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Recipient: Gabrielle Ploplis
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Regarding: Analysis of Pickaway County Drug Data

Foreword

The above referenced Author is a computationally and legally trained sociologist with a PhD in Sociology from Northwestern University and a JD from the Northwestern Pritzker School of Law. She is currently a professor at Georgia State University in the Andrew Young School of Policy Studies. The Author has been asked to conduct an analysis of Pickaway County Drug data provided by attorney Gabrielle Ploplis. The report to follow comments on the data cleaning process and shares results from the analysis.

Data Cleaning Process

The data for this analysis was provided in the form of an excel spreadsheet. In this Author's experience, the data gathered and the process by which Ms. Ploplis gathered it is unusually rigorous and complete. For example, Ms. Ploplis provided data confirmation fields and took extra steps to ensure the accuracy of various data fields. The cleaning steps taken by this Author did not involve gathering external or making legal decisions. Instead, they were limited to making the data amenable to analysis by separating information into new columns, normalizing data labels etc. A small number of cases were recommended for removal via the legal knowledge of Ms. Ploplis and those recommendations were followed by this Author.

The data contains 1,132 rows, identified by case number, name, and date of birth. The results to follow consider the rows individually, though an individual in the data may have two separate case number. The unit of analysis for this report concerns adjudication by case, making this shape of the data prudent. For most of the categories in the results to follow, the data are much more complete than is average with similar data sets, thanks to Ms. Ploplis' thorough data collection and confirmation efforts. The data all pertain to drug charges, with categories including RICO, trafficking, and possession. Specific drugs are often named in these charges, including heroin, crack, meth, and marijuana. Notably, the size of this data is also larger than many other criminal justice data samples, which provides more analytic leverage to observe patterns in the data.

Results

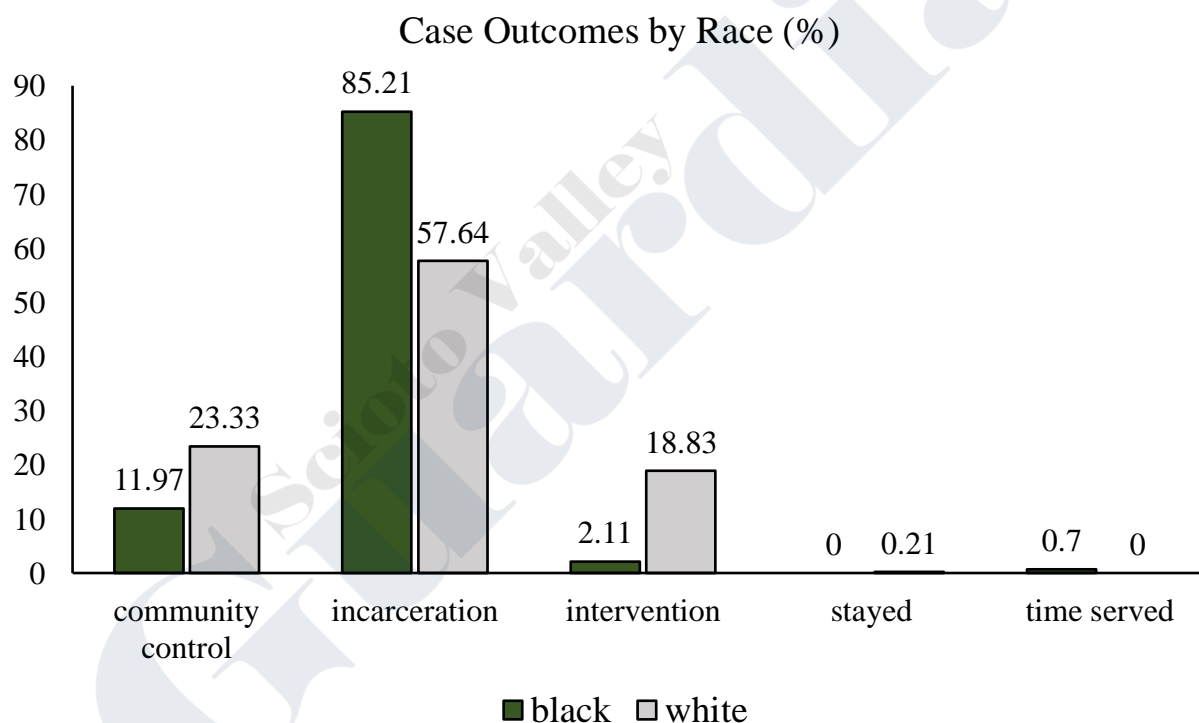
The analytic goal set before this Author was to investigate any potential racial disparity in drug sentencing in Pickaway County. The results section begins with descriptive univariate information and proceeds to more complex visualizations.

Sex information was available for 1,111 rows with 69.67% reported as male (N=774) and 30.33% (N=337) reported as female. Race information was present for 1,102 rows. 0.18% (N=2) individuals were American Indian or Alaskan Natives, 12.89% (N=142) were Black, 0.18%

(N=2) were listed as Hispanic, and 86.75% (N=956) were white.¹ This result differs from what we would expect based on the population of Pickaway County. According to the U.S. Census, 90.08% of the county is white and 3.69% is Black.² This means that there is a higher percentage of Black defendants than would be expected by demographics alone. 98.67% (N=1,116) of cases ended with a plea. 52.74% (N=596) involved a defendant who did not have a prior felony, where 47.26% (N=534) involved a defendant who did have a prior felony.

An Analysis of case outcomes indicated substantial variation by race. Of the 142 Black defendants, 85.21% (N=121) were sentenced to incarceration of some length. Comparatively, 57.64% (N=551) of the 956 white defendants were so sentenced. 23.33% (N=223) of white defendants received community control and 18.83% (N=180) received intervention. Black defendants received those outcomes significantly less often with 11.97% (N=17) Black defendants receiving community control and only 2.11% (N=3) receiving intervention. Figure 1 visually plots these differences.

Fig. 1. Case Outcomes by Race (%)



¹ The remaining race analyses in this report focus on Black and white defendants only due to a dearth of data in other race groups.

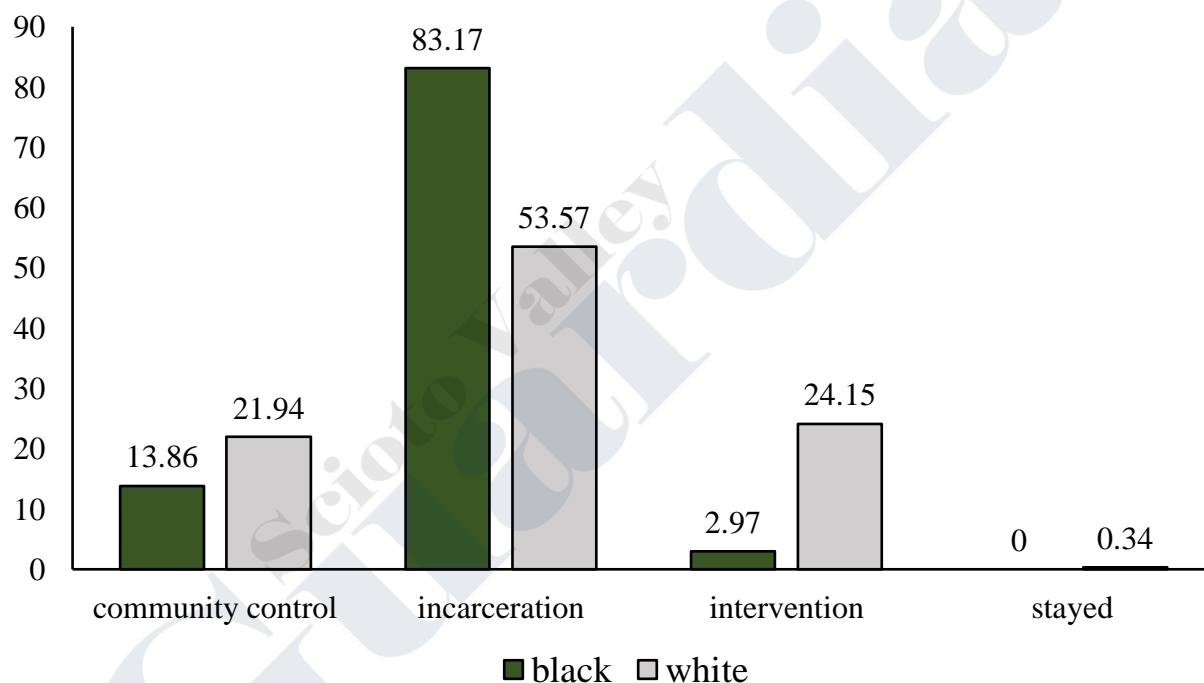
² Data available at: https://data.census.gov/profile/Pickaway_County,_Ohio?g=050XX00US39129#race-and-ethnicity

Possible explanations for the differences in outcomes could relate to different categories of criminal charges, different legally required outcomes for different drugs, or different treatment of individuals based on criminal history (operationalized here as having a prior felony conviction). This Author conducted additional analyses to determine the preliminary likelihood of these alternative explanations.

Separate variables were constructed for three main offense categories: RICO, possession, and trafficking. These variables were constructed based on the charging information provided in the spreadsheet. Of the 60 individuals with RICO charges, all 60 were sentenced to incarceration.

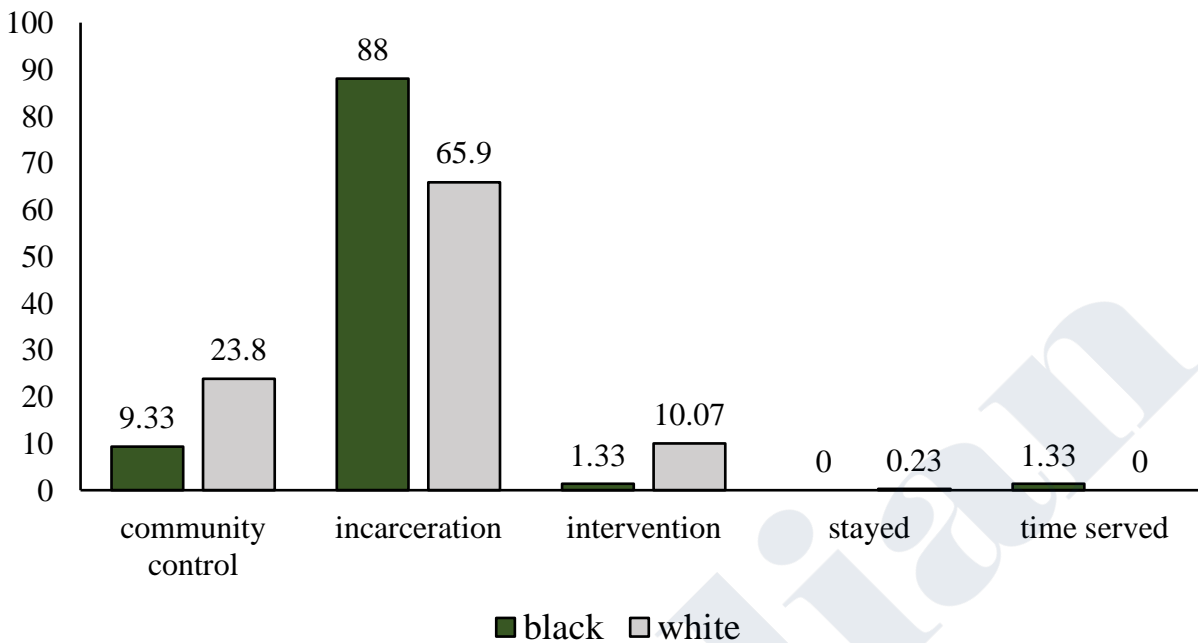
692 individuals had possession-related charges, but the outcomes varied substantially by race. Where 83.17% of Black defendants were sentenced to incarceration, 53.57% of white defendants were so sentenced.

Fig. 2. Outcomes of Possession-related Cases by Race (%)



Similar patterns were observed in the 514 trafficking-related offenses, where a higher percentage of Black defendants received incarceration (88%) than white defendants (65.90%). Consistent with previous findings, white defendants were more likely to receive alternative sanctions. These results are reported in figure 3 (below).

Fig. 3. Outcomes of Trafficking-related Cases by Race (%)



Next, analyses were conducted to explore whether differential engagement with certain types of drugs would explain the differences in outcomes. Figure 4 (below) indicates that this is not the case. Instead, Black defendants are more likely to be sentenced to incarceration across all four analyzed drug types. Notably, white defendants were also more likely to receive alternative sanctions across all categories.

Fig. 4. Case Outcomes by Defendant by Race by Drug Type

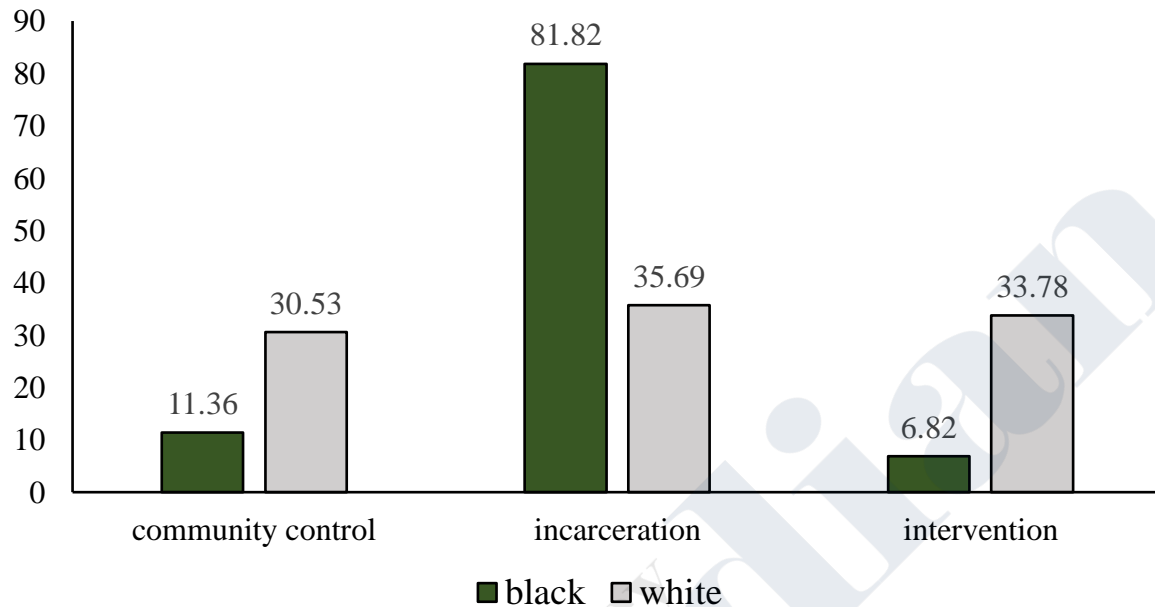
	Black				White			
	heroin	crack	meth	marijuana	heroin	crack	meth	marijuana
c. control	10.53	9.76	0.00	22.22	16.80	24.58	20.93	39.53
incarceration	89.47	87.80	100.00	81.82	59.35	58.47	68.22	51.16
intervention	0.00	2.44	0.00	0.00	23.58	16.95	10.85	9.30
stayed	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00

A third type of analysis was conducted to see if presence of a prior felony would explain the difference in case outcomes. For defendants with prior felonies, the percentage of defendants sentenced to incarceration was similar. 86.73% of Black defendants with a prior felony were sentenced to incarceration compared to 84.45% of white defendants with a prior felony were sentenced to incarceration.

The difference in outcomes was apparent among defendants who did not have a prior felony conviction. 81.82% of Black defendants who did not have a prior felony were sentenced to incarceration, which is similar to the percentage of Black defendants with a prior felony so sentenced. However, only 35.61% of white defendants without a prior felony were sentenced to

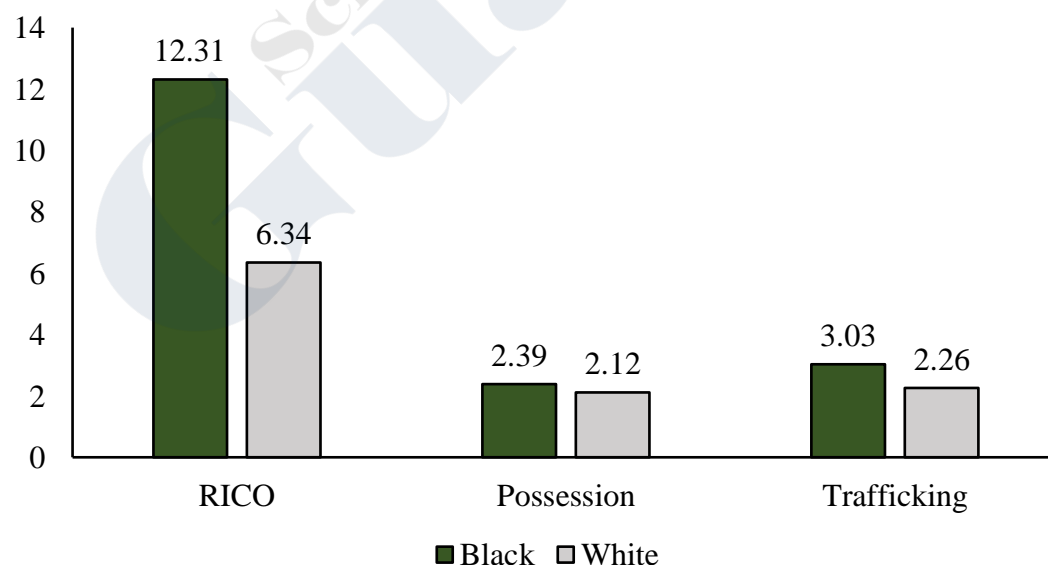
incarceration while 33.78% received intervention and 30.53% received community control. Figure 5 visually represents these differences.

Fig. 5. Case Outcomes for Defendants with No Prior Felony (%)



Additional analysis was conducted to further examine potential disparities in sentence length. These numbers should be interpreted while taking into account the substantial difference found in intervention vs. incarceration outcomes. That is, the numbers to follow represent a much larger proportion of Black defendants because they are more likely to receive carceral outcomes whereas as a greater proportion of white defendants receive non-carceral outcomes.

Fig. 6. Average Sentence Length in Years by Offense Category



An analysis of the three major categories: RICO, drug possession, and drug trafficking, showed that cases with Black defendants receive longer sentences on average (see Figure 6 above). The difference is particularly apparent with respect to RICO charges.

In a closer analysis of individuals with RICO charges, Ms. Ploplis identified 26 individuals who were charged with RICO and felony 1 trafficking. Of these individuals, 8 were Black and 18 were white. The mean sentence for white defendants was 11.28 while the mean sentence for Black defendants was 12.81 years. Of these individuals, the Author was advised that only 4 were sentenced to both an F1 RICO and an F1 trafficking. Inspection of the data revealed that 3 of these of defendants were Black and 1 was white.

Conclusion

The analyses conducted for this report consistently find that Black and white defendants have differing case outcomes for the analyzed drug cases. Black defendants are more likely to be sentenced to incarceration and less likely to receive alternative sanctions even when considering types of charges, types of drugs, and presence of a prior felony.

Should more data be made available to facilitate additional analysis, this Author is ready and willing to undertake that analysis.

Respectfully Submitted,

Kat Albrecht, JD, PhD