

# Social Costs of Proactive Policing: The Impact of NYC's Stop and Frisk Program on Educational Attainment

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# Most Americans Say Policing Needs 'Major Changes'

BY STEVE CRABTREE



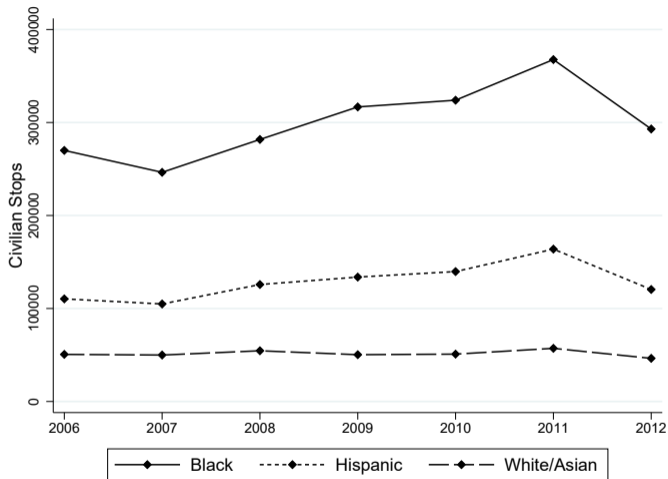
# *Michael Bloomberg Pushed ‘Stop-and-Frisk’ Policing. Now He’s Apologizing.*

Ahead of a possible Democratic run for president, the former mayor of New York City reversed himself before an important party constituency: black voters.



# Stop and Frisk Policing

- ▶ In NYC, 3.6 million stops from 2006 to 2012, primarily targeting young Black men.
- ▶ 2.5 million Americans stopped on the street by police each year.
- ▶ Little evidence of the social costs of frequent and relatively unproductive police contact.
- ▶ Implications for police reform, both in schools (SROs) and in the community.



# Social Impacts of Civilian Stops Are Ambiguous

## ▶ Possible positive effects:

- Deter crime, improve neighborhood safety (“Broken Windows”).  
(Becker, 1968; Wilson & Kelling, 1982; Chalfin & McCrary, 2017)
- Safer neighborhoods can reduce stress/anxiety and improve educational outcomes.  
(Margolin & Gordis, 2004; Sharkey et al., 2014)

## ▶ Possible negative effects:

- Introduction to criminal justice system.  
(Aizer & Doyle, 2015; Dobbie, Goldin & Yang, 2018)
- Traumatic effects of police interaction itself, affecting trust and cognition.  
(Brunson, 2007; Ang, 2018)
- Negative spillovers through policing of peers, teachers, or family members.  
(Rosenbaum et al., 2005; Kirk & Papachristos, 2011)

# This Paper

## Central question:

What is the net impact of stop and frisk policing on educational attainment?

## Empirical approach:

Exploit naturally-occurring movement of NYPD police commanders across precincts to estimate a switcher quasi-experiment. (Chetty, Friedman, & Rockoff, 2014)

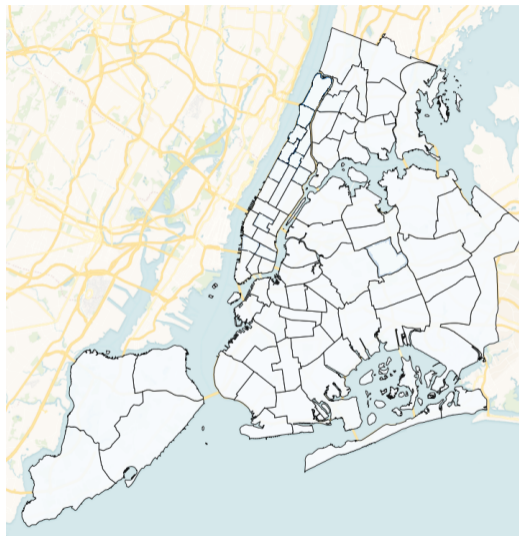
1. Predict a commander's effect on stops in one precinct using data from different precincts.
2. Estimate the effect of high propensity-to-stop commanders on educational attainment.

## Preview of Results

- ▶ Changes in commander effects are highly predictive of changes in actual stops, but uncorrelated with baseline measures of crime, policing, and education.
- ▶ Exposure to police stops has negative effects on high school graduation, college enrollment, and college persistence.
- ▶ Negative effects concentrated among Black students; positive spillovers for White and Asian students.
- ▶ Mechanisms include heterogeneous perceptions of safety and system avoidance.

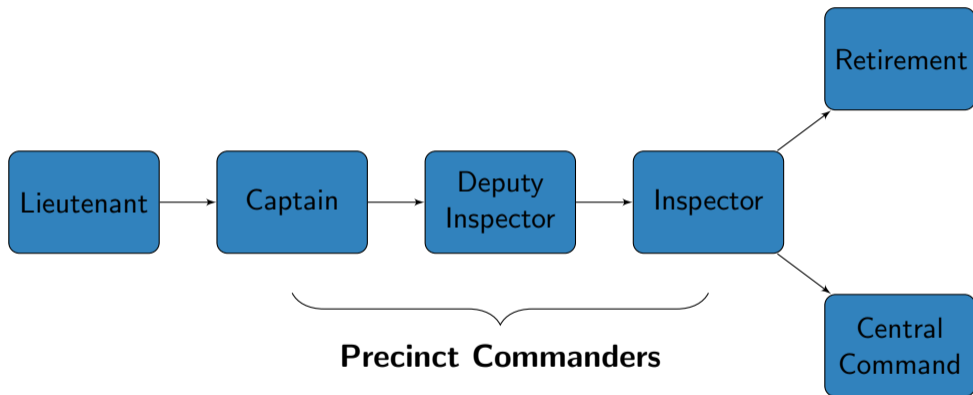
# NYPD Precinct Commanders

- ▶ Develop patrol strategy for one of NYC's 77 police precincts.
- ▶ Lead multiple precincts over their careers.
- ▶ Switch precincts every 2.4 years.
- ▶ Cross-precinct movement related to natural cycle of retirement and promotions.





## Commander Movement and Career Trajectory



# Data

## **NYPD Stop-Question-Frisk (SQF) data (2006-2012)**

- ▶ 5+ million records on all NYC civilian stops, frisks, and arrests.
- ▶ Date and location of each encounter.

## **NYPD precinct commander history (2006-2012)**

- ▶ Start and end month of all (527) precinct commander tenures.
- ▶ Compiled by the authors from news clippings and internet archives.

## **NYCDOE student-level administrative data (2006-2018)**

- ▶ Student-year records for all public school students in New York City.
- ▶ Demographics, attendance, test scores, graduation, college attendance.

# Sample and Descriptives

## SQF and crime data:

- ▶ All non-transit related stops, frisks, and arrests with date and location.
- ▶ Collapsed to precinct-year-month and matched to precinct commanders.

## Student data:

- ▶ All NYC middle school students from 2006 through 2012.
- ▶ Linked to precincts/commanders by school location.

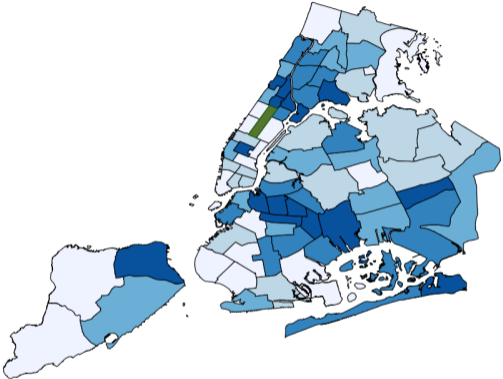
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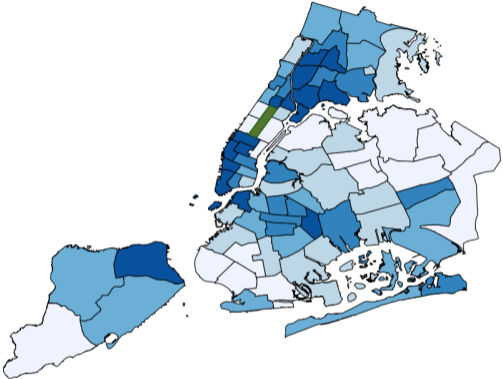
	Mean
<i>Panel A: Precinct SQF and Crime Data</i>	
Stops	506.71
Stop-Induced Frisks	273.26
Stop-Induced Arrests	29.86
Stop-Induced Drug/Weapon Recoveries	13.05
<i>N Precinct-Year-Months</i>	7,140
<i>Panel B: Student Data</i>	
Proportion Black	0.31
Proportion Hispanic	0.40
Proportion White	0.13
Proportion Asian	0.14
Proportion free or reduced lunch	0.69
<i>N Student-Years</i>	1,512,314

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# Stops are Concentrated in High-Crime Areas

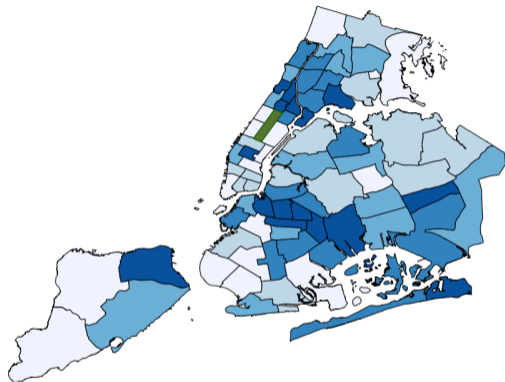


Avg. Stops

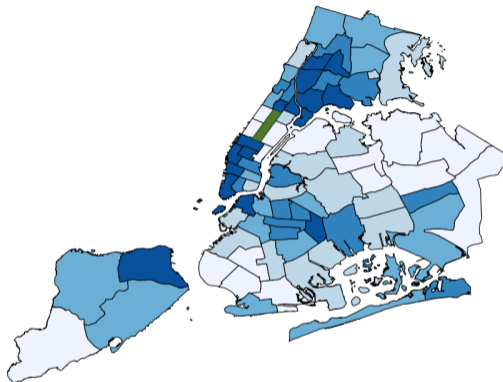


Avg. Crime

## Stops are Concentrated in High-Crime Areas



Avg. Stops



Avg. Crime

**Our solution:** Exploit natural movement of commanders across precincts to estimate “leave-precinct-out” commander effects on stops.

## Estimating Commander Stop Effects

**Step 1:** Compute monthly stop residuals, adjusting for observable baseline crime/policing and neighborhood characteristics:

$$\text{Stop}_{pm} = \beta_0 A_{p,t-1} + \beta_1 X_p + \alpha_m + v_{pm},$$

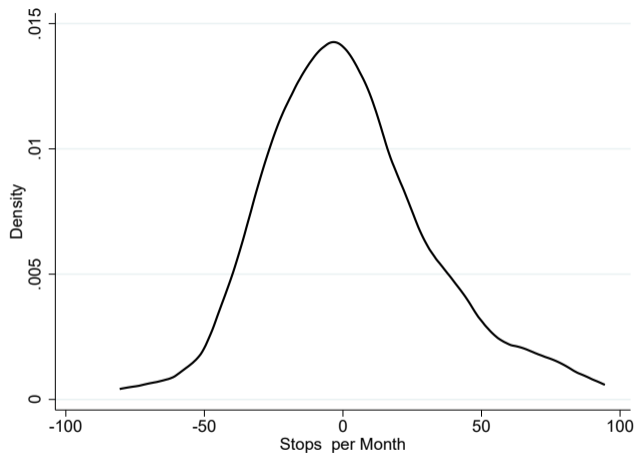
where  $v_{pm} = \mu_{jt} + \theta_p + \varepsilon_{pm}$

- ▶  $A_{p,t-1}$  = Crime and SQFs in precinct  $p$  during the prior commander's tenure,  $t - 1$
- ▶  $X_p$  = Precinct-level controls, such as race, median age, and median income
- ▶  $\alpha_m$  = Year-month fixed effects

**Step 2:** Generate empirical Bayes shrunken estimates of stop effects for commander  $j$  in tenure  $t$  ( $\hat{\mu}_{jt}$ ) using only residuals from other tenures.

## Empirical Distribution of Commander Stop Effects, $\hat{\mu}_{jt}$

- ▶ Standard deviation of 29 stops per month
- ▶ Commanders account for 12% of residual variance ( $v_{pm}$ )



Decomposition of Variance

## First Stage Estimation

Estimate first stage impact of commander effects ( $\hat{\mu}_{jt}$ ) on observed stops:

$$Stop_{pm} = \beta_{FS}\hat{\mu}_{jt} + \delta X_{p,t-1} + \Phi_m + \Gamma_p + \varepsilon_{pm}$$

- ▶  $\hat{\mu}_{jt}$  = Empirical Bayes shrunken estimates of commander stop effects (based on prior tenure data)
- ▶  $X_{p,t-1}$  = Crime and SQFs in precinct  $p$  during the prior commander's tenure,  $t - 1$
- ▶ Fixed effects for year-month ( $\Phi_m$ ) and precinct ( $\Gamma_p$ )

$\beta_{FS}$  identified by changes in predicted commander stop effects within a precinct



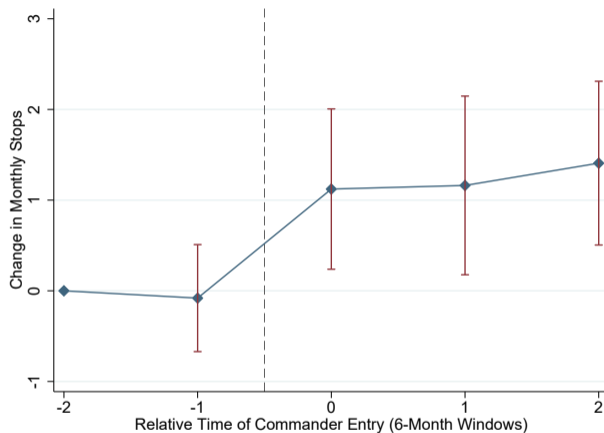
# First Stage Results

	(1)	(2)	(3)
Commander Effect on Stops	1.082** (0.438)	1.049*** (0.397)	1.007*** (0.376)
Precinct FE	✓	✓	✓
Year-Month FE	✓	✓	✓
Lagged-Tenure Crime	-	✓	✓
Lagged-Tenure SQF	-	-	✓
N Precinct-Year-Months	7,140	7,140	7,140

## Key findings:

- ▶ Changes in commander effects predict changes in observed stops.
- ▶ Principals (commanders) have control over agents (officers), even in settings where agents' actions are difficult to monitor and context-dependent.

# First Stage Event Study



## Key findings:

- ▶ No trend in stops prior to a commander switch.
- ▶ Stops increase (and persist) following the entrance of high-stop commander.

# Balance Checks

► **Key identification assumption:**

Commander stop effects are uncorrelated with other features of precincts that affect educational attainment.

► **Empirical test:**

We find that baseline covariates do not individually or jointly predict an incoming commander's stop effect.

	(1)	(2)
Mean monthly violations	0.035 (0.076)	0.175 (0.156)
Mean monthly misdemeanors	-0.012 (0.019)	-0.039 (0.042)
Mean monthly felonies	0.014 (0.032)	-0.034 (0.070)
Mean monthly stops	0.022 (0.017)	0.008 (0.022)
Mean monthly frisks	-0.016 (0.032)	-0.015 (0.036)
Mean math test scores	12.846 (24.546)	-0.435 (29.137)
Mean ELA test scores	-11.470 (26.237)	-2.338 (31.258)
Mean days absent	0.047 (0.363)	-0.115 (0.528)
Mean days suspended	17.668 (64.212)	64.226 (74.551)
Percent Black	3.414 (14.294)	-7.319 (26.178)
Percent English language learner	-30.449 (43.937)	16.486 (66.493)
Percent special education	-31.060 (52.945)	-43.013 (63.256)
Percent free or reduced lunch	20.651 (23.466)	3.122 (27.007)
Precinct FE		✓
P-value of Joint F-Test	0.286	0.816
N Precinct-Year-Months	7,140	7,140

## Reduced Form Estimation

Estimate reduced form impact of commander stop effects ( $\hat{\mu}_{jt}$ ) on educational outcomes:

$$Y_{it} = \beta_{RF}\hat{\mu}_{jt} + \delta X_{i,t-1} + \Gamma_t + \varepsilon_{it}$$

- ▶  $\hat{\mu}_{jt}$  = Empirical Bayes shrunken estimates of commander stop effects (based on prior tenure data)
- ▶  $X_{i,t-1}$  = Students' baseline test scores and demographic characteristics
- ▶ Fixed effects for school year ( $\Gamma_t$ )

$\beta_{RF}$  identified by differences in exposure to predicted commander stop effects

## Reduced Form: Net Effects Across All Students

	HS Grad. (1)	Enroll Coll. (2)	Enroll 4-Year (3)	Persist Coll. (4)
Commander Effect on Stops	-0.006* (0.003) [0.751]	-0.010*** (0.004) [0.566]	-0.003 (0.004) [0.342]	-0.012*** (0.004) [0.507]
N Student-Years	1,170,546	1,002,339	1,002,339	837,017

### Interpretation:

- ▶ 1 SD increase in commander effect (30 stops per precinct-month) reduces college enrollment by 1pp (2 percent) and persistence by 1.2pp (2 percent).

## Reduced Form Heterogeneity by Race

	HS Grad.	Enroll Coll.	Enroll 4-Year	Persist Coll.
<i>Panel A: Black Students</i>				
Commander Effect on Stops	-0.018*** (0.004) [0.697]	-0.025*** (0.005) [0.479]	-0.016*** (0.004) [0.262]	-0.025*** (0.005) [0.420]
<i>Panel B: Hispanic Students</i>				
Commander Effect on Stops	-0.002 (0.004) [0.693]	-0.006 (0.005) [0.483]	-0.002 (0.004) [0.232]	-0.010* (0.005) [0.421]
<i>Panel C: White and Asian Students</i>				
Commander Effect on Stops	0.006** (0.003) [0.887]	0.002 (0.004) [0.766]	0.010** (0.005) [0.569]	0.001 (0.004) [0.714]
N Student-Years	1,170,546	1,002,339	1,002,339	837,017

# Reduced Form Effects of Frisks

	HS Grad.	Enroll Coll.	Enroll 4-Year	Persist Coll.
<i>Panel A: Black Students</i>				
Commander Effect on Frisks	-0.011*** (0.004) [0.697]	-0.017*** (0.005) [0.479]	-0.011*** (0.004) [0.262]	-0.017*** (0.005) [0.420]
<i>Panel B: Hispanic Students</i>				
Commander Effect on Frisks	0.002 (0.004) [0.693]	-0.004 (0.004) [0.483]	-0.004 (0.003) [0.232]	-0.006 (0.004) [0.421]
<i>Panel C: White and Asian Students</i>				
Commander Effect on Frisks	0.009*** (0.003) [0.887]	0.012** (0.005) [0.766]	0.021*** (0.007) [0.569]	0.009* (0.005) [0.714]
N Student-Years	1,170,546	1,002,339	1,002,339	837,017

## Additional and Robustness Analyses

▶ Placebo test: no effects of high-stop commanders after 2013.

Placebo

▶ Age effects: similar results in each middle school grade.

Grades

▶ Extensive margin: similar results for indicator of ever exposed.

Extensive

▶ Race-specific VA: results flow through Black VA on Black students

Race VA

▶ Gender: Similar results by gender; same within-gender racial differences.

Male

Female



# Mechanisms

- ▶ No evidence of incapacitation effects: no increase in arrests.
- ▶ School safety: violent and disruptive school incidents decrease.
- ▶ Perceptions of safety: self-reported feelings of safety differ by race.
- ▶ System avoidance: chronic absenteeism increases for Black students.

Arrests

School Incidents

Perceived Safety

Absenteeism

Heterogeneity

## Conclusion

- ▶ Commanders' impacts on stops transfer across different settings and officers.
- ▶ Increased exposure to police stops has negative effects on high school graduation, college enrollment, and college persistence.
- ▶ Negative net effects, concentrated among Black students; some evidence of positive spillovers among White and Asian students.
- ▶ Results highlight the unintended consequences of criminal justice policies on educational inequality.

# Appendix

## Estimating Commander Stop Effects: Empirical Bayes Details

**Step 2:** Predict commander effect on stops,  $\mu_{jt}$ , using data only from commander  $j$ 's prior tenures:

$$\hat{\mu}_{jt} = \gamma \bar{\varepsilon}_{p,t-1}$$

where  $\bar{\varepsilon}_{j,t-1}$  is the mean residual of monthly stops in commander  $j$ 's prior tenure and  $\gamma$  represents the reliability of the commander effect (i.e., the signal to signal-plus-noise ratio):

$$\hat{\mu}_{jt} = \left( \frac{\sigma_{\mu}^2}{\sigma_{\mu}^2 + \sigma_{\theta}^2 + \left( \frac{\sigma_{\varepsilon}^2}{n_{j,t-1}} \right)} \right) \bar{\varepsilon}_{j,t-1},$$

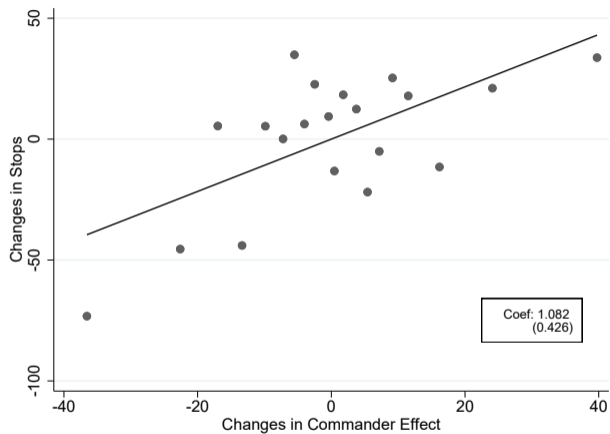
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# Variance Decomposition

Commander-level variance	14,799
Precinct-level variance	72,235
Within-precinct variance	32,534
Total variance	119,568
<i>Percent commander variance</i>	12.38%
Precinct Characteristics	✓
Year-Month FE	✓
Lagged Crime Controls	✓
Lagged SQF Controls	✓

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# First Stage



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# First Stage: Sensitivity to Controls in Value-Added

	(1)	(2)	(3)
<i>Panel A: Baseline Precinct Characteristics</i>			
Commander Effect on Stops	0.231*** (0.083)	0.254*** (0.069)	0.209** (0.083)
<i>Panel B: Baseline Precinct Characteristics &amp; Crime</i>			
Commander Effect on Stops	0.531** (0.218)	0.531*** (0.167)	0.453** (0.189)
<i>Panel C: Baseline Precinct Characteristics, Crime, &amp; SQF</i>			
Commander Effect on Stops	1.082** (0.438)	1.049*** (0.397)	1.007*** (0.376)
Precinct FE	✓	✓	✓
Year-Month FE	✓	✓	✓
Lagged-Tenure Crime	-	✓	✓
Lagged-Tenure SQF	-	-	✓
N Precinct-Year-Months	7,140	7,140	7,140

## First Stage (Frisks)

	(1)	(2)	(3)
Commander Effect on Frisks	1.361** (0.677)	1.152** (0.451)	0.831** (0.380)
Precinct FE	✓	✓	✓
Year-Month FE	✓	✓	✓
Lagged-Tenure Crime	-	✓	✓
Lagged-Tenure SQF	-	-	✓
N Precinct-Year-Months	7,140	7,140	7,140

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## First Stage (Post-2013)

	(1)	(2)	(3)
Commander Effect on Stops	-0.042 (0.266)	0.100 (0.239)	-0.071 (0.222)
Precinct FE	✓	✓	✓
Year-Month FE	✓	✓	✓
Lagged-Tenure Crime	-	✓	✓
Lagged-Tenure SQF	-	-	✓
N Precinct-Year-Months	6,188	6,188	6,188

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## Heterogeneity in Reduced Form Results Across Grades

	HS Grad. (1)	HS Dropout (2)	Enroll Coll. (3)	Enroll 4-Year (4)	Persist 2 Sem. (5)	Persist 4 Sem. (6)
Commander Effect	-0.006** (0.003)	0.003 (0.002)	-0.011** (0.004)	-0.002 (0.004)	-0.013*** (0.004)	-0.016*** (0.004)
(Commander Effect) × (Grade 7)	0.001 (0.002)	0.001 (0.001)	0.001 (0.003)	-0.000 (0.002)	0.001 (0.002)	0.004 (0.003)
(Commander Effect) × (Grade 8)	-0.001 (0.003)	0.001 (0.002)	0.000 (0.004)	-0.000 (0.003)	0.002 (0.003)	0.004 (0.004)
Sample Mean	[0.751]	[0.140]	[0.566]	[0.342]	[0.507]	[0.419]
N Student-Years	1,170,546	1,170,546	1,002,339	1,002,339	837,017	672,207

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# Heterogeneity in Reduced Form Results: Male Students

	HS Grad. (1)	HS Dropout (2)	Enroll Coll. (3)	Enroll 4-Year (4)	Persist 2 Sem. (5)	Persist 4 Sem. (6)
<i>Panel A: Males</i>						
Commander Effect on Stops	-0.006* (0.003) [0.713]	0.004* (0.002) [0.158]	-0.010** (0.004) [0.505]	-0.001 (0.003) [0.292]	-0.011*** (0.004) [0.447]	-0.011*** (0.004) [0.357]
<i>Panel B: Black Males</i>						
Commander Effect on Stops	-0.021*** (0.004) [0.644]	0.011*** (0.003) [0.181]	-0.026*** (0.005) [0.401]	-0.016*** (0.004) [0.199]	-0.026*** (0.005) [0.345]	-0.023*** (0.005) [0.251]
<i>Panel C: Hispanic Males</i>						
Commander Effect on Stops	-0.001 (0.004) [0.655]	0.003 (0.003) [0.197]	-0.006 (0.005) [0.417]	-0.002 (0.004) [0.187]	-0.008 (0.005) [0.355]	-0.006 (0.006) [0.263]
<i>Panel D: White and Asian Males</i>						
Commander Effect on Stops	0.007** (0.003) [0.859]	-0.004** (0.002) [0.082]	0.003 (0.004) [0.723]	0.011** (0.005) [0.520]	0.002 (0.005) [0.669]	-0.001 (0.006) [0.587]
N Student-Years	1,170,546	1,170,546	1,002,339	1,002,339	837,017	672,207

# Heterogeneity in Reduced Form Results: Female Students

	HS Grad. (1)	HS Dropout (2)	Enroll Coll. (3)	Enroll 4-Year (4)	Persist 2 Sem. (5)	Persist 4 Sem. (6)
<i>Panel A: All Females</i>						
Commander Effect on Stops	-0.005* (0.003) [0.789]	0.004* (0.002) [0.123]	-0.010** (0.004) [0.629]	-0.004 (0.004) [0.393]	-0.013*** (0.004) [0.570]	-0.015*** (0.005) [0.483]
<i>Panel B: Black Females</i>						
Commander Effect on Stops	-0.016*** (0.004) [0.748]	0.009*** (0.003) [0.142]	-0.023*** (0.006) [0.557]	-0.017*** (0.005) [0.325]	-0.024*** (0.006) [0.494]	-0.027*** (0.006) [0.398]
<i>Panel C: Hispanic Females</i>						
Commander Effect on Stops	-0.002 (0.004) [0.732]	0.004 (0.003) [0.159]	-0.005 (0.005) [0.552]	-0.002 (0.004) [0.280]	-0.011* (0.006) [0.489]	-0.014* (0.008) [0.392]
<i>Panel D: White and Asian Females</i>						
Commander Effect on Stops	0.005** (0.002) [0.916]	-0.004** (0.001) [0.048]	0.000 (0.003) [0.812]	0.008* (0.005) [0.621]	0.000 (0.004) [0.764]	0.001 (0.004) [0.703]
N Student-Years	1,170,546	1,170,546	1,002,339	1,002,339	837,017	672,207

# Extensive Margin: Effects of Exposure to Above Median Commander

	HS Grad. (1)	HS Dropout (2)	Enroll Coll. (3)	Enroll 4-Year (4)	Persist 2 Sem. (5)	Persist 4 Sem. (6)
<i>Panel A: Full Sample</i>						
Ever Exposed to High-Stop Commander	-0.013*** (0.005)	0.009*** (0.004)	-0.012* (0.007)	-0.005 (0.008)	-0.013* (0.007)	-0.018** (0.008)
<i>Panel B: Black Students</i>						
Ever Exposed to High-Stop Commander	-0.028*** (0.007)	0.016*** (0.005)	-0.033*** (0.010)	-0.032*** (0.007)	-0.037*** (0.011)	-0.045*** (0.011)
<i>Panel C: Hispanic Students</i>						
Ever Exposed to High-Stop Commander	-0.015** (0.007)	0.014*** (0.005)	-0.011 (0.009)	-0.004 (0.007)	-0.015* (0.009)	-0.022** (0.009)
<i>Panel D: White and Asian Students</i>						
Ever Exposed to High-Stop Commander	0.003 (0.006)	-0.005 (0.004)	0.006 (0.011)	0.021 (0.015)	0.014 (0.011)	0.018 (0.014)
N Student-Years	1,170,546	1,170,546	1,002,339	1,002,339	837,017	672,207

# Extensive Margin: Effects of Exposure to Top Quartile Commander

	HS Grad. (1)	HS Dropout (2)	Enroll Coll. (3)	Enroll 4-Year (4)	Persist 2 Sem. (5)	Persist 4 Sem. (6)
<i>Panel A: Full Sample</i>						
Ever Exposed to High-Stop Commander	-0.022*** (0.007)	0.016*** (0.005)	-0.030*** (0.008)	-0.013* (0.008)	-0.030*** (0.009)	-0.029*** (0.010)
<i>Panel B: Black Students</i>						
Ever Exposed to High-Stop Commander	-0.052*** (0.009)	0.033*** (0.006)	-0.067*** (0.012)	-0.043*** (0.008)	-0.068*** (0.012)	-0.066*** (0.011)
<i>Panel C: Hispanic Students</i>						
Ever Exposed to High-Stop Commander	-0.016* (0.008)	0.017*** (0.006)	-0.019* (0.010)	-0.013* (0.007)	-0.019* (0.010)	-0.023* (0.012)
<i>Panel D: White and Asian Students</i>						
Ever Exposed to High-Stop Commander	0.012* (0.006)	-0.009** (0.004)	0.004 (0.012)	0.024 (0.014)	0.010 (0.012)	0.013 (0.016)
N Student-Years	1,170,546	1,170,546	1,002,339	1,002,339	837,017	672,207

# Race-Specific VA Effects

	HS Grad. (1)	HS Dropout (2)	Enroll Coll. (3)	Enroll 4-Year (4)	Persist 2 Sem. (5)	Persist 4 Sem. (6)
<i>Panel A: Black Students</i>						
Commander Effect on Black Stops	-0.028*** (0.008)	0.020*** (0.006)	-0.033*** (0.010)	-0.014* (0.007)	-0.035*** (0.011)	-0.030*** (0.011)
<i>Panel B: Hispanic Students</i>						
Commander Effect on Hispanic Stops	0.001 (0.006)	0.001 (0.004)	-0.001 (0.007)	0.003 (0.006)	-0.002 (0.008)	-0.003 (0.008)
<i>Panel C: White and Asian Students</i>						
Commander Effect on White and Asian Stops	0.006 (0.005)	-0.002 (0.003)	0.005 (0.009)	0.017 (0.012)	0.005 (0.010)	0.001 (0.013)
N Student-Years	1,170,546	1,170,546	1,002,339	1,002,339	837,017	672,207

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## Incapacitation Effects: Arrests

	SQF Arrests (1)	All Arrests (2)	Felony Arrests (3)	Non-Felony Arrests (4)
<i>Panel A: All Arrests</i>				
Commander Effect on Stops	1.091 (1.032)	-3.704 (4.122)	-0.768 (1.297)	-2.936 (3.177)
Sample Mean	[29.860]	[347.992]	[93.545]	[254.447]
<i>Panel B: Arrests of Individuals Under Age 18</i>				
Commander Effect on Stops	0.241 (0.167)	-0.471 (0.476)	0.091 (0.175)	-0.563 (0.381)
Sample Mean	[4.133]	[34.088]	[11.163]	[22.925]
N Precinct-Year-Months	7,140	7,140	7,140	7,140



# School Safety: Violent and Disruptive Incidents

	Total Incidents (1)	Disruptive Incidents (2)	Minor Altercat. (3)	Harass/ Bully (4)	Serious Crimes (5)	Weapon/ Drug/Alc (6)
Commander Effect on Stops	-4.043*** (1.423)	-1.453** (0.568)	-1.652*** (0.552)	-0.480** (0.191)	-0.417* (0.235)	-0.042 (0.072)
Sample Mean	[50.833]	[13.447]	[17.985]	[6.292]	[9.790]	[3.320]
N School-Years	3,652	3,652	3,652	3,652	3,652	3,652

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## School Safety: Self-Reported Feelings of Safety

	Safe Outside		Safe in Classes	
	(1)	(2)	(3)	(4)
Commander Effect	-0.015 (0.035)	0.078* (0.045)	0.039 (0.027)	0.094** (0.038)
Commander Effect × Above Median Black School		-0.165*** (0.063)		-0.090* (0.051)
N School-Years	3,433	3,433	3,433	3,433

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## System Avoidance: School Attendance

	Days Absent (1)	Chronic Absence (2)
<i>Panel A: Full Sample</i>		
Commander Effect on Stops	0.318** (0.159)	0.006 (0.004)
<i>Panel B: Black Students</i>		
Commander Effect on Stops	0.657*** (0.180)	0.014*** (0.005)
<i>Panel C: Hispanic Students</i>		
Commander Effect on Stops	0.285 (0.284)	0.005 (0.007)
<i>Panel D: White and Asian Students</i>		
Commander Effect on Stops	-0.037 (0.128)	-0.002 (0.003)
N Student-Years	1,512,314	1,512,314

# System Avoidance: Attendance by Predicted Anti-Social Behavior

	Below Median		Above Median	
	Days Absent (1)	Chronic Absence (2)	Days Absent (3)	Chronic Absence (4)
<i>Panel A: Full Sample</i>				
Commander Effect on Stops	0.094 (0.108)	0.001 (0.003)	0.501*** (0.185)	0.010** (0.005)
<i>Panel B: Black Students</i>				
Commander Effect on Stops	0.330** (0.140)	0.007** (0.003)	0.728*** (0.194)	0.015*** (0.005)
<i>Panel C: Hispanic Students</i>				
Commander Effect on Stops	0.070 (0.186)	0.000 (0.005)	0.548* (0.293)	0.010 (0.007)
<i>Panel D: White and Asian Students</i>				
Commander Effect on Stops	-0.026 (0.110)	-0.003 (0.002)	-0.040 (0.175)	0.000 (0.005)
N School-Years	776,016	776,016	736,298	736,298