

final minutes

Criminal Justice Policy Commission Meeting

9:00 a.m. • Wednesday, March 6, 2019

Room 405 • 4th Floor of the State Capitol Building

100 N. Capitol Avenue • Lansing, MI

Members Present:

Senator Bruce Caswell, Chair
D.J. Hilson
Kyle Kaminski
Brian Kolodziej
Sheryl Kubiak
Representative Beau LaFave
Barbara Levine
Senator Peter Lucido
Representative Isaac Robinson
Senator Sylvia Santana
Jennifer Strange
Judge Paul Stutesman (via teleconference)
Andrew Verheek

Members Excused:

Kyle Kaminski

I. Call to Order and Roll Call

The Chair called the meeting to order at 9:01 a.m. and asked the clerk to take the roll. A quorum was present and absent members were excused.

II. Introduction of Brian Kolodziej as the New Attorney General Designee

The Chair called on Commissioner Laura Moody to introduce Assistant Attorney General Brian Kolodziej who was recently appointed to serve as the new Attorney General designee for the Commission. Commissioner Moody thanked the Chairman for his leadership and for the opportunity to serve on the Commission. The Chair then introduced and welcomed the new legislative members on the Commission—Senator Peter Lucido, Senator Sylvia Santana, Representative Beau LaFave, and Representative Isaac Robinson. Chair Caswell also had other members around the table introduce themselves.

III. Approval of the February 6, 2019 Criminal Justice Policy Commission Meeting Minutes

The Chair asked members if there were any additions or corrections to the proposed February 6, 2019 CJPC meeting minutes. Commissioner Kubiak commented that she did not see the discussion of adding another subcommittee and would like that included in the minutes. **Commissioner Verheek moved, supported by Commissioner Hilson, to approve the minutes of the February 6, 2019 Criminal Justice Policy Commission meeting as amended by including the discussion of another subcommittee. There was no further discussion. The minutes as amended were approved by unanimous consent.**

IV. Data Subcommittee Update

The Chair reported that he had a meeting with a group called One Voice and received a flyer which he will share with Commission members (see attached). He then called on Grady Bridges for an overview of the draft executive summary (see attached handout for more details). A few issues were raised throughout the presentation including the difficulty in capturing race/ethnicity data, assaultive vs. non-assaultive crime groups, and the inclusion of mental health status data in the final report. The Chair asked members to start thinking about how they want to approach including areas where policy can be changed in the final report.

Mr. Bridges then went through an exercise of showing simple data graphically and then adding complexity (see attached slide presentation for more details). Commissioner Levine expressed her interest in seeing statistics when holding constant the specific offense. Mr. Bridges will take the two most common crimes in the D and E grid and run the numbers and have them ready for the next data subcommittee meeting.

V. Commissioner Comments

The Chair asked if there were any Commissioner comments. Commissioner Kaminiski commented that the slides on pages 26 and 27 are the easiest to understand. Representative LaFave and Commissioner Kolodziej expressed their appreciation for the opportunity to serve on the Commission. Commissioner Verheek and the Chair commended Mr. Bridges on his good work. The Chair also thanked Laura Moody for her work on the Commission.

VI. Public Comments

The Chair asked if there were any public comments. Shellie Weisberg of the ACLU provided comments on the lack of diversity on the Commission. Bruce Timmons commented that the E grid includes considerable disparity among crimes and it might be useful for the Commission to look at high volume crimes and by length of sentence. There were no other public comments.

VII. Next CJPC Meeting Date

The next CJPC meeting is scheduled for **Wednesday, April 3, 2019, at 9:00 a.m.** The location for the meeting is to be determined and will be announced at a later date.

VIII. Adjournment

There being no further business before the Commission and seeing no objection, the Chair adjourned the meeting, the time being 11:45 a.m.

(Minutes approved at the April 3, 2019 CJPC meeting.)

1
91%

The percentage of respondents who either Strongly Agreed or Agreed that **Post Traumatic Stress is a serious and pervasive issue within corrections**



2
91%

The percentage of respondents who Strongly Agree and Agree that **Understaffing has led to unsafe increases in mandatory overtime and increasingly low morale amongst staff**

MANDATORY

3
15%

of respondents think the **corrections profession is respected and recognized as an important branch of the law enforcement community.**



4

42%

Strongly Agree, Agree and Somewhat Agree that offender **programming and other educational opportunities are properly staffed**

8

51%

Strongly Agree, Agree and Somewhat Agree that **opportunities for visitation should be expanded and encouraged for all**

5
70%

The percentage of respondents that Strongly Agree, Agree and Somewhat Agree that **Overcrowding has led to a decrease in resources and program opportunities for those incarcerated**



IMPORTANT NATIONAL SURVEY STATISTICS



6

47%

believe inmates in segregation are given the proper resources to work through their issues and properly correct their behavior

9

87%

believe **segregation is an effective method for officers to maintain order and ensure safety within an institution**

11
99%

The percentage of respondents that feel any **prisoner who inflicts harm on staff should be held accountable, regardless of sentence length or classification level.**



7
94%

The percentage of respondents that believe there **needs to be agency-wide training on mental health awareness and stress management**



10
91%

The percentage of respondents who believe **prisons are a governmental function that should not be delegated to private industry**



12
81%

of respondents say more efforts are needed to **encourage communication, increase respect, and ultimately breakdown the notions of hostility between officers and those incarcerated.**



Executive Summary

Utilizing the past six years of felony sentencing data from across the state, the Criminal Justice Policy Commission (CJPC) has begun a systematic evaluation of straddle cell sentencing in Michigan. In 1998, the Michigan Legislature adopted sentencing guidelines to reduce disparities in sentencing for people convicted of felonies. In many cases, the guidelines provide judges with recommendations for an intermediate sentence (i.e., jail and/or probation) or a presumptive prison sentence. In other instances, the recommendations permit judges complete discretion to impose either an intermediate sanction or a prison term if the offense details and offender’s prior criminal record place them within a “straddle cell” for sentencing. Focusing on straddle cell sentencing decisions, this report addresses the following questions for offenders convicted of Class E felonies:

- Research Question 1:** To what extent are prison sentences, relative to intermediate sanctions, imposed on offenders convicted of a Class E felony and scoring within a straddle cell?
- Research Question 2:** For offenders with similar offense and offender characteristics, are there disparities in the rate of prison sentences? If so, what factors or characteristics are contributing to such disparities?

We identified 11,058 cases, using Michigan Department of Corrections’ data, of individuals sentenced between 2012-2017 and scoring within a straddle cell for Class E offenses, excluding habitual offenders and those with a special status¹ during the offense. Of these cases, 2,753 (24.9%) received prison sentences and 6,318 (57.14%) received a jail sentence or a combination of jail and probation.

A logistic regression was used to evaluate whether there are disparities in the rate at which offenders are sentenced to prison as opposed to intermediate sanctions. Using this regression technique, we can consider multiple factors at the same time and estimate how each factor is associated with the probability that an offender receives a prison sentence, allowing for more suitable “apple to apple” comparisons. When reviewing results from this analysis, it is important to keep the following in mind. These results describe correlations between certain factors and the probability that an offender is sentenced to prison as opposed to jail and/or probation. These results should not be interpreted as causal (i.e., going to trial will make you more likely to receive a prison sentence) because there may be additional factors outside our model that provide a plausible explanation, such as plea bargains, for why a significant difference exists.

Ultimately, our analysis found that eight factors had statistically significant associations with the probability of being sentenced to prison for offenders convicted of a Class E felony and located in a straddle cell. In the presence of significant differences in sentencing outcomes for these offenders, we conclude that there are sentencing disparities across these factors:

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Circuit Court where sentence is imposed • Type of Crime (Crime Group²) • Conviction Method (Found Guilty at Trial vs. Pleading Guilty) • Attorney Status (Retained vs. Appointed) | <ul style="list-style-type: none"> • Gender • Race • Age • Employment Status |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

Further, we conclude that sentencing disparities were not found for offenders across these factors: Offense Group (Assaultive vs. Non-Assaultive), Hispanic Ethnicity, High School Diploma/GED, Alcohol Abuse History, Drug Abuse History, and History of Mental Health Treatment.

¹ Special statuses include the following: HYTA, Probation, District Court Probation, Delay of Sentence, Parole, Jail, State Prisoner, Bond, Juvenile Court Supervision, Federal Probation, and Federal Parole.

² Felony offenses are classified into six groups: 1) Crimes against a person, 2) Crimes against property, 3) Crimes involving a controlled substance, 4) Crimes against public order, 5) Crimes against public safety, and 6) Crimes against public trust. The three most common offenses for each crime group are listed in Table A-1 of the appendix.

Table E1 summarizes the results from our regression analysis, indicating which factors were statistically significant and the direction of the relationship. For example, the 1st row indicates that there was a statistically significant difference between those who retained their attorney and those who were appointed counsel. The third column shows that offenders who retained an attorney were less likely on average to receive a prison sentence when compared to similar offenders with an appointed attorney. This difference considers or “controls for” the offense’s severity, the offender’s prior criminal record, the type of crime, whether the offense was assaultive in nature, the circuit court, and if there was a trial, as well as multiple demographic factors (e.g., gender, race/ethnicity, age, etc.).

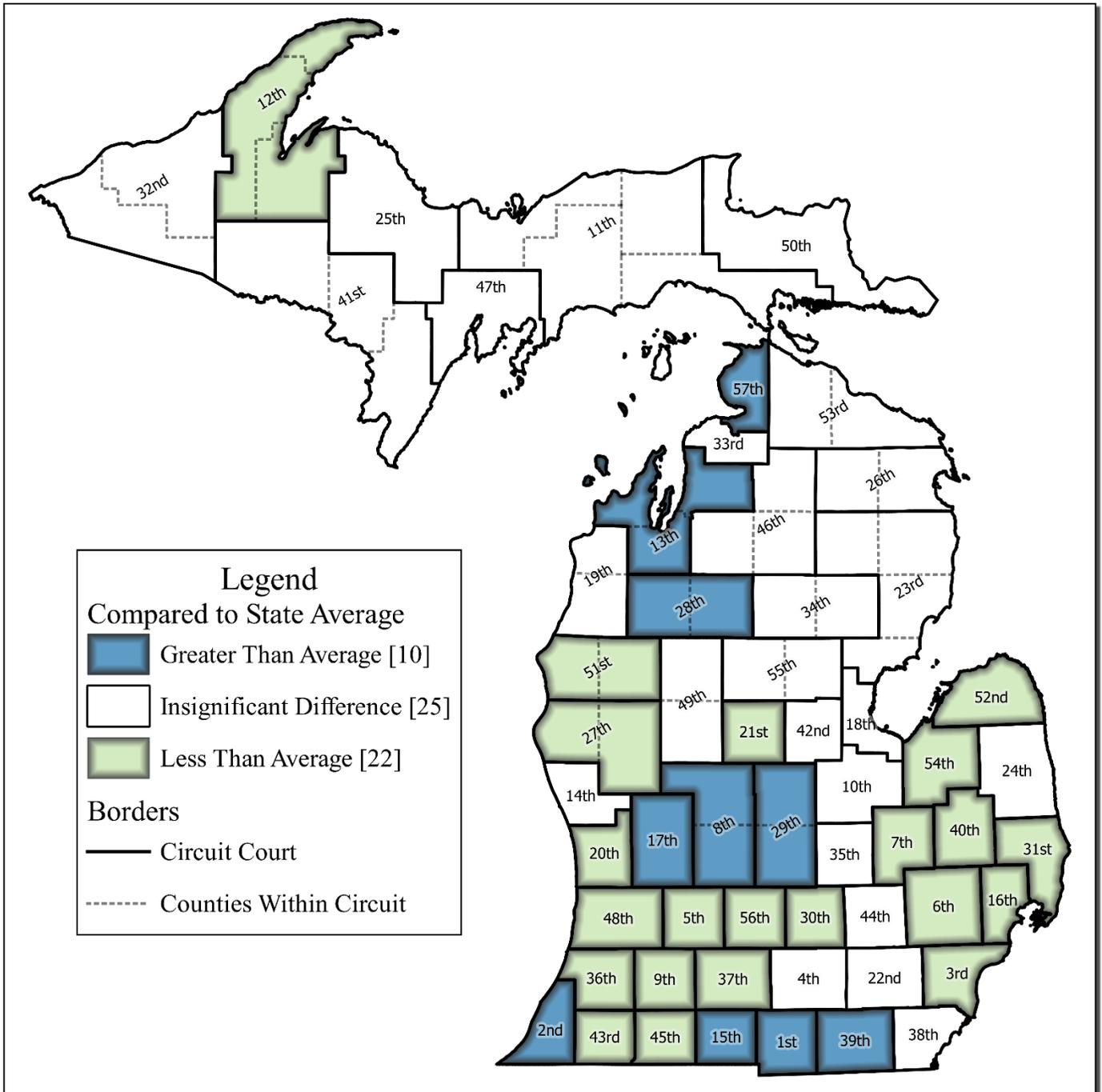
Table E1: Summary of Regression Results³

Variable	Statistically Significant	Average Relationship to Prison Sentence
Attorney Status (Retained vs. Appointed)	Yes	Those who retained their attorney were <i>less</i> likely to receive a prison sentence than offenders with appointed attorneys.
Conviction Method (Found Guilty vs. Pled Guilty)	Yes	Those found guilty at trial were <i>more</i> likely to receive a prison sentence than those who pled guilty.
Employed	Yes	Employed offenders were <i>less</i> likely to receive a prison sentence than unemployed offenders.
Gender (Female vs. Male)	Yes	Whether an offender received a prison sentence differed significantly between male and female offenders, however the relationship between gender and prison sentencing varied depending on race and age.
Black or African American (Female vs. Male)	Yes	Black female offenders were <i>less</i> likely to receive a prison sentence than black male offenders. The differences is <i>largest</i> when offenders are young and becomes <i>smaller</i> for older offenders.
White (Female vs. Male)	Yes	White female offenders were <i>less</i> likely to receive a prison sentence than white male offenders. The differences is <i>largest</i> when offenders are young and becomes <i>smaller</i> for older offenders.
Offender Race (Black or African American vs. White)	Yes	Whether an offender received a prison sentence differed significantly between black and white offenders, however the relationship between race and prison sentencing varied depending on gender and age.
Male Offenders (Black or African American vs. White)	Yes	Male Offenders Under 24 Years Old: Black offenders were <i>more</i> likely than white offenders to receive a prison sentence. Male Offenders 24 - 35 Years Old: Prison sentencing <i>did not differ</i> significantly between black and white men. Male Offenders 36 and Older: White offenders were <i>more</i> likely to receive a prison sentence than black offenders.
Female Offenders (Black or African American vs. White)	Yes	Black female offenders under 30 years old were <i>less</i> likely to receive a prison sentence than white female offenders of the same age. For offenders thirty and older, prison sentencing for black females <i>did not differ</i> significantly from white females.
Age	Yes	On average, as offenders become older, the probability of being sentenced to prison: <i>decreases</i> for black men, <i>increases</i> for white women, and <i>does not differ</i> significantly for white men or black women.
Sentence Guideline Crime Group	Yes	Dependent on the Crime Group
Crimes Against Property	Yes	Compared to the average of the crime groups, convictions for "Property" crimes were <i>less</i> likely to be sentenced to prison.
Crimes Against Public Safety	Yes	Compared to the average of the crime groups, convictions for "Public Safety" crimes were <i>more</i> likely to be sentenced to prison.
Crimes Against A Person	No	
Controlled Substance Crimes	No	Prison sentencing for these crimes did not differ significantly from the average of the crime groups.
Crimes Against Public Order	No	
Crimes Against Public Trust	No	
Circuit Court	Yes	Compared to the statewide average (28.98%): • 11 Circuits were <i>more</i> likely • 25 Circuits were <i>less</i> likely, and • 22 Circuits didn't differ significantly
Offense Group (Assaultive vs. Non-Assaultive)	No	
Ethnicity	No	
High School Diploma/GED	No	No statistically significant relationship to the "In/Out" of prison sentencing decision.
Drug Abuse	No	
Alcohol Abuse	No	
Mental Health Treatment	No	

³ The sample for these results included individuals sentenced between 2012-2017 and scored within a straddle cell for Class E offenses, excluding habitual offenders and those with a special status during the offense (HYTA, Probation, District Court Probation, Delay of Sentence, Parole, Jail, State Prisoner, Bond, Juvenile Court Supervision, Federal Probation, Federal Parole).

The circuit court results included in Table E1 identified whether courts sentenced offenders to prison significantly more often, less often, or approximately the same as the state average. Figure E1 below maps the 10 above-average circuits in blue, 22 below-average circuits in green, and 25 circuits that did not differ significantly for the state average in white.

**Figure E1: Probability of Receiving a Prison Sentence⁴
Comparing Circuit Courts to the State Average (28.98%)**



⁴ Figure E1 shows how each circuit court compares to the statewide average for imposing prison sentences on offenders convicted of Class E felonies and scoring within a straddle cell. Habitual offenders and those with a special status during the offense (e.g., HYTA, Probation, Parole) are not included in these comparisons.

Appendix

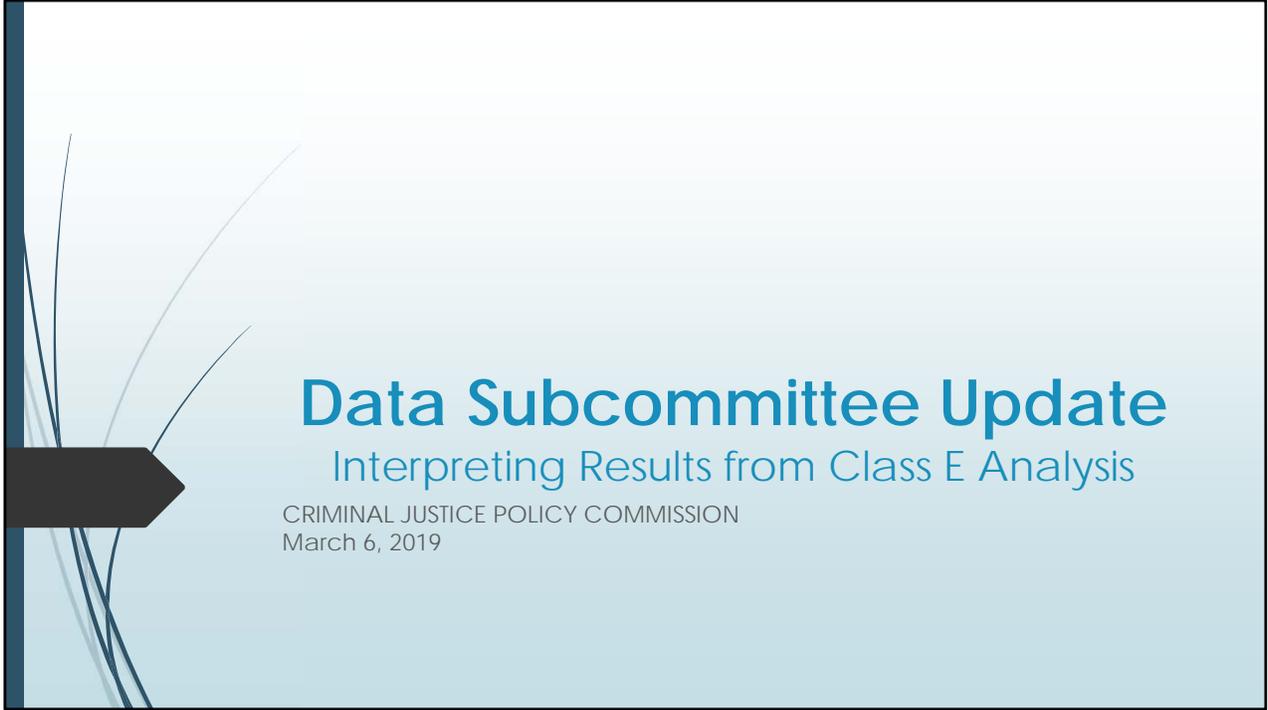
**Table A-1: Logistic Regression Results
Average Marginal Effects of Variables**

Variable	Statistically Significant	Average Marginal Effect (Percentage Points)		
Attorney Status (Retained vs. Appointed)	Yes	-4.0		
Conviction Method (Found Guilty vs. Pled Guilty)	Yes	+44.9		
Employed	Yes	-9.8		
Sentence Guideline Crime Group				
Crimes Against Property	Yes	-1.7		
Crimes Against Public Safety	Yes	+1.1		
Crimes Against A Person	No	<i>Did not differ significantly</i>		
Controlled Substance Crimes	No	<i>Did not differ significantly</i>		
Crimes Against Public Order	No	<i>Did not differ significantly</i>		
Crimes Against Public Trust	No	<i>Did not differ significantly</i>		
Gender (Female vs. Male)		Age = 20	Age = 35	Age = 50
Black or African American (Female vs. Male)	Yes	-8.6	-3.8	<i>Did not differ significantly</i>
White (Female vs. Male)	Yes	-11.5	-8.3	-4.5
Race (Black or African American vs. White)		Age = 20	Age = 35	Age = 50
Male Offenders (Black or African American vs. White)	Yes	+3.7	<i>Did not differ significantly</i>	-6.9
Female Offenders (Black or African American vs. White)	Yes	+6.6	<i>Did not differ significantly</i>	<i>Did not differ significantly</i>

Table A-2: Probability of an Offender Receiving a Prison Sentence by Circuit Court, Compared to State Average (28.98%)

Circuit	Number of Cases	Percent Sentenced to Prison	Difference from State Average		Counties
			Estimate	Std. Error	
1	38	0.895	0.605***	0.049	Hillsdale
2	451	0.412	0.123***	0.023	Berrien
3	2,849	0.159	-0.13***	0.009	Wayne
4	268	0.325	0.035	0.028	Jackson
5	55	0.164	-0.126**	0.046	Barry
6	351	0.188	-0.102***	0.021	Oakland
7	538	0.182	-0.108***	0.017	Genesee
8	180	0.511	0.221***	0.035	Montcalm and Ionia
9	344	0.099	-0.191***	0.017	Kalamazoo
10	127	0.236	-0.054	0.035	Saginaw
11	42	0.238	-0.052	0.062	Luce, Mackinac, Schoolcraft, and Alger
12	36	0.111	-0.179***	0.050	Houghton, Baraga, and Keweenaw
13	120	0.450	0.16***	0.043	Leelanau, Antrim, and Grand Traverse
14	141	0.312	0.022	0.037	Muskegon
15	69	0.522	0.232***	0.057	Branch
16	547	0.161	-0.129***	0.016	Macomb
17	976	0.431	0.141***	0.016	Kent
18	158	0.247	-0.043	0.033	Bay
19	30	0.433	0.143	0.085	Benzie and Manistee
20	220	0.200	-0.09***	0.027	Ottawa
21	95	0.211	-0.079*	0.040	Isabella
22	429	0.284	-0.005	0.022	Washtenaw
23	72	0.292	0.002	0.051	Iosco, Arenac, Alcona, and Oscoda
24	36	0.361	0.071	0.076	Sanilac
25	47	0.191	-0.098	0.055	Marquette
26	49	0.224	-0.065	0.057	Alpena and Montmorency
27	102	0.078	-0.211***	0.027	Oceana and Newaygo
28	91	0.407	0.117*	0.049	Wexford and Missaukee
29	108	0.417	0.127**	0.045	Gratiot and Clinton
30	312	0.192	-0.098***	0.021	Ingham
31	148	0.155	-0.134***	0.029	St. Clair
32	23	0.348	0.058	0.092	Ontonagon and Gogebic
33	14	0.500	0.21	0.127	Charlevoix
34	107	0.299	0.009	0.042	Ogemaw and Roscommon
35	50	0.400	0.11	0.065	Shiawassee
36	137	0.161	-0.129***	0.031	Van Buren
37	224	0.228	-0.062*	0.027	Calhoun
38	172	0.355	0.065	0.035	Monroe
39	86	0.523	0.233***	0.050	Lenawee
40	94	0.138	-0.152***	0.035	Lapeer
41	33	0.242	-0.047	0.068	Iron, Dickinson, and Menominee
42	46	0.304	0.014	0.064	Midland
43	90	0.167	-0.123**	0.038	Cass
44	85	0.282	-0.008	0.047	Livingston
45	124	0.169	-0.12***	0.033	St. Joseph
46	89	0.382	0.092	0.049	Otsego, Crawford, and Kalkaska
47	28	0.393	0.103	0.085	Delta
48	142	0.127	-0.163***	0.027	Allegan
49	128	0.359	0.07	0.041	Osceola and Mecosta
50	26	0.462	0.172	0.092	Chippewa
51	40	0.175	-0.115*	0.058	Mason and Lake
52	23	0.130	-0.159*	0.067	Huron
53	52	0.308	0.018	0.061	Cheboygan and Presque Isle
54	35	0.114	-0.176***	0.052	Tuscola
55	100	0.260	-0.03	0.042	Clare and Gladwin
56	45	0.133	-0.157**	0.050	Eaton
57	36	0.472	0.182*	0.079	Emmet

Significance Levels: * p<0.05, ** p<0.01, *** p<0.001



2

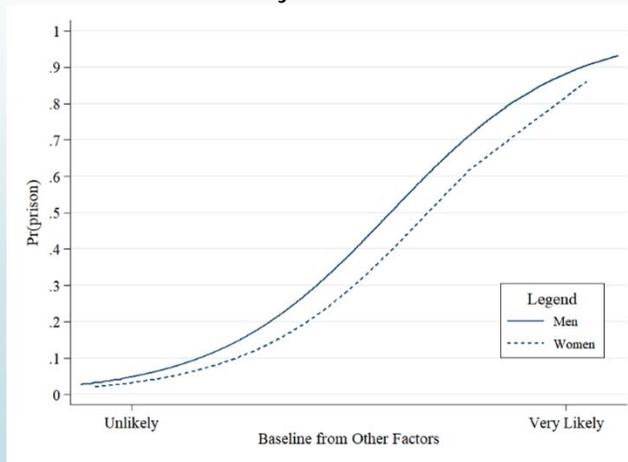
Basic Case: Gender

Are men and women sentenced to prison at significantly different rates?

3

Example 1: Gender Gap

Figure 1: Probability of a Prison Sentence By Gender



The probability that an offender is sentenced to prison is shown on the y-axis.

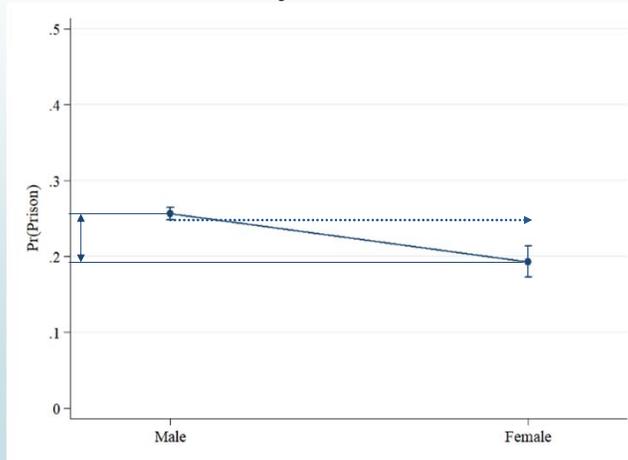
The x-axis represents a composite of offender characteristics. Those on the left side of the x-axis have characteristics that are typically less likely to be sentenced to prison (e.g., low prior record level, low offense variable level) and those towards the right side have factors that are more likely to be sentenced to prison (e.g., high prior record level, high offense variable level).

The height between the solid and dashed lines represents the difference in probability for men and women with similar criminal and demographic characteristics.

4

Example 1: Gender Gap

Figure 2: Average Probability of a Prison Sentence By Gender



Each dot in the graph above represents the average probability of receiving a prison sentence for offenders of a given gender. The dashed arrow demonstrates the difference between men and women is statistically significant (wings on the dots do not overlap). The values for the points above and their 95% confidence intervals are:

	Pr(Prison)	[95% Conf. Interval]
Male	.256729	[.2486515 .2648065]
Female	.1932633	[.1727466 .2137799]

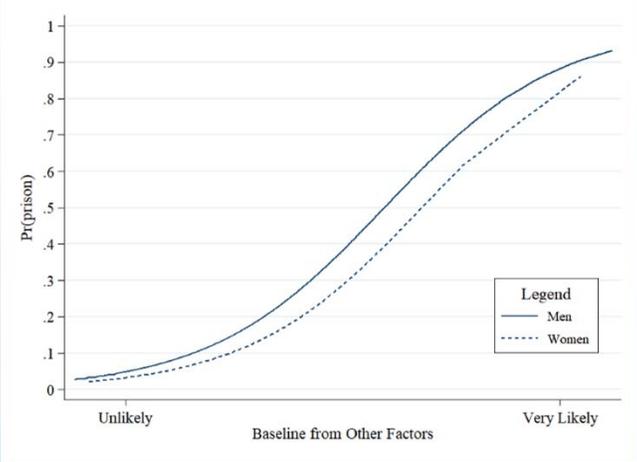
Difference = .257 - .193 = .063 -> 6.3 percentage points

% Difference = (.257 - .193)/.193 = .328 -> 32.8 percent increase

Interpretation: When comparing offenders with similar criminal history and demographic factors, male offenders are on average 6.3 percentage points more likely to be sentenced to prison than female offenders. On average female offenders have a 19.8% probability of being sentenced to prison, therefore the 6.3 point increase represents a 32.8 percent increase in probability for men.

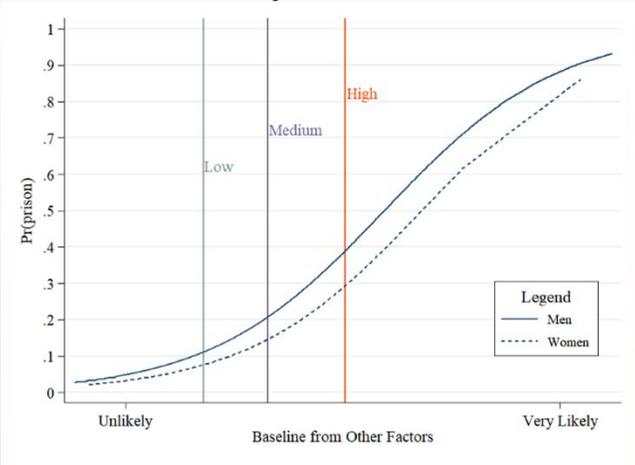
Example 1: Gender Gap

Figure 1: Probability of a Prison Sentence By Gender



Example 2: Low, Medium, & High Cases

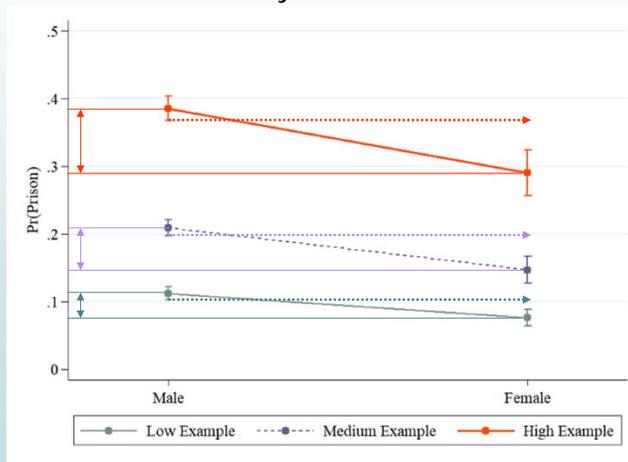
Figure 1: Probability of a Prison Sentence By Gender



The last figure showed the average difference between men and women (i.e. the average height between the solid and dashed lines above). However looking at 3 cases, we can see the height difference varies.

Example 2: Low, Medium, & High Cases

Figure 2: Average Probability of a Prison Sentence By Gender



The values for the points above and their 95% confidence intervals are:

	Pr(Prison)	[95% Conf. Interval]
Low Example		
Male	.1121591	[.1025235 .1217948]
Female	.076112	[.0637283 .0884956]
Difference = .112 - .076 = .036 -> 3.6 percentage points		
% Difference = (.112 - .076)/.076 = .474 -> 47.4 percent increase		

Medium Example		
Male	.2092619	[.1975722 .2209516]
Female	.1471802	[.1269761 .1673843]
Difference = .209 - .147 = .062 -> 6.2 percentage points		
% Difference = (.209 - .147)/.193 = .422 -> 42.2 percent increase		

High Example		
Male	.3855666	[.3677786 .4033546]
Female	.2903905	[.2569336 .3238474]
Difference = .386 - .290 = .095 -> 9.5 percentage points		
% Difference = (.386 - .290)/.290 = .328 -> 32.8 percent increase		

Interpretation Medium Example: When comparing offenders with similar criminal history and demographic factors, male offenders are on average 6.2 percentage points more likely to be sentenced to prison than female offenders. On average female offenders have a 14.7% probability of being sentenced to prison, therefore the 6.3 point increase represents a 42.2 percent increase in probability for men.

8

Basic Case: Gender & Race

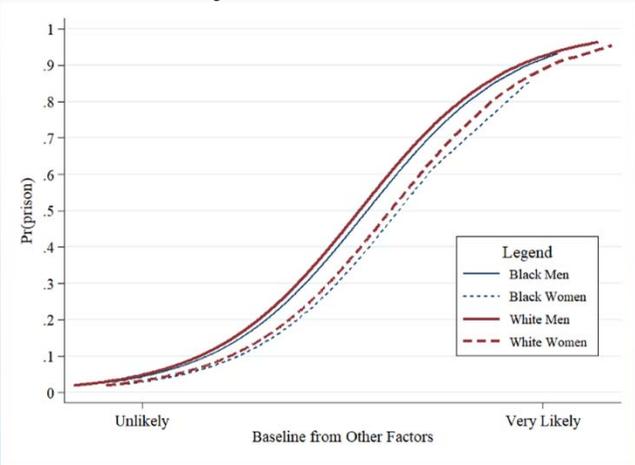
Are men and women sentenced to prison at significantly different rates?

Are the differences between men and women similar across race?

9

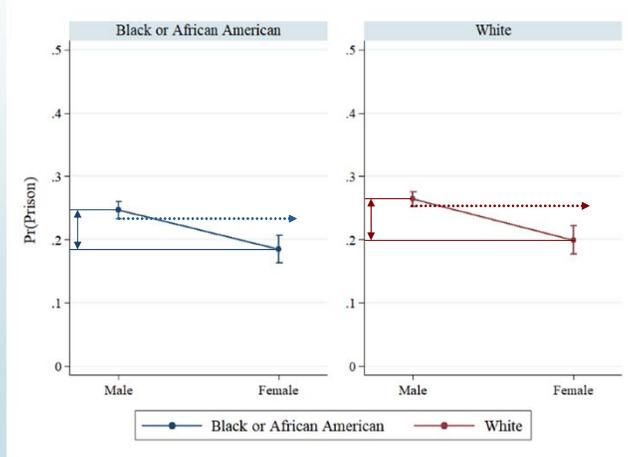
Example 3: Gender Gap by Race

Figure 1: Probability of a Prison Sentence By Gender and Race



Example 3: Gender Gap by Race

Figure 2: Average Probability of a Prison Sentence By Gender and Race



The values for the points above and their 95% confidence intervals are:

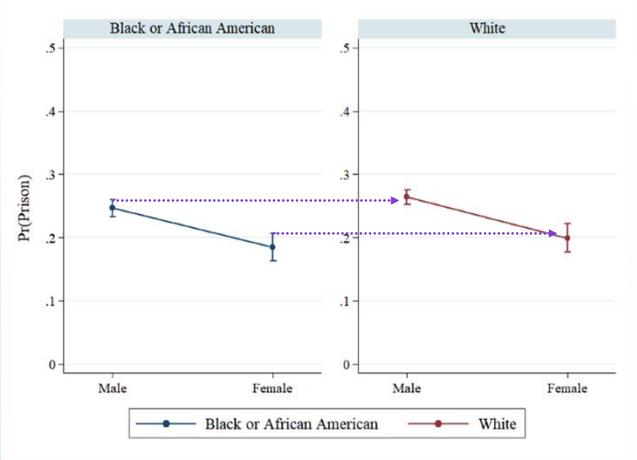
Pr(Prison)	[95% Conf. Interval]
Black, Male	.2466619 [.2331659 .260158]
Black, Female	.1848428 [.1630075 .2066781]
Difference = .247 - .185 = .062 -> 6.2 percentage points	
% Difference = (.247 - .185) / .185 = .334 -> 33.4 percent increase	

White, Male	.2641472 [.2525818 .2757126]
White, Female	.199326 [.1772308 .2214211]
Difference = .264 - .199 = .065 -> 6.5 percentage points	
% Difference = (.264 - .199) / .199 = .325 -> 32.5 percent increase	

Interpretation : When comparing men and women with similar criminal history and demographic factors, black male offenders are on average 6.2 percentage points more likely to be sentenced to prison than black female offenders, while white male offenders are 6.5 percentage points more likely than white females to receive a prison sentence.

Example 3: Gender Gap by Race

Figure 2: Average Probability of a Prison Sentence By Gender and Race

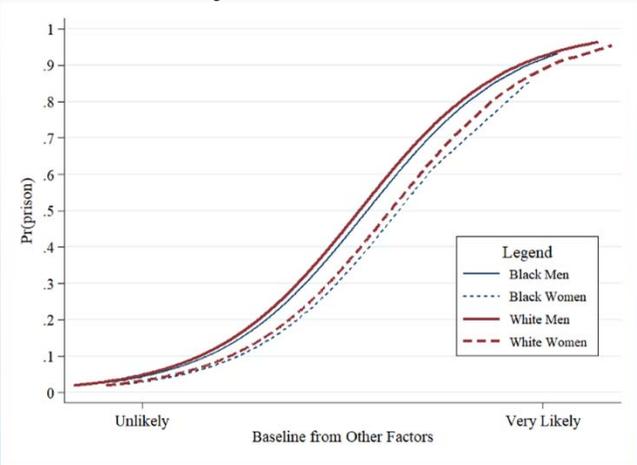


The values for the points above and their 95% confidence intervals are:

	Pr(Prison)	[95% Conf. Interval]
Black, Male	.2466619	[.2331659 .260158]
Black, Female	.1848428	[.1630075 .2066781]
White, Male	.2641472	[.2525818 .2757126]
White, Female	.199326	[.1772308 .2214211]

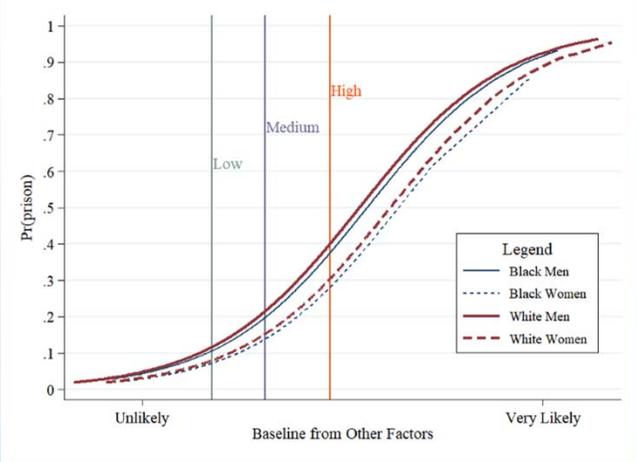
Example 3: Gender Gap by Race

Figure 1: Probability of a Prison Sentence By Gender and Race



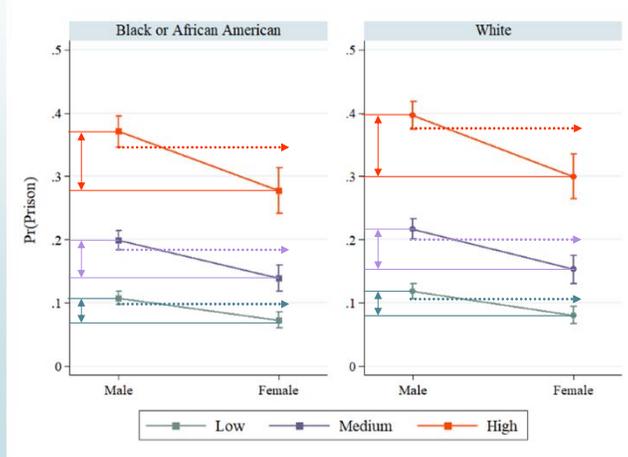
Example 4: Low, Medium, High Cases

Figure 1: Probability of a Prison Sentence By Gender and Race



Example 4: Low, Medium, High Cases

Figure 2: Average Probability of a Prison Sentence By Gender and Race



The values for the points above and their 95% confidence intervals are:

Low Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.1079023	[0.097597 0.1182076]
Black, Female	0.0731107	[0.0607766 0.0854447]
Difference = .108 - .073 = .035 -> 3.5 percentage points		
% Difference = (.108 - .073)/.073 = .476 -> 47.6 percent increase		

White, Male	0.1187478	[0.1068986 0.1305969]
White, Female	0.0807758	[0.0669338 0.0946178]
Difference = .119 - .081 = .038 -> 3.8 percentage points		
% Difference = (.119 - .081)/.081 = .470 -> 47.0 percent increase		

Med. Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.1991429	[0.1838475 0.2144384]
Black, Female	0.1395334	[0.1187168 0.1603499]
Difference = .199 - .140 = .06 -> 6 percentage points		
% Difference = (.199 - .140)/.140 = .427 -> 42.7 percent increase		

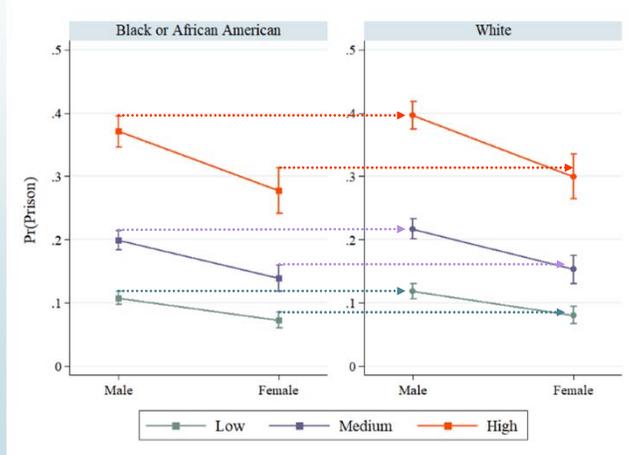
White, Male	0.2169292	[0.2014488 0.2324095]
White, Female	0.1530128	[0.1307786 0.1752471]
Difference = .217 - .153 = .064 -> 6.4 percentage points		
% Difference = (.217 - .153)/.153 = .418 -> 41.8 percent increase		

High Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.3707091	[0.3458756 0.3955426]
Black, Female	0.2775436	[0.2417963 0.313291]
Difference = .371 - .278 = .093 -> 9.3 percentage points		
% Difference = (.371 - .278)/.278 = .336 -> 33.6 percent increase		

White, Male	0.3962367	[0.3747594 0.4177139]
White, Female	0.2997112	[0.2641078 0.3353146]
Difference = .396 - .30 = .096 -> 9.7 percentage points		
% Difference = (.396 - .30)/.30 = .322 -> 32.2 percent increase		

Example 4: Low, Medium, High Cases

Figure 2: Average Probability of a Prison Sentence By Gender and Race



The values for the points above and their 95% confidence intervals are:

Low Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.1079023	[0.097597 0.1182076]
Black, Female	0.0731107	[0.0607766 0.0854447]
White, Male	0.1187478	[0.1068986 0.1305969]
White, Female	0.0807758	[0.0669338 0.0946178]

Med. Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.1991429	[0.1838475 0.2144384]
Black, Female	0.1395334	[0.1187168 0.1603499]
White, Male	0.2169292	[0.2014488 0.2324095]
White, Female	0.1530128	[0.1307786 0.1752471]

High Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.3707091	[0.3458756 0.3955426]
Black, Female	0.2775436	[0.2417963 0.313291]
White, Male	0.3962367	[0.3747594 0.4177139]
White, Female	0.2997112	[0.2641078 0.3353146]

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Complicated Case: Interactions with Gender, Race, & Age

Are men and women sentenced to prison at significantly different rates?

Are the differences between men and women similar across race?

Are the differences between men and women similar for young and old offenders?

Table 1: Summary of Regression Results

Variable	Statistically Significant	Average Relationship to Prison Sentence
Attorney Status (Retained vs. Appointed)	Yes	Those who retained their attorney were <i>less</i> likely to receive a prison sentence than offenders with appointed attorneys.
Conviction Method (Found Guilty vs. Pled Guilty)	Yes	Those found guilty at trial were <i>more</i> likely to receive a prison sentence than those who pled guilty.
Employed	Yes	Employed offenders were <i>less</i> likely to receive a prison sentence than unemployed offenders.
Gender (Female vs. Male)	Yes	Whether an offender received a prison sentence differed significantly between male and female offenders, however the relationship between gender and prison sentencing varied depending on race and age.
Black or African American (Female vs. Male)	Yes	Black female offenders were <i>less</i> likely to receive a prison sentence than black male offenders. The differences is <i>largest</i> when offenders are young and becomes <i>smaller</i> for older offenders.
White (Female vs. Male)	Yes	White female offenders were <i>less</i> likely to receive a prison sentence than white male offenders. The differences is <i>largest</i> when offenders are young and becomes <i>smaller</i> for older offenders.
Offender Race (Black or African American vs. White)	Yes	Whether an offender received a prison sentence differed significantly between black and white offenders, however the relationship between race and prison sentencing varied depending on gender and age.
Male Offenders (Black or African American vs. White)	Yes	Male Offenders Under 24 Years Old: Black offenders were <i>more</i> likely than white offenders to receive a prison sentence. Male Offenders 24 - 35 Years Old: Prison sentencing <i>did not differ</i> significantly between black and white men. Male Offenders 36 and Older: White offenders were <i>more</i> likely to receive a prison sentence than black offenders.
Female Offenders (Black or African American vs. White)	Yes	Black female offenders under 30 years old were <i>more</i> likely to receive a prison sentence than white female offenders of the same age. For offenders thirty and older, prison sentencing for black females <i>did not differ</i> significantly from white females.

The sample for these results included individuals sentenced between 2012-2017 and scored within a straddle cell for Class E offenses, excluding habitual offenders and those with a special status during the offense (HYTA, Probation, District Court Probation, Delay of Sentence, Parole, Jail, State Prisoner, Bond, Juvenile Court Supervision, Federal Probation, Federal Parole).

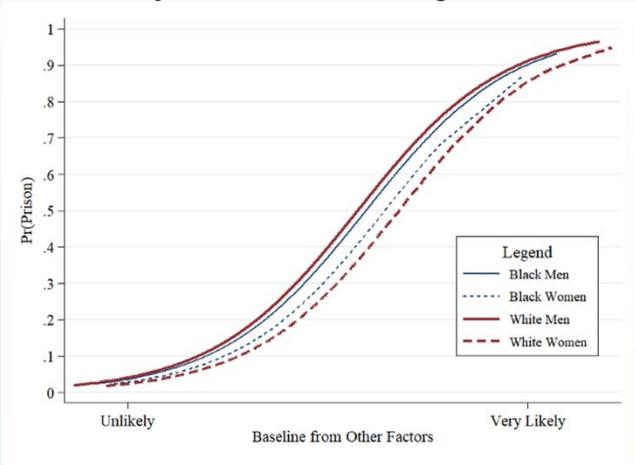
Table 2: Regression Results
Average Marginal Effects of Variables

Variable	Statistically Significant	Average Marginal Effect (Percentage Points)		
Attorney Status (Retained vs. Appointed)	Yes	-4.0		
Conviction Method (Found Guilty vs. Pled Guilty)	Yes	+44.9		
Employed	Yes	-9.8		
Sentence Guideline Crime Group				
Crimes Against Property	Yes	-1.7		
Crimes Against Public Safety	Yes	+1.1		
Crimes Against A Person	No	Did not differ significantly		
Controlled Substance Crimes	No	Did not differ significantly		
Crimes Against Public Order	No	Did not differ significantly		
Crimes Against Public Trust	No	Did not differ significantly		
Gender (Female vs. Male)		Age = 20	Age = 35	Age = 50
Black or African American (Female vs. Male)	Yes	-8.6	-3.8	Did not differ significantly
White (Female vs. Male)	Yes	-11.5	-8.3	-4.5
Race (Black or African American vs. White)		Age = 20	Age = 35	Age = 50
Male Offenders (Black or African American vs. White)	Yes	+3.7	Did not differ significantly	-6.9
Female Offenders (Black or African American vs. White)	Yes	+6.6	Did not differ significantly	Did not differ significantly

The sample for these results included individuals sentenced between 2012-2017 and scored within a straddle cell for Class E offenses, excluding habitual offenders and those with a special status during the offense (HYTA, Probation, District Court Probation, Delay of Sentence, Parole, Jail, State Prisoner, Bond, Juvenile Court Supervision, Federal Probation, Federal Parole).

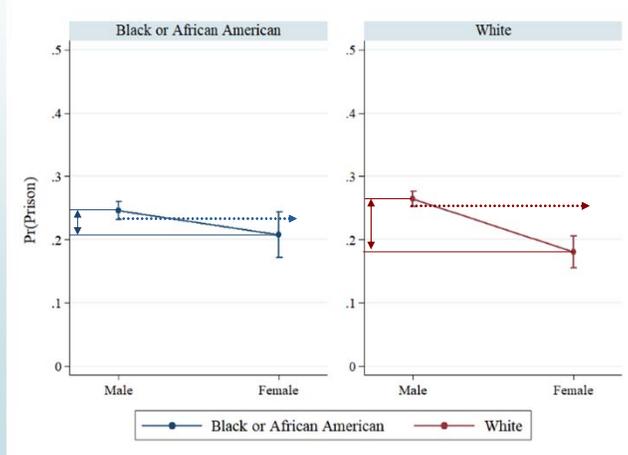
Example 5: Gender Gap by Race & Age

Figure 1: Probability of a Prison Sentence By Gender and Race at Age 35



Example 5: Gender Gap by Race & Age

Figure 2: Average Probability of a Prison Sentence By Gender and Race at Age 35



The values for the points above and their 95% confidence intervals are:

	Pr(Prison)	[95% Conf. Interval]
Black, Male	.2456665	[.2318074 .2595256]
Black, Female	.207437	[.1716252 .2432489]

Difference = .246 - .207 = .038 -> 3.8 percentage points

% Difference = (.246 - .207)/.207 = .184 -> 18.4 percent increase

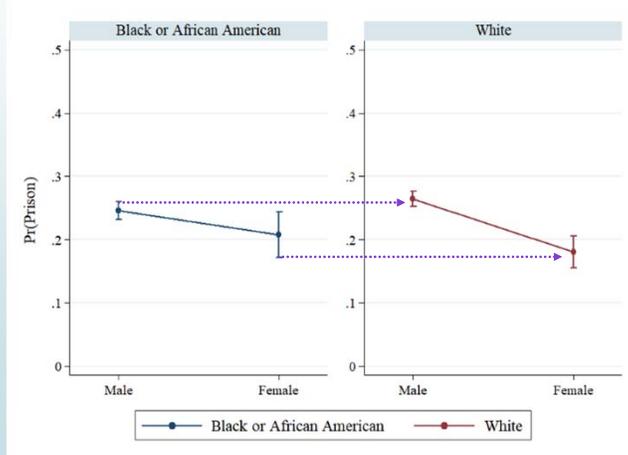
	Pr(Prison)	[95% Conf. Interval]
White, Male	.2642062	[.2522305 .2761819]
White, Female	.1807355	[.1557548 .2057163]

Difference = .264 - .181 = .083 -> 8.3 percentage points

% Difference = (.264 - .181)/.181 = .462 -> 46.2 percent increase

Example 5: Gender Gap by Race & Age

Figure 2: Average Probability of a Prison Sentence By Gender and Race at Age 35

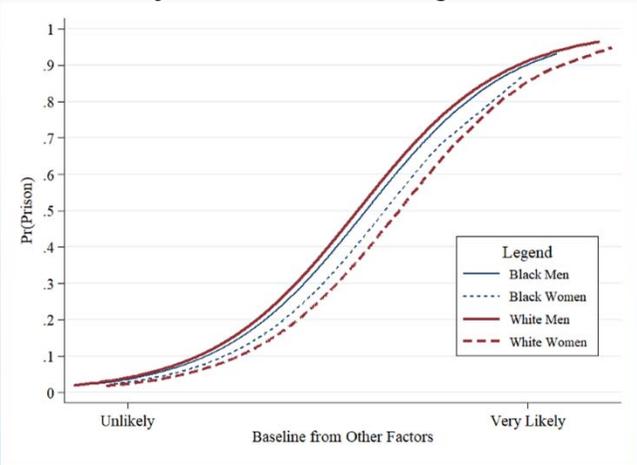


The values for the points above and their 95% confidence intervals are:

	Pr(Prison)	[95% Conf. Interval]
Black, Male	.2456665	[.2318074 .2595256]
Black, Female	.207437	[.1716252 .2432489]
White, Male	.2642062	[.2522305 .2761819]
White, Female	.1807355	[.1557548 .2057163]

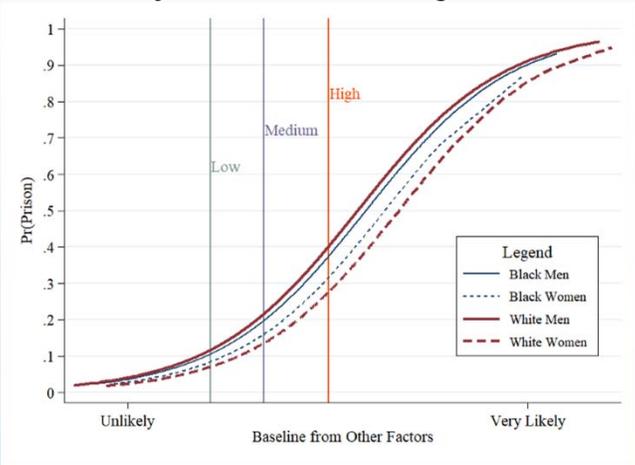
Example 5: Gender Gap by Race & Age

Figure 1: Probability of a Prison Sentence By Gender and Race at Age 35



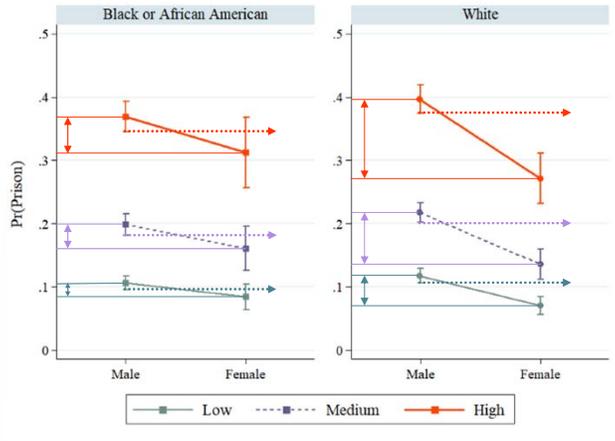
Example 6: Low, Medium, High Cases

Figure 1: Probability of a Prison Sentence By Gender and Race at Age 35



Example 6: Low, Medium, High Cases

Figure 2: Average Probability of a Prison Sentence By Gender and Race at Age 35



The values for the points above and their 95% confidence intervals are:

Low Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.1064432	[0.0958569 0.1170295]
Black, Female	0.0844693	[0.0641308 0.1048078]
Difference = .106 - .084 = .022 -> 2.2 percentage points		
% Difference = (.106 - .084)/.084 = .260 -> 26.0 percent increase		

White, Male	0.1178713	[0.1060201 0.1297225]
White, Female	0.0703562	[0.0563205 0.0843919]
Difference = .118 - .07 = .048 -> 4.8 percentage points		
% Difference = (.118 - .07)/.07 = .675 -> 67.5 percent increase		

Med. Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.198732	[0.1819624 0.2155016]
Black, Female	0.1611421	[0.1262045 0.1960796]
Difference = .199 - .161 = .038 -> 3.8 percentage points		
% Difference = (.199 - .161)/.161 = .233 -> 23.3 percent increase		

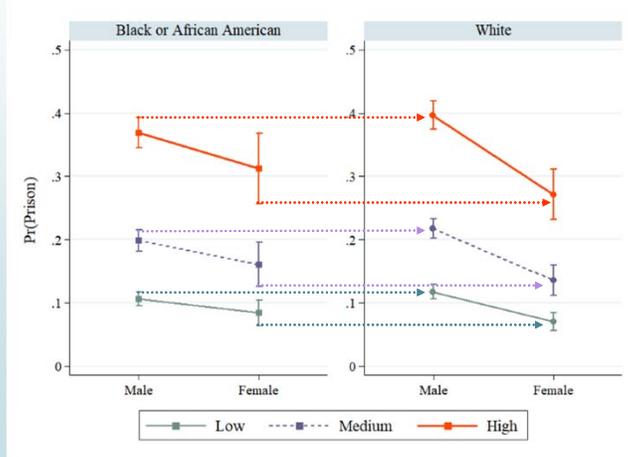
White, Male	0.2176549	[0.2023452 0.2329647]
White, Female	0.1361233	[0.1123814 0.1598653]
Difference = .218 - .136 = .082 -> 8.2 percentage points		
% Difference = (.218 - .136)/.136 = .599 -> 59.9 percent increase		

High Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.3693116	[0.3452353 0.3933879]
Black, Female	0.3120219	[0.2564092 0.3676345]
Difference = .369 - .312 = .057 -> 5.7 percentage points		
% Difference = (.369 - .312)/.312 = .184 -> 18.4 percent increase		

White, Male	0.3964403	[0.3742857 0.4185949]
White, Female	0.2711502	[0.2313067 0.3109937]
Difference = .396 - .271 = .125 -> 12.5 percentage points		
% Difference = (.396 - .271)/.271 = .462 -> 46.2 percent increase		

Example 6: Low, Medium, High Cases

Figure 2: Average Probability of a Prison Sentence By Gender and Race at Age 35



The values for the points above and their 95% confidence intervals are:

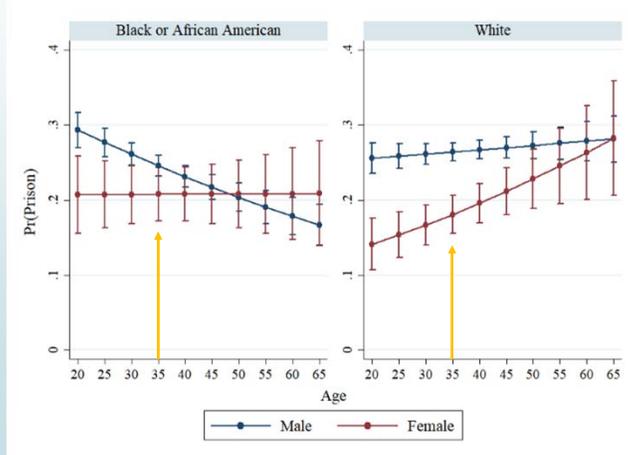
Low Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.1064432	[0.0958569 0.1170295]
Black, Female	0.0844693	[0.0641308 0.1048078]
White, Male	0.1178713	[0.1060201 0.1297225]
White, Female	0.0703562	[0.0563205 0.0843919]

Med. Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.198732	[0.1819624 0.2155016]
Black, Female	0.1611421	[0.1262045 0.1960796]
White, Male	0.2176549	[0.2023452 0.2329647]
White, Female	0.1361233	[0.1123814 0.1598653]

High Example	Pr(Prison)	[95% Conf. Interval]
Black, Male	0.3693116	[0.3452353 0.3933879]
Black, Female	0.3120219	[0.2564092 0.3676345]
White, Male	0.3964403	[0.3742857 0.4185949]
White, Female	0.2711502	[0.2313067 0.3109937]

Example 7: Gender Gap by Race & Age

Figure 2: Average Probability of a Prison Sentence By Gender, Race, and Age



The figure above now shows the average probability for offenders by gender, race, and age.

Left Graph: Black Offenders

The graph on the left side shows the averages for black offenders, ages 20-65. The blue line represents black men, while the red line represents black women. Each dot can be interpreted as the average probability of a prison sentence for black offenders of that gender (blue = men, red = women) at a certain age. If the wings for the blue and red dots don't overlap, we can say that there is a statistically significant difference between black men and women at that age.

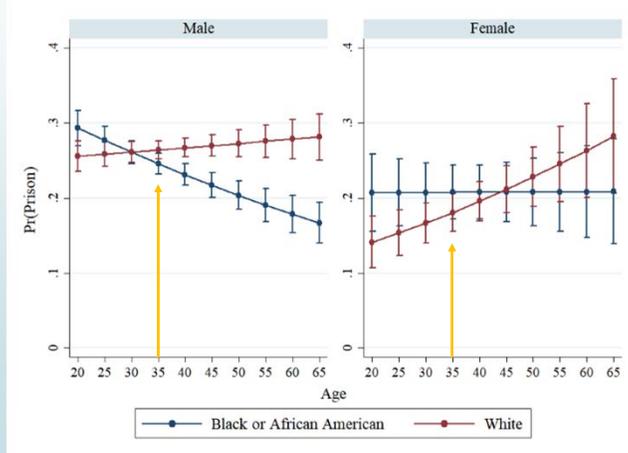
Right Graph: White Offenders

The graph on the right side shows the averages for white offenders, ages 20-65. The blue line represents white men, while the red line represents white women. Each dot can be interpreted as the average probability of a prison sentence for white offenders of that gender (blue = men, red = women) at a certain age. If the wings for the blue and red dots don't overlap, we can say that there is a statistically significant difference between white men and women at that age.

The values and 95% confidence intervals from the previous example, when age is 35, are highlighted with the yellow arrows.

Example 7: Gender Gap by Race & Age

Figure 2: Average Probability of a Prison Sentence By Race, Gender, and Age



The figure above now shows the average probability for offenders by race, gender, and age.

Left Graph: Male Offenders

The graph on the left side shows the averages for male offenders, ages 20-65. The blue line represents black men, while the red line represents white men. Each dot can be interpreted as the average probability of a prison sentence for male offenders of that race (blue = black, red = white) at a certain age. If the wings for the blue and red dots don't overlap, we can say that there is a statistically significant difference between black and white men at that age.

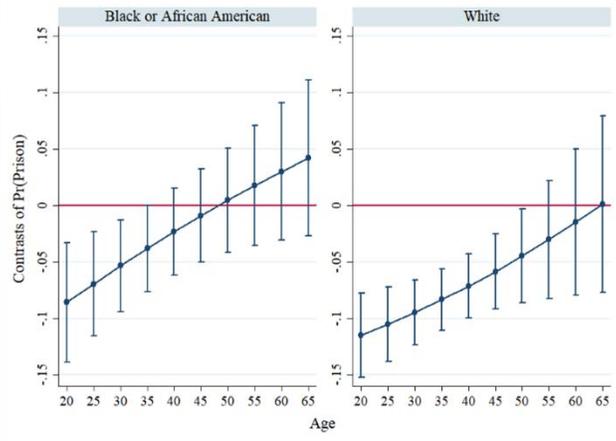
Right Graph: Female Offenders

The graph on the right side shows the averages for female offenders, ages 20-65. The blue line represents black women, while the red line represents white women. Each dot can be interpreted as the average probability of a prison sentence for female offenders of that race (blue = black, red = white) at a certain age. If the wings for the blue and red dots don't overlap, we can say that there is a statistically significant difference between black and white women at that age.

The values and 95% confidence intervals from the previous example, when age is 35, are highlighted with the yellow arrows.

Example 7: Gender Gap by Race & Age

Figure 3: Average Difference in Probability between Gender, By Race and Age



The figure above now shows the average difference in probability between female and male offenders by race and age.

Left Graph: Black Offenders

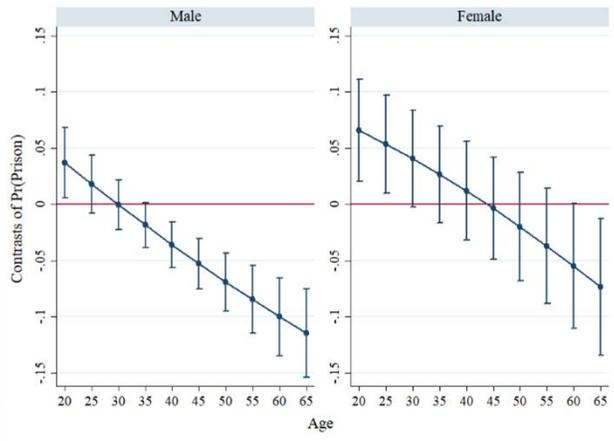
Each point represents the average difference between black women and black men for ages 20-65. Negative values indicate that black women are less likely than black men to be sentenced to prison. If the confidence interval (wings for a dot) includes zero, we conclude that the difference between the two groups for that age is **not** statistically significant. As shown above we can see that black women under 30 years old are less likely to be sentenced to prison than black men of the same age. The difference is largest, -8.5 points, at age 20 (i.e., 20 year old black women are on average 8.5 percentage points less likely to be sentenced to prison than 20 year old black men).

Right Graph: White Offenders

Each point represents the average difference between white women and white men for ages 20-65. Negative values indicate that white women are less likely than white men to be sentenced to prison. If the confidence interval (wings for a dot) includes zero, we conclude that the difference between the two groups for that age is **not** statistically significant. As shown above we can see that white women, ages 50 and under, are less likely to be sentenced to prison than white men of the same age. The difference is largest, -11.5 points, at age 20 (i.e., 20 year old white women are on average 11.5 percentage points less likely to be sentenced to prison than 20 year old white men).

Example 7: Gender Gap by Race & Age

Figure 3: Average Difference in Probability between Race, By Gender and Age



The figure above now shows the average difference in probability between black and white offenders by gender and age.

Left Graph: Male Offenders

Each point represents the average difference between black men and white men for ages 20-65. Positive values indicate that black men are **more** likely than white men to be sentenced to prison, while negative values indicate black men are **less** likely than white men. If the confidence interval (wings for a dot) includes zero, we conclude that the difference between the two groups for that age is **not** statistically significant. As shown above we can see that black men under 25 years old are more likely to be sentenced to prison than white men of the same age. The difference become insignificant between ages 25-35. After age 35, we see that black men are less likely than white men to be sentenced to prison.

Left Graph: Female Offenders

Each point represents the average difference between black women and white women for ages 20-65. Positive values indicate that black women are **more** likely than white women to be sentenced to prison, while negative values indicate black women are **less** likely than white women. If the confidence interval (wings for a dot) includes zero, we conclude that the difference between the two groups for that age is **not** statistically significant. As shown above we can see that black women under 30 years old are more likely to be sentenced to prison than white women of the same age. The difference become insignificant between ages 30-60. After age 60, we see that black women are less likely than white women to be sentenced to prison.

Table 1: Summary of Regression Results

Variable	Statistically Significant	Average Relationship to Prison Sentence
Attorney Status (Retained vs. Appointed)	Yes	Those who retained their attorney were <i>less</i> likely to receive a prison sentence than offenders with appointed attorneys.
Conviction Method (Found Guilty vs. Pled Guilty)	Yes	Those found guilty at trial were <i>more</i> likely to receive a prison sentence than those who pled guilty.
Employed	Yes	Employed offenders were <i>less</i> likely to receive a prison sentence than unemployed offenders.
Gender (Female vs. Male)	Yes	Whether an offender received a prison sentence differed significantly between male and female offenders, however the relationship between gender and prison sentencing varied depending on race and age.
Black or African American (Female vs. Male)	Yes	Black female offenders were <i>less</i> likely to receive a prison sentence than black male offenders. The differences is <i>largest</i> when offenders are young and becomes <i>smaller</i> for older offenders.
White (Female vs. Male)	Yes	White female offenders were <i>less</i> likely to receive a prison sentence than white male offenders. The differences is <i>largest</i> when offenders are young and becomes <i>smaller</i> for older offenders.
Offender Race (Black or African American vs. White)	Yes	Whether an offender received a prison sentence differed significantly between black and white offenders, however the relationship between race and prison sentencing varied depending on gender and age.
Male Offenders (Black or African American vs. White)	Yes	Male Offenders Under 24 Years Old: Black offenders were <i>more</i> likely than white offenders to receive a prison sentence. Male Offenders 24 - 35 Years Old: Prison sentencing <i>did not differ</i> significantly between black and white men. Male Offenders 36 and Older: White offenders were <i>more</i> likely to receive a prison sentence than black offenders.
Female Offenders (Black or African American vs. White)	Yes	Black female offenders under 30 years old were <i>more</i> likely to receive a prison sentence than white female offenders of the same age. For offenders thirty and older, prison sentencing for black females <i>did not differ</i> significantly from white females.

The sample for these results included individuals sentenced between 2012-2017 and scored within a straddle cell for Class E offenses, excluding habitual offenders and those with a special status during the offense (HYTA, Probation, District Court Probation, Delay of Sentence, Parole, Jail, State Prisoner, Bond, Juvenile Court Supervision, Federal Probation, Federal Parole).

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Table 2: Regression Results

Average Marginal Effects of Variables

Variable	Statistically Significant	Average Marginal Effect (Percentage Points)		
Attorney Status (Retained vs. Appointed)	Yes	-4.0		
Conviction Method (Found Guilty vs. Pled Guilty)	Yes	+44.9		
Employed	Yes	-9.8		
Sentence Guideline Crime Group				
Crimes Against Property	Yes	-1.7		
Crimes Against Public Safety	Yes	+1.1		
Crimes Against A Person	No	<i>Did not differ significantly</i>		
Controlled Substance Crimes	No	<i>Did not differ significantly</i>		
Crimes Against Public Order	No	<i>Did not differ significantly</i>		
Crimes Against Public Trust	No	<i>Did not differ significantly</i>		
Gender (Female vs. Male)				
		Age = 20	Age = 35	Age = 50
Black or African American (Female vs. Male)	Yes	-8.6	-3.8	<i>Did not differ significantly</i>
White (Female vs. Male)	Yes	-11.5	-8.3	-4.5
Race (Black or African American vs. White)				
		Age = 20	Age = 35	Age = 50
Male Offenders (Black or African American vs. White)	Yes	+3.7	<i>Did not differ significantly</i>	-6.9
Female Offenders (Black or African American vs. White)	Yes	+6.6	<i>Did not differ significantly</i>	<i>Did not differ significantly</i>

The sample for these results included individuals sentenced between 2012-2017 and scored within a straddle cell for Class E offenses, excluding habitual offenders and those with a special status during the offense (HYTA, Probation, District Court Probation, Delay of Sentence, Parole, Jail, State Prisoner, Bond, Juvenile Court Supervision, Federal Probation, Federal Parole).