Race, Crime, and Police Interactions

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October 6, 2021

Research Questions

Race and poverty are correlated → and this leads to crime that is concentrated in low-income non-white neighborhoods

Police interactions are disproportionate in these places of *concentrated disadvantage*.

Research Question: Is the disparity in police interactions by race highly correlated with disparities in crime and/or poverty by race?

Contribution: Leverage numerous data sources to provide new evidence on the relationships between poverty, race, crime, and policing

Debates Surrounding this Correlation

- Understanding the mechanics of these correlations is first order

- New attention on structural inequities that contribute to race disparities in policing

- Disparities have also been used to place blame on non-white communities for criminal behavior and to justify differential police treatment

- Historically, economists have been focused on isolating taste-based discrimination/individual officer bias

- This focus has neglected the far more pervasive possibility of statistical discrimination - including its extent and potential consequences

Illustrative Evidence

Table 4. Firearm Homicide Offending, Victimization, and Police Shootings by Race

Year	Black homicide victims	White homicide victims	Black homicide offenders	White homicide offenders	Black police shootings	White police shootings
2015	16.69	1.76	12.95	1.28	0.63	0.28
2016	18.58	1.99	13.98	1.39	0.57	0.26
2017	17.99	1.97	14.22	1.41	0.54	0.27
2018	16.95	1.84	13.84	1.42	0.55	0.26
2019	17.63	1.77	14.38	1.38	0.60	0.25
Mean	17.57	1.87	13.87	1.38	0.58	0.26

Notes: Rates per 100,000 population. Data sources; https://github.com/washingtonpost/data-police-shootings
https://www.ojjdp.gov/ojstatbb/ezashr/; https://data.census.gov/cedsci/table?d=ACS%201-
Year%20Estimates%20Data%20Profiles&tid=ACSDP1Y2019.DP05

Homicide, homicide arrests, and police shootings are highly correlated by race, though not proportional

What can descriptive data tell us about the crime antecedents of race disparities in police actions?

Descriptive Evidence from New York City

Table 5. Ratio of Stops by Race to Reported Crime in NYC, 2013-2015

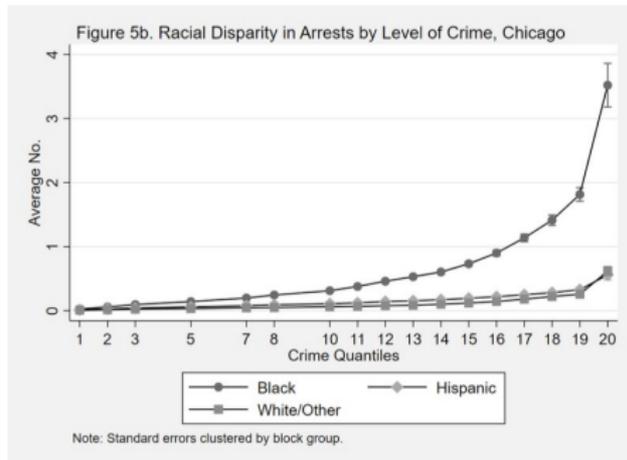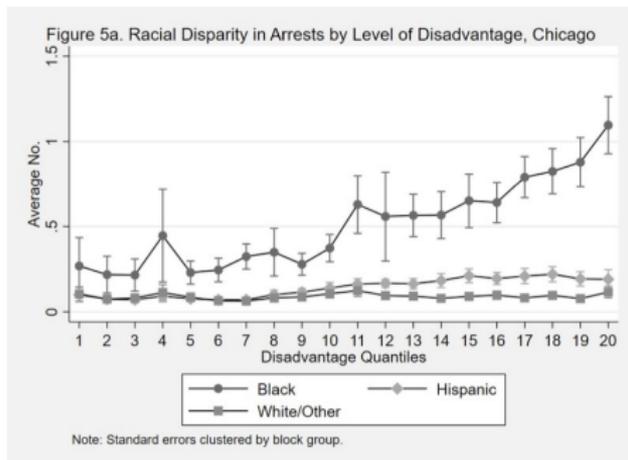| Stop to Crime	Black	White/Other	Hispanic	White/Other
2013	1.284 (.041)	.591 (.013)	.953 (.021)	.665 (.016)
Diff	.692 (.040) **		.287 (.022) **	
N=	3,267		3,253	
2014	.716 (.036)	.459 (.021)	.691 (.033)	.560 (.024)
Diff	.256 (.031) **		.130 (.029) **	
N=	566		513	
2015	.634 (.062)	.442 (.033)	.635 (.045)	.564 (.040)
Diff	.192 (.055) **		.070 (.040) **	
N=	194		214	
All Years	1.173 (.034)	.566 (.011)	.902 (.017)	.646 (.013)
Diff	.607 (.033) **		.255 (.018) **	
N=	4,027		3,890	

Note: Standard errors in parentheses.
$**p<.001$

Exercise shows that non-white civilians are treated differently by police, even after adjusting for local crime - *Likely Statistical Discrimination*

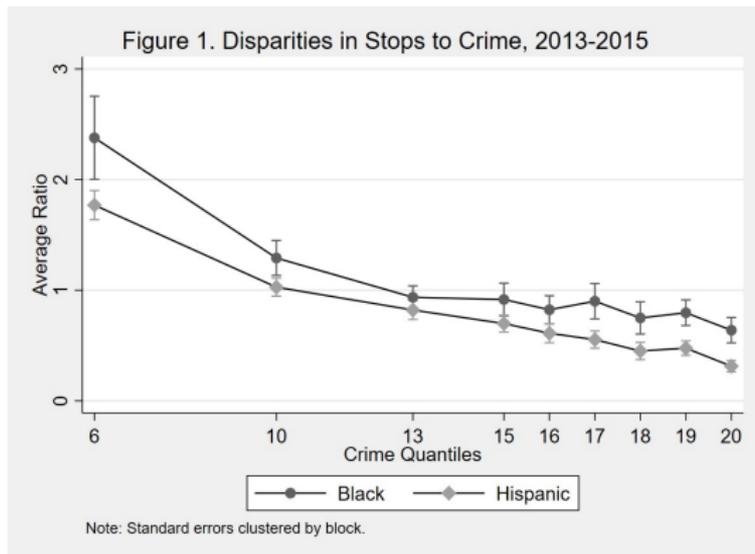<u>Open question:</u> What level of stops is efficient for each group?

Racial Disparities in Arrests are Larger in Areas of Higher Concentrated Disadvantage and Crime

Example of Chicago:

Figure 5a. Racial Disparity in Arrests by Level of Disadvantage, Chicago

Figure 5b. Racial Disparity in Arrests by Level of Crime, Chicago

There is a race gradient here: disparities get larger in high crime high poverty areas

A result that counters this narrative: Why are police stop race disparities larger in lower crime areas in NYC?

Figure 1. Disparities in Stops to Crime, 2013-2015

Note: Standard errors clustered by block.

Why might we see the reverse pattern in stops? Would we see the same pattern for concentrated disadvantage?

Is this profiling/statistical discrimination?

Thoughts on Analysis

Regression Analysis:

- Linear models can be easier to interpret, include as alternative
- Adjust within city model (using census blocks) for population
- Try flexibly controlling for population rather than using rates (across city model)
- Could help to more clearly explain how "concentrated disadvantage" is defined

Thoughts on Analysis

How do we think about arrests and crime?

- Analyses seem to vary definitions of police contact (arrest severity, stops) and crime types (any reported, serious)
- <u>Baseline Benchmark:</u> Might consider proportional response to be one arrest per crime of a specific category (e.g. robbery)
- Comparisons are tricky when arrests and crime are different categories
- Including by offense results would be interesting

Thoughts on Analysis

Can we decompose the arrest disparity correlation?

- Lofty and ambitious but...
- How much of the arrest disparity is due to crime and poverty/disadvantage versus a residual?
- Would test for proportionality of outcome to these underlying determinants

Numerous (Fundamental) Challenges to Answering this Question!!

- Analysis requires detailed data on BOTH policing and crime

- Crime could be directly affected by policing, so it is difficult to separate the two in descriptive analyses

- Poverty is so correlated with race that they can be difficult to separate - few white low-income neighborhoods parallel the poorest Black neighborhoods

- Disparities in policing could be proportional to crime OR they could be a function of statistical discrimination that reinforces future disparities - descriptive statistics cannot separate the two

- Proportionality to crime does not tell us whether policing practices are effective or constructive in reducing crime or burden of sanctions

Proportionality of Arrests to Crime/Poverty

A thought experiment: Police officers increase discretionary arrests in all areas *proportional* to current levels

Correlation between racial arrest disparities and crime/concentrated disadvantage would be the same

Does this mean that the arrest increase would be warranted, effective or justified by neighborhood differences?

We need more of an understanding of what works in policing and what is appropriate before we can rate the appropriateness of policing tactics and race disparities in policing