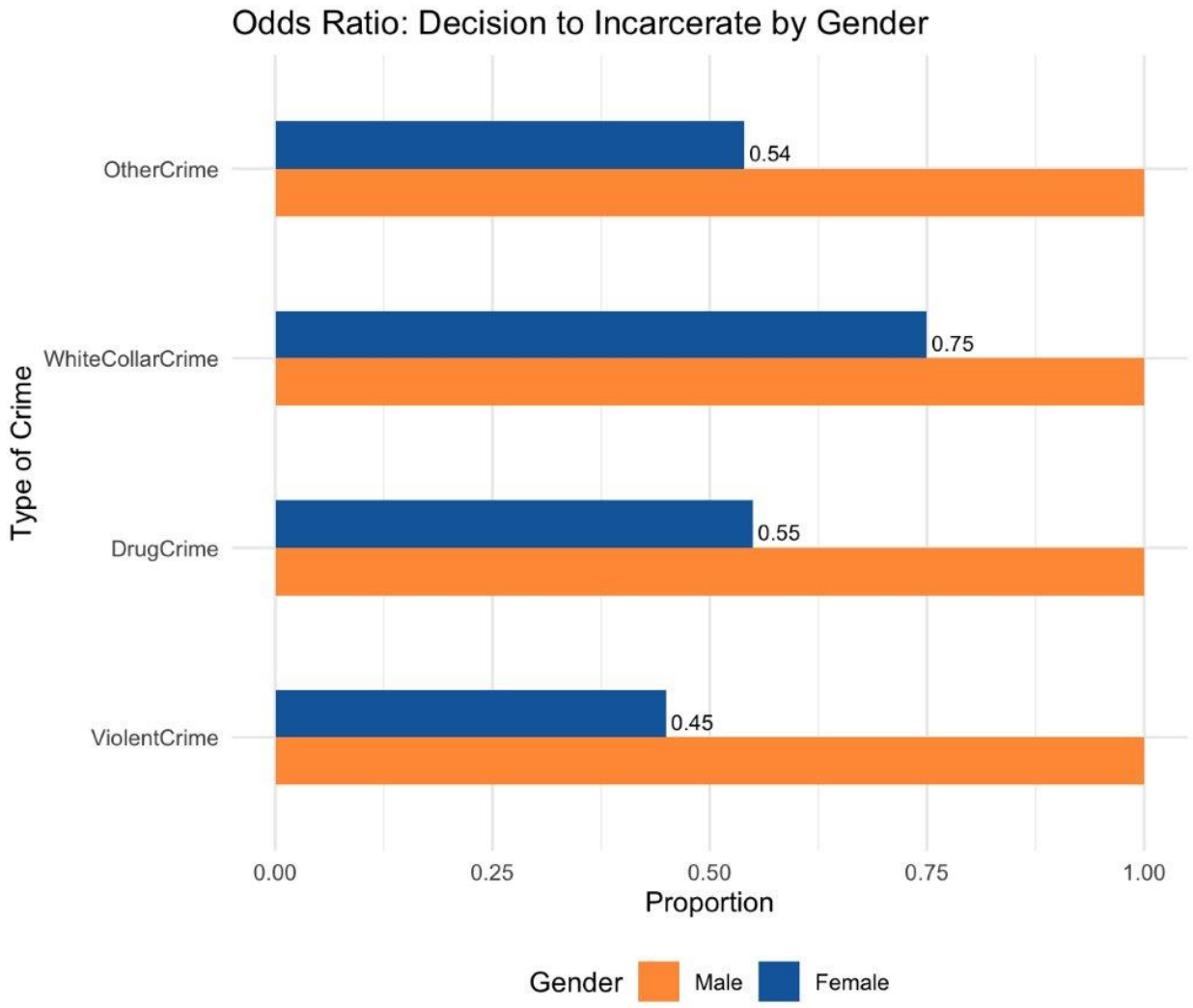

Education Percentage by Crime Type
Defendant's Formal Education
Other Crime
White-Collar Crime
Drug Crime
Violent Crime
31%
43%
20%
5%
13%
30%
34%
23%
31%
44%
22%
3%
30%
43%
22%
5%
0
25
50
75
100
Percentage
Education
Less than High School
High School Grad
Some College
College Grad

Appendix D:



Crime_Type	Coefficient
Violent Crime	-29.26
Drug Crime	-14.80
White Collar Crime	-1.94
Other Crime	-0.93

Appendix E:


Odds Ratio: Decision to Incarcerate by Gender
OtherCrime
WhiteCollarCrime
DrugCrime
ViolentCrime
Type of Crime
0.54
0.75
0.55
0.45
0.00
0.25
0.50
0.75
1.00
Proportion
Gender
Male
Female