Racial and Ethnic Disparities in Local Criminal Justice Systems

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Introduction

It is well-documented that criminal justice practices disproportionately impact historically underrepresented groups and lead to social inequality and exclusion.[1] Although the majority of research on racial disparities in the justice system has examined the White/Black divide, scholars have found that Latinos are perceived by justice officials to be more dangerous than Whites and consequently, are treated more punitively than their non-Latino counterparts.[2]

In order to advance research on this topic, we move beyond the standard binary measures of race used in criminal justice research and examine racial and ethnic subgroups (i.e., Black, Latino, and White) in criminal justice administrative data.[3] We build off recent work from the MacArthur Foundation's Safety and Justice Challenge (SJC), which found that despite a reduction in the population of people entering local justice systems, disparities persist.[4]

In particular, we examine the effect of race across system outcomes in two SJC sites—Harris County, Texas and Multnomah County, Oregon. Given the varied effects of gender in sentencing research, analyses include the joint effects of race and gender on multiple justice system outcomes. Our goal is to provide a more comprehensive account of the effects of race, ethnicity, and gender in front-end and back-end justice system outcomes.

1. National Academies of Sciences, Engineering, and Medicine. 2023. Reducing Racial Inequality in Crime and Justice: Science, Practice, and Policy. Washington, DC: The National Academies Press. https://doi.org/10.17226/26705.
2. Chen, E. (2014). In the furtherance of justice, injustice, or both? A multilevel analysis of courtroom context and the implementation of Three Strikes. Justice Quarterly, 31(2), 257–286; Light, M. T., Massoglia, M., & R. King. (2014). Citizenship and punishment: The salience of national membership in U.S. criminal courts. American Sociological Review, 79(5), 825–847; Rodriguez, N. (2013). Concentrated disadvantage and the incarceration of youth: Examining how context affects juvenile justice. Journal of Research in Crime and Delinquency 50(2):189-215; Zatz, M. (2000). The convergence of race, ethnicity, gender, and class on court decision making: Looking toward the 21st century. In Policies, processes, and decisions of the criminal justice system (Vol. 3, pp. 503–552). Criminal Justice. Washington, DC: U.S. Department of Justice.
3. Throughout this brief, we use the term "Latino" to reflect Hispanics, Latinos/as, and Latinx persons more broadly. Polls indicate that most Hispanics (61%) prefer Hispanic or Latino, 29% prefer Latino and 4% Latinx. (Noe-Bustamente, L., Mora, L., and Lopez, M. August 11, 2020. "About One-in-Four U.S. Hispanics Have Heard of Latinx, but Just 3% Use It". Pew Research Center. Available at: https://www.pewresearch.org/race-and-ethnicity/2020/08/11/views-on-latinx-as-a-pan-ethnic-term-for-u-s-hispanics/).
4. Khan, Sana, Emily West, and Stephanie Rosoff, "Jail Populations, Violent Crime, and COVID-19," March 2023.

Methodology & Analysis

To pursue this study, we obtained deidentified case-level administrative data from criminal justice agencies in Harris County, Texas and Multnomah County, Oregon. These data were provided by the Institute for State and Local Governance (ISLG).

Harris County data included arrest, prosecution, and jail records between May 2013 and April 2020. We focused our analysis on a cohort of individuals who were arrested in 2017, allowing for a comprehensive evaluation of approximately four years of prior arrest records and three years of post-arrest outcomes. Arrest, jail and prosecution data were linked using person and case-level identifiers to examine the following four system outcomes: pretrial detention, the number of days detained (if the individual was detained), the set bond amount, and conviction. The final sample in Harris County represented 50,209 unique individuals arrested in 2017.[5] Control measures were included in the analyses.[6]

Multnomah County data consisted of jail and court records between June 2014 and April 2019. Individuals who were admitted to jail in 2018 served as the cohort of analysis, providing four years of prior court history and a single post year for case outcomes. We used person and case-level identifiers to link jail and court data for the 2018 cohort and examined the following three system outcomes: pretrial detention, whether an individual was released on their own recognizance, and the number of days detained (if the individual was detained). The final sample for Multnomah County included 16,685 jail bookings.[7] Control measures were included in the analyses.[8]

Regression analysis with an entropy weighting technique were conducted to examine the joint effects of race and gender relative to White men in systems outcomes.[9] In this policy brief, we illustrate the findings for Black men, Black women, Latino men, and Latino women subgroups.[10] For each system outcome, we provide a figure that illustrates the estimated effect for each outcome, broken down by the subgroup (i.e., Black men, Black women, Latino men, and Latino women). Each estimate also includes a confidence interval, which represents the range of values that we should expect to see given our estimation procedure 95 out of 100 times, if we were to repeat it with a new sample each time.

5. Arrest records include 348,732 observations between May 2013 and April 2018, with 56,265 arrests specifically in 2017. Prosecution records include a slightly higher number of observations, totaling 365,238 prosecutions between May 2013 and April 2020. Jail records include 353,220 individuals booked in jail from January 2011 to April 2019.

6. Control measures in Harris County analyses included age, age squared, number of charges, offense category, prosecutor's subjective risk level, indicator for if the charges included a felony, prior number of felony arrests, and prior number of misdemeanors arrests.

7. Jail data included 66,227 observations between June 2014 and April 2019. Data from court records included 209,629 observations, ranging from September 2010 to April 2019

8. Control measures in Multnomah County analyses included age, age squared, offense category, indicator for if the charges include a felony, prior number of misdemeanor and felony jail bookings, and the month the individual was booked in jail.

9. MacDonald, J. M. and E. A. Donnelly. (2019). Evaluating the role of race in sentencing: An entropy weighting analysis. Justice Quarterly, 36 (4), 656–681; Hainmueller, Jen. (2012). Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. Political Analysis, 20 (1), 25–46.

10. Technical details on the methodology and summary tables are included in the Appendix.

Findings

Harris County, Texas

Estimates for Harris County reveal significant differences for most groups at every stage of the criminal justice system we examine. Pretrial and trial outcomes for men and women are similar across racial groups, with Black and Latino men receiving more punitive outcomes relative to White men and Black and Latino women receiving seemingly more lenient outcomes compared to White men. Results indicate higher probabilities of pretrial detention, longer pretrial detention jail stays, higher bond amounts, and higher probabilities of conviction for both Black and Latino men compared to White men. Black women had lower probabilities of pretrial detention compared to White men, while estimates indicate Latino women had similar probabilities of pretrial detention to White men. Additionally, Black and Latino women received shorter jail stays, lower bond amounts, and had lower probabilities of conviction relative to White men.[11]

Figure 1.

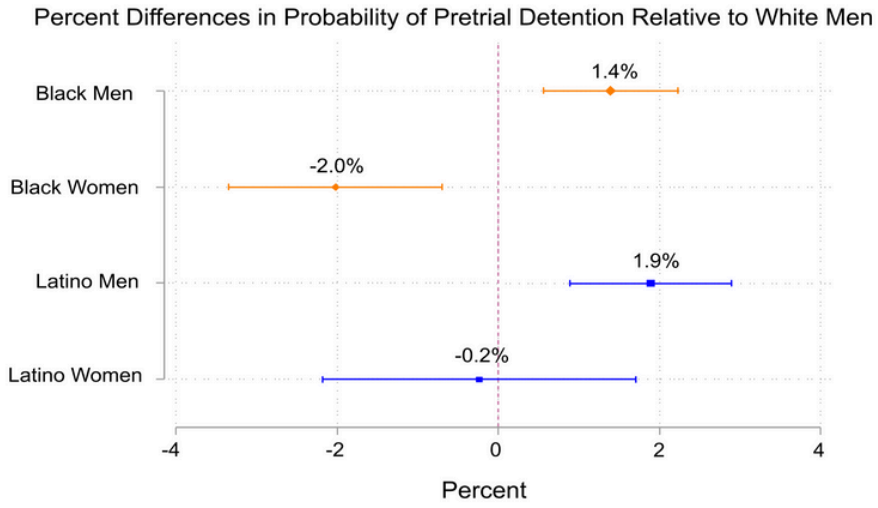

Figure 1 illustrates results for the joint effects of race and gender on the rate of pretrial detention. Estimates indicate Black and Latino men were about 1.4% and 1.9%, respectively, more likely to be detained pretrial compared to White men. However, estimates indicate that Black women were about 2% less likely to be detained pretrial compared to White men, while Latino women experienced similar rates of pretrial detention to White men.

11. Although not reported in these figures, White women tend to have similar outcomes as Black and Latino women, when compared to White men.

Findings

Figure 2.

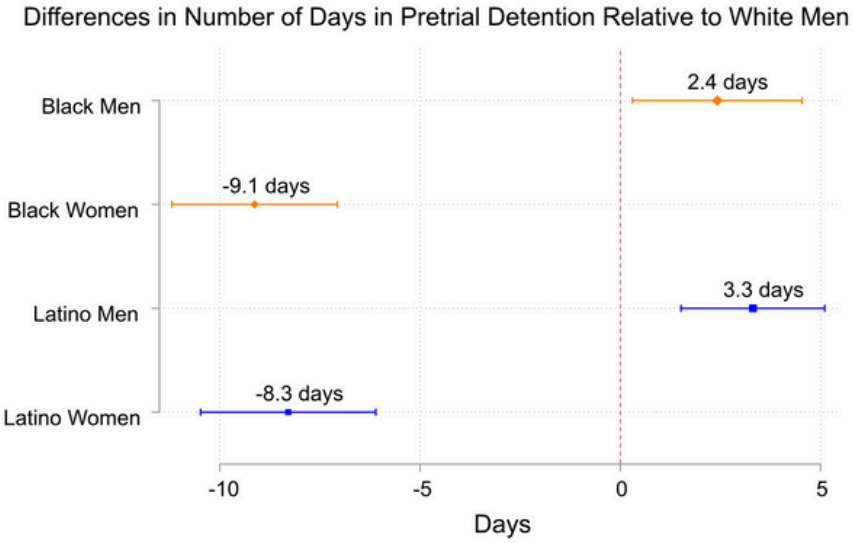

Figure 2 displays the results for the joint effects of race and gender on the length of pretrial detention. Black and Latino men experienced about 2.4 and 3.3 more days in detention, compared to White men. However, Black and Latino women had shorter detention stays relative to White men, 9.1 days fewer for Black women and 8.3 days fewer for Latino women.

Figure 3.

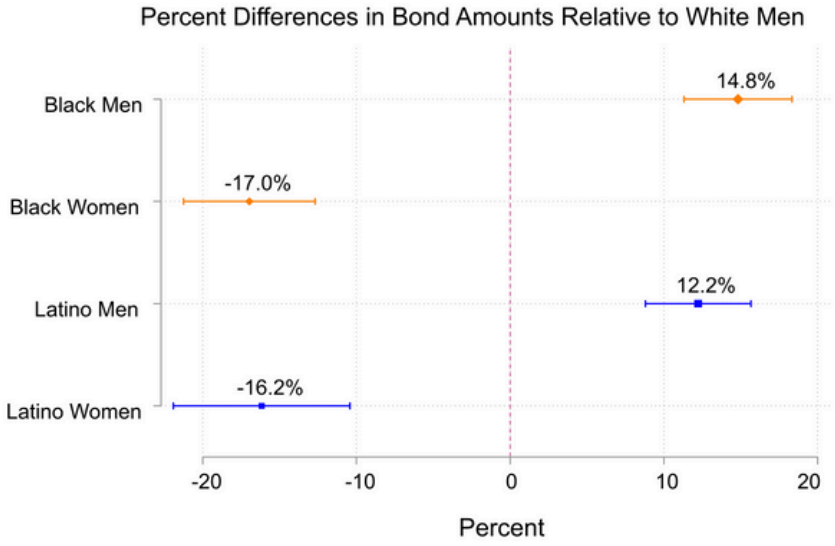

Figure 3 illustrates that Black and Latino men had higher bond amounts (in dollars) compared to White men, 14.8% and 12.2% respectively. Black and Latino women received lower bond amounts relative to White men, 17% and 16.2% respectively.

Findings

Figure 4.

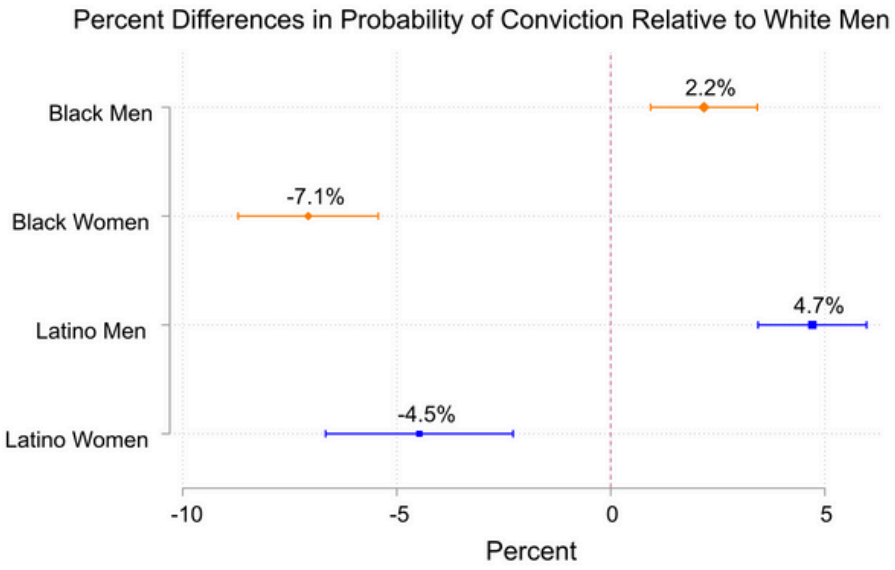

Figure 4 illustrates the joint effects of race and gender on the probability of being convicted. For this outcome, sociodemographic, legal, and pretrial detention measures were included as controls. The probability of conviction was higher for Black and Latino men relative to White men, but lower for Black and Latino women. In particular, Black men experienced a 2.2% increase in the probability of being convicted relative to White men, while Latino men faced a 4.7% increase in the probability of being convicted. Black women were about 7.1% less likely to be convicted relative to White men, while Latino women were about 4.5% less likely to be convicted than White men.

In general, these results are compounded by the effect of pretrial outcomes. Although not reported here, Black individuals were about 6.2% more likely to be convicted if they had experienced pretrial detention and another 0.6% increase in the probability of conviction for every ten days they were detained in jail. Latino individuals faced a 5.2% increase in the probability of conviction if they had been detained pretrial, with another 0.7% increase for every ten days in jail.

Findings

Multnomah County, Oregon

Estimates for Multnomah County reveal greater differences at the front-end of the system than back-end system outcomes.[12]

Figure 5.

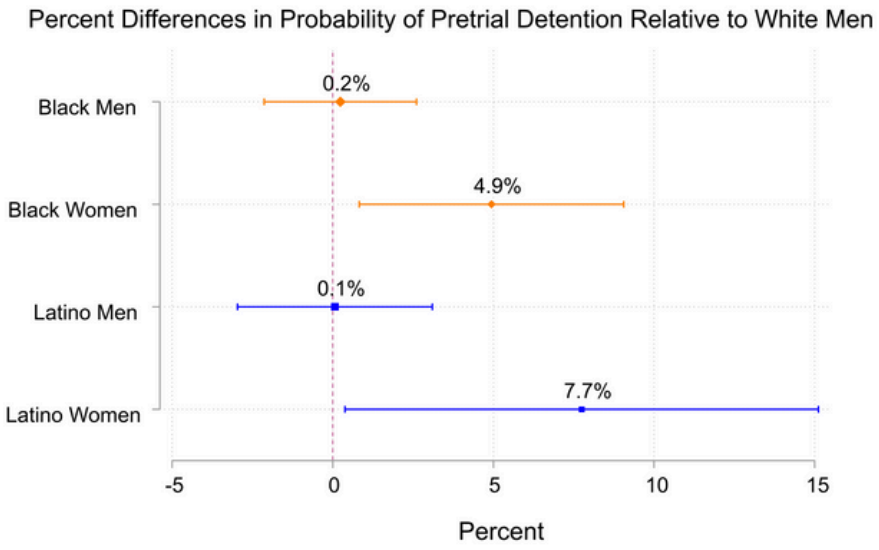

Figure 5 illustrates the joint effects of race and gender on the probability of pretrial detention. Estimates show no significant differences for Black and Latino men relative to White men. However, findings indicate that Black and Latino women had a higher probability of pretrial detention relative to White men, 4.9% and 7.7.%, respectively.

12. Although not reported here, the outcomes for White women tend to be similar to those of Black and Latino women.

Findings

Figure 6.

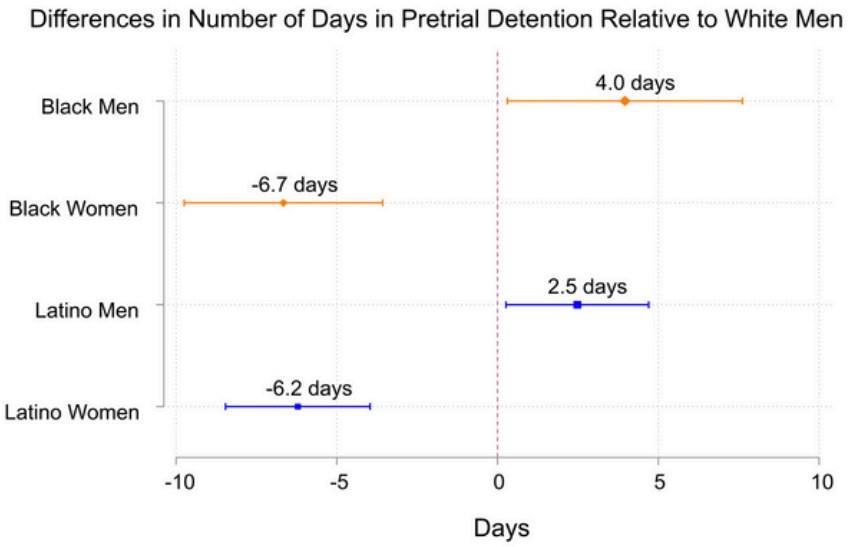

Figure 6 illustrates that Black and Latino men experienced considerably longer stays in detention. On average, Black men were detained four days longer and Latino men two and half days longer than White men. Black and Latino women faced considerably shorter stays in detention, with Black women spending about 6.7 fewer days and Latino women facing about 6.2 fewer days relative to White men.

Figure 7.

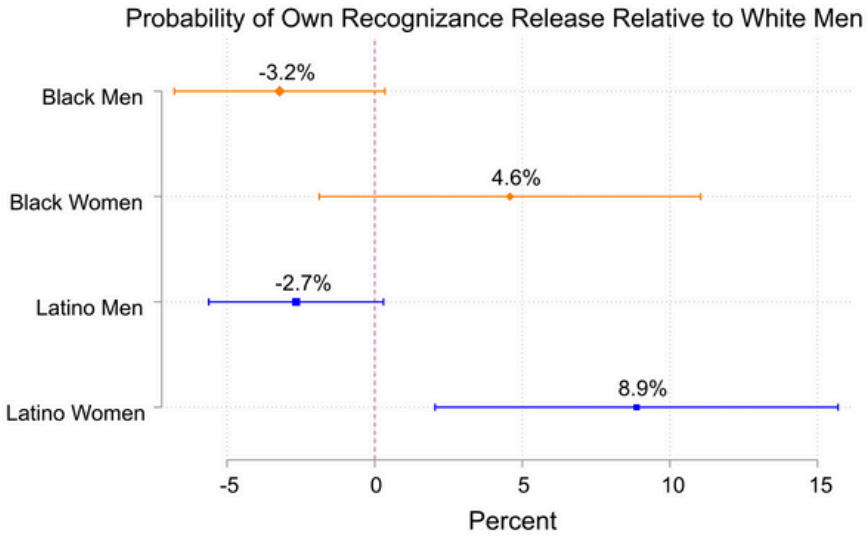

Figure 7 illustrates that Latino women had a higher probability of being released on their own recognizance than White men. This was the only significant joint race and gender effect in the released on their own recognizance outcome.

Policy Recommendations

Encourage the Collection of Race and Ethnicity Data Across Criminal Justice Agencies.
Currently, criminal justice agencies rely on different methods to collect and record race and ethnicity information. We encourage agencies to develop a system-wide standard for the categorization of race and ethnicity data. This is especially important in light of the U.S. Office of Management and Budget (OMB) new standards on collecting race/ethnicity data across federal agencies. The collection of self-identification and "street race" data would provide informative data on how these measures are similarly or differently associated with disparities in system outcomes.

Encourage the Examination of Outcomes by Race and Gender.
The interaction of race, ethnicity, and gender offers valuable insight into the treatment of different subgroups. Investigating system outcomes along race and gender can direct attention to where disparities exist and where to direct targeted interventions for particular subgroups.

Conduct Analyses of Front-end Outcomes as Drivers of Disparities.
Analyses of front-end system outcomes such as pretrial detention and length of detention can significantly inform what we know about racial and ethnic disparities in the justice system. A review of policies and practices that guide these initial justice system outcomes, and how they impact particular subgroups, will significantly advance research and practice.

Appendix

The entropy weighting procedure creates weights for comparisons across two dichotomous categories and therefore restricts analysis to specific comparisons between racial groups. For the purposes of this study, White, non-Latino individuals were set as the reference group. This provided that in each estimation, coefficients are relative to the effects on this reference group. This method enabled us to investigate racial groups' unique experiences in comparison to a baseline that is commonly regarded as the normative or dominant population in a variety of societal contexts, including the criminal justice system.

In the weighting procedure we matched on all characteristics of individuals in each racial group up to the third statistical moment (the mean, variance, and skewness). Once the weights were generated, we employed the following linear model where the sample weights were those generated previously,

$$y_i = \beta_0 + \beta_1 Race_i + \beta_2 Gender + \beta_3 Race_i \times Gender_i + X_i\Gamma + \varepsilon_i.$$

Here, $Race_i$ takes on the value 1 if individual i is of the racial category of interest (either Black non-Latino or Latino, depending on the specification) and 0 if the individual is White, non-Latino (our reference category). Gender is a dichotomous variable that takes the value of 1 if the individual is a woman and 0 if they are a man. X_i is a matrix of covariates—that vary based on the location of interest and available data from those locations—and includes individual demographic characteristics, current criminal charge characteristics, and prior criminal history. For Harris County, demographics included age and age squared, criminal charge characteristics included the total number of charges for the current case, the type of offense for the most serious charge (violent, property, serious, DWI, drug, or other, where violent is the reference category), the subjective risk level assigned by the prosecuting authority which takes the value of 1 (least risky) to 3 (most risky), an indicator for felony charge, as well as the number of prior felony and misdemeanor arrests. For Multnomah County, demographics include age and age squared, the offense category (alcohol and drug, behavioral, local, person, property, or vehicle, where alcohol and drug is the reference category), an indicator for felony charge, the prior number of felony and misdemeanor jail bookings, and the month the individual was booked in jail. For Harris County, when estimating trial outcomes (e.g., conviction), an individual's pretrial outcomes—whether the individual was detained prior or during their trial and the length of that detention in days—were also included in X_i.

The outcomes of interest, y_i, vary by location due to data availability. For Harris County these were either the natural log of the bond amount recorded by the court, an indicator for pretrial detention that takes the value of one if the individual faced at least one day in jail and zero otherwise, the number of days of pretrial detention, and a dichotomous variable that takes on the value of one if the individual was convicted and zero otherwise. For Multnomah County these included an indicator for pretrial detention that takes the value of one if the individual faced at least one day in jail and zero otherwise, the number of days of pretrial detention, and an indicator variable for whether an individual was released on their own recognizance.

Using this specification, estimates for the effects for men are represented by β_1 and effects for women—in their respective racial or ethnic category—are the sum of β_1, β_2, and β_3, with inference determined by a join t-test of the coefficients. For these estimates, the reference category remains White men, that is, the difference between an individual with indicators for all categories set to one and one where they are all zero.

Appendix

Table A1: Harris County Race and Gender for Total Sample

Race and Gender	Sample Size	Share of Total Sample
White men	10,226	20.37%
White women	3,682	7.33%
White total	13,909	27.70%
Black men	16,623	33.11%
Black women	4,445	8.85%
Black total	21,068	41.96%
Latino men	12,024	23.95%
Latino women	1,950	3.88%
Latino total	13,974	27.83%
Asian/Pacific Islander men	553	1.10%
Asian/Pacific Islander women	171	0.34%
Asian/Pacific Islander total	724	1.44%
American Indian or Alaskan men	67	0.13%
American Indian or Alaskan women	21	0.05%
American Indian or Alaskan total	88	0.18%
Total	50,209	100.00%

Table A2: Harris County Justice System Outcomes by Race and Gender Relative to White Men

	Pre-trial Detention (Percent)	Length of Pre-Trial Detention (Days)	Bond Amount (Percent)	Conviction (Percent)
Black men	1.4***	2.4**	14.8***	2.2***
Black women	-2.0***	-9.1***	-17.0***	-7.1***
Latino men	1.9***	3.3***	12.2***	4.7***
Latino women	-0.2	-8.3***	-16.2***	-4.5***
Asian/Pacific Islander men	1.2	-4.5**	-6.5	-7.2***
Asian/Pacific Islander women	-11.3***	-10.3***	-6.6***	-17.9***

** p < .1, ** p < .05, *** p < .01*

Appendix

Table A3: Multnomah County Race and gender for total sample

Race	Sample Size	Share of Total Sample
White men	7,963	47.72%
White women	2,893	17.34%
White total	10,856	65.06%
Black men	2,577	15.44%
Black women	690	4.14%
Black total	3.267	19.58%
Latino men	1,490	8.93%
Latino women	213	1.28%
Latino total	1,703	10.21%
Asian/Pacific Islander men	399	2.39%
Asian/Pacific Islander women	131	0.79%
Asian/Pacific Islander total	530	3.18%
American Indian or Alaskan men	202	1.21%
American Indian or Alaskan women	110	0.66%
American Indian or Alaskan total	312	1.87%
Unknown men	13	0.08%
Unknown women	4	0.02%
Unknown total	17	0.10%
Total	16,685	100.00%

Table A4: Multnomah County Justice System Outcomes by Race and Gender Relative to White Men

	Pre-trial detention (Percent)	Pre-trial detention length (Days)	OR release (Percent)	Changes in total charges (count)
Black men	0.2	4.0**	-3.2*	0.02
Black women	4.9**	-6.7***	4.6	0.02
Latino men	0.1	2.5**	-2.7*	0.13
Latino women	7.7**	-6.2***	8.9**	-0.13

** p < .1, ** p < .05, *** p < .01*

Table A5: Multnomah County Justice System Outcomes by Race and Gender Relative to White Men

	Conviction (Percent)	ODOC (Percent)	Community Service (Percent)	Probation (Percent)
Black men	-3.5*	0.01	-1.7	-3.0
Black women	-7.4**	-2.4***	-1.4	-6.5**
Latino men	-3.2	-0.06	-1.6	-0.9
Latino women	-2.8	-2.3***	-2.4	-4.1