

Disparities in Law Enforcement Stop Data from California's Largest Agencies

Kevin Walker, Trenton C. Simmons, Tiana K. Osborne, Evelyn Reynoso, Jannie N. Scott, & Randie C. Chance
California Department of Justice, Research Center

Introduction

- ❖ The Racial and Identity Profiling Act (RIPA) of 2015 requires all law enforcement agencies throughout California to collect and report data on individuals their peace officers detain or search by April 1, 2023.
- ❖ Officers must collect information on the date, time and location of the stop, officer's perception of the individual's race/ethnicity and identity groups (e.g. gender), actions taken during the stop, contraband/evidence discovered, basis for seizing property, and result of stop outcomes.
- ❖ The eight largest agencies in California began collecting stop data on July 1, 2018. The data used in the analyses presented on this poster are derived from completed data submissions for stops between July 1st and December 31st, 2018.
- ❖ The purpose of this poster is to present preliminary findings on the 2018 stop data. First, we examined decisions by officers to stop individuals for disparate outcomes utilizing Veil of Darkness tests. Second, we test post-stop actions by officers for disparate outcomes utilizing search hit rate analyses.

Method

- ❖ 1,800,054 stopped individuals are in the 2018 data.
- ❖ All data in reference to the race/ethnicity of individuals is based upon officer perception.

Veil of Darkness (VOD)

- ❖ VOD tests examine the racial distribution of stops in the inter-twilight period that were made during light and dark conditions for differences. The inter-twilight period is the period of time that is light during daylight savings time, but dark during standard time (generally viewed as about 5 pm to 9 pm).
- ❖ Test inclusion criteria - (1) stop occurred during the inter-twilight period; (2) stop reason was traffic violation; (3) stop was not a call for service stop (N = 167,524).

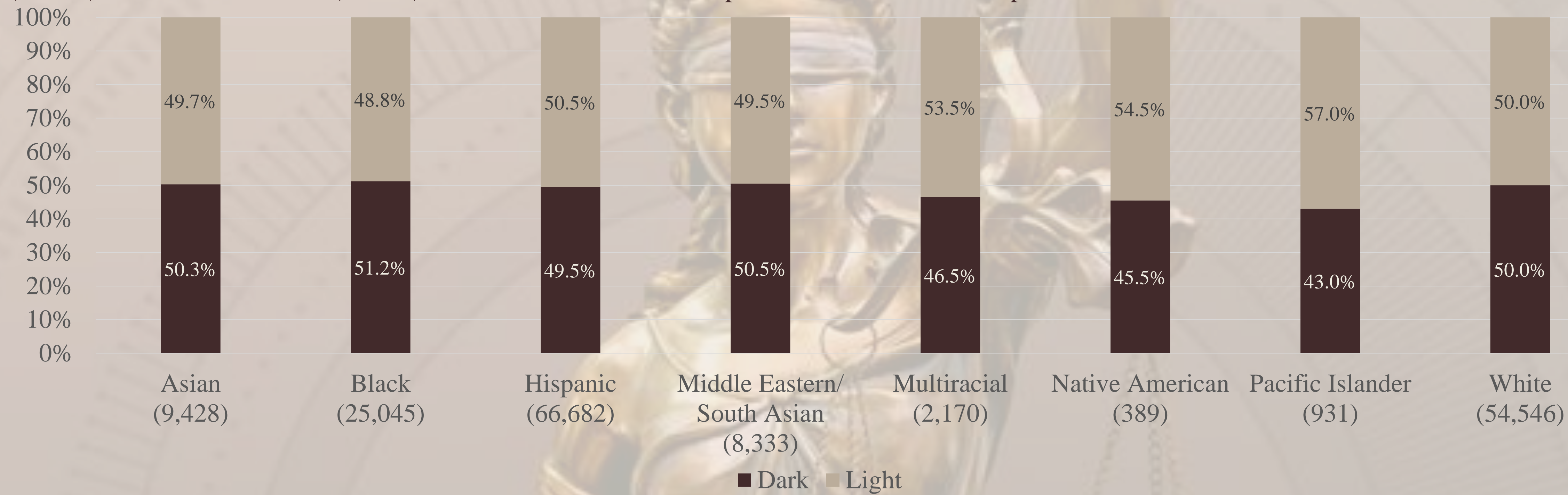
Search Hit Rates

- ❖ "Search hit rate" is the proportion of all searched individuals that were found to be in possession of contraband or evidence.
- ❖ Overall Search Hit Rates
 - All searches
 - N = 39,676
- ❖ Lower-discretion Searches
 - Searches performed: incident to arrest, for vehicle inventory purposes, or pursuant to a warrant.
 - N = 17,840
- ❖ Higher-discretion Searches
 - Searches performed where the sole search basis provided was that the officer received consent from the stopped individual.
 - N = 2,578

Results

Veil of Darkness Results

- ❖ Across the reporting period, there was a near 50/50 split between the proportion of individuals stopped during the inter-twilight period under light (50.1%) and dark conditions (49.9%). Whites had the closest stop distribution to a 50/50 split.

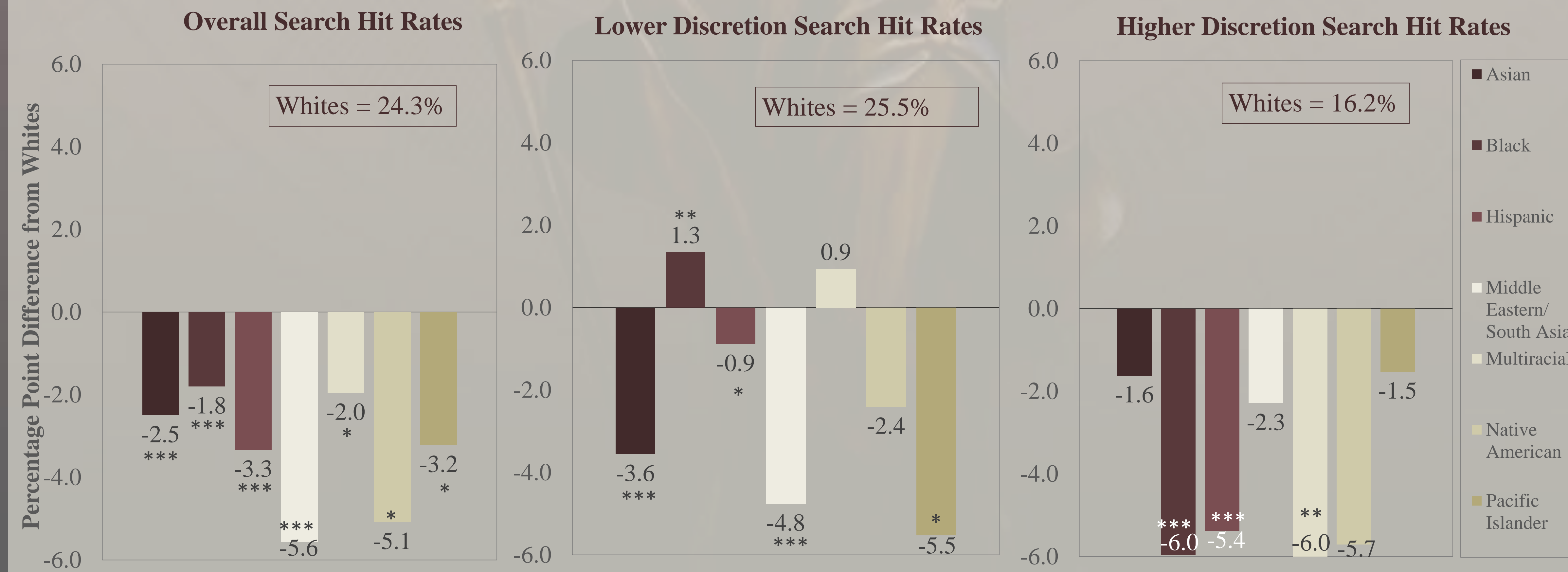


- ❖ Using a logistic regression, we predicted the odds of an individual stopped in the dark being a person of color. We repeated this analysis for each group of color compared to Whites. We also implemented an additional set of analyses that controlled for time.

Veil of Darkness Logistic Regression Coefficients and Standard Error

Race/Ethnicity	Model 1	Model 2
Asian	0.013 (0.022)	0.040 (0.024)
Black	** 0.048 (0.015)	*** 0.085 (0.016)
Hispanic	-0.020 (0.012)	0.011 (0.012)
Middle Eastern/ South Asian	0.019 (0.024)	0.035 (0.025)
Multiracial	** -0.139 (0.044)	** -0.138 (0.047)
Native American	-0.181 (0.102)	-0.215 (0.110)
Pacific Islander	*** -0.284 (0.067)	*** -0.247 (0.072)

Note: Model 1 regresses minority status on visibility while Model 2 regresses minority status on visibility and time. Negative estimates indicate decreased propensity for stopped persons to be the associated group of color in darkness. Positive estimates indicate increased propensity for stopped persons to be the associated group of color in the light.



Results Cont.

Search Hit Rate Results

- ❖ In the overall search hit rates model, hit rates for all racial/ethnic groups of color were lower than Whites. These differences were all statistically significant.
- ❖ When examining hit rates for lower-discretion searches, hit rates for Blacks were 1.3 percentage points higher than Whites. Hit rates for Asians, Hispanics, Middle Eastern/South Asians, and Pacific Islanders remained lower than Whites. The hit rate difference amongst Native American and Multiracial individuals from Whites did not reach statistical significance.
- ❖ When examining higher-discretion searches, hit rates were lower than Whites for Black, Hispanic, and Multiracial individuals. Differences from Whites for all other racial/ethnic groups of color were not statistically significant.
- ❖ Search hit rates were lower for searches where officers had more discretion in deciding to perform a search (i.e. high-discretion searches).

Discussion

- ❖ Observed differences between racial/ethnic groups of color and Whites were generally small and mostly not statistically significant when examining to data through the lens of the Veil of Darkness.
- ❖ However, examining search hit rates revealed many sizeable and statistically significant differences between Whites and some racial/ethnic groups of color.
- ❖ Most differences indicate that searches of racial/ethnic groups of color yield less contraband and evidence than searches of Whites.

Considerations and Limitations

Veil of Darkness (VOD)

- ❖ Uses specific time period of data (roughly 5 to 9 pm)
- ❖ Only examines traffic violation stops (traffic stop proxy)
- ❖ Less light does not make it impossible to perceive race
- ❖ Artificial lighting available differs by circumstance
- ❖ Driving behavior could differ across lighting conditions
- ❖ Officers could use observable proxies for race/ethnicity

Search Hit Rates

- ❖ Officers could profile, but correctly identify some contraband-carrying groups more effectively.
- ❖ Groups could differ in their propensity to display observable indicators of possessing contraband without having differing propensities of actually carrying contraband.

Full calendar year data collected from more agencies will be available to analyze in future years.

Contact Information

California Department of Justice, Research Center
Email: Research.Center@doj.ca.gov