

Analysis of Hispanic-White Differences in Traffic Stops and Searches in Durham, NC, 2002-2013

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Table 1. Overview of the Data

Data Subsets	Observations
Total stops	250,520
-2001	1
-2014	8,934
-Passengers	9,515
-Checkpoint stops	3,166
Stops for analysis	229,551
Searches	14,067

Search Rate = 6.13

Figure 1. Number of Traffic Stops per Year

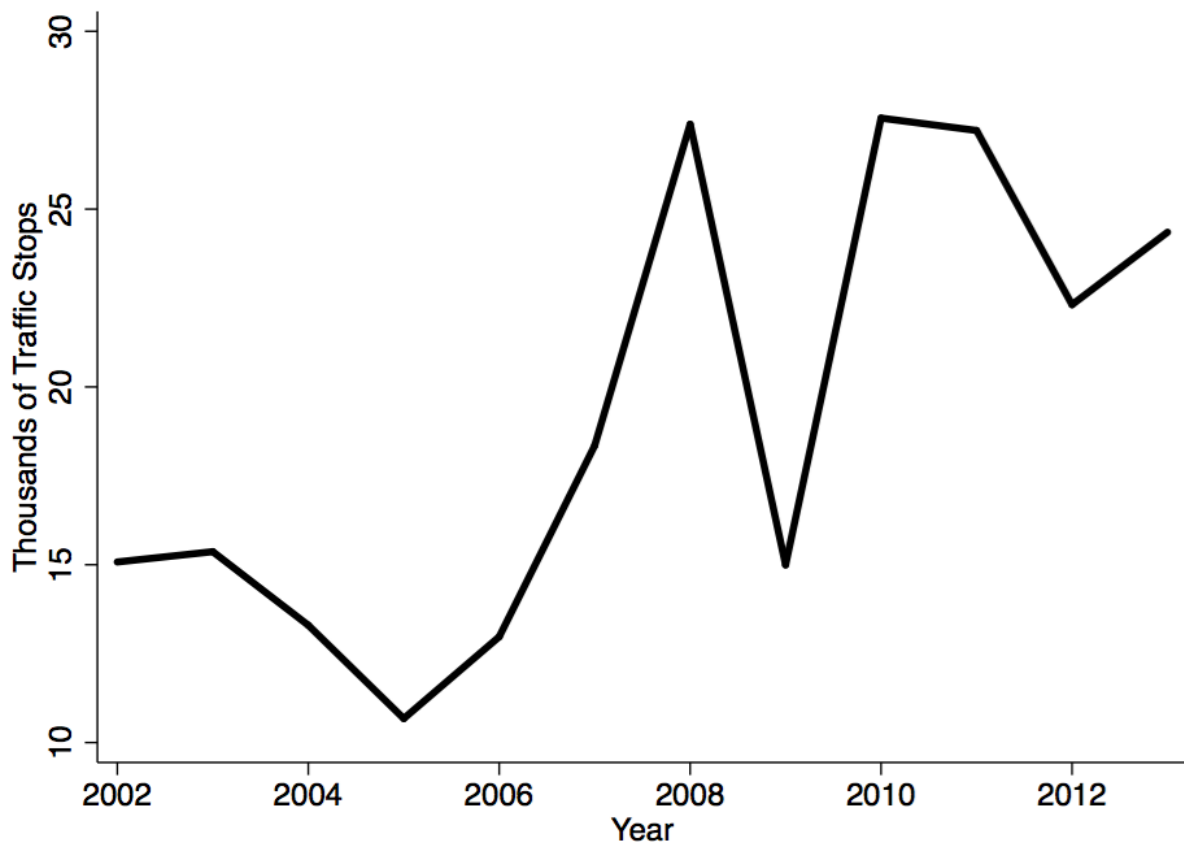


Figure 2. Ethnic Composition of Traffic Stops by Year

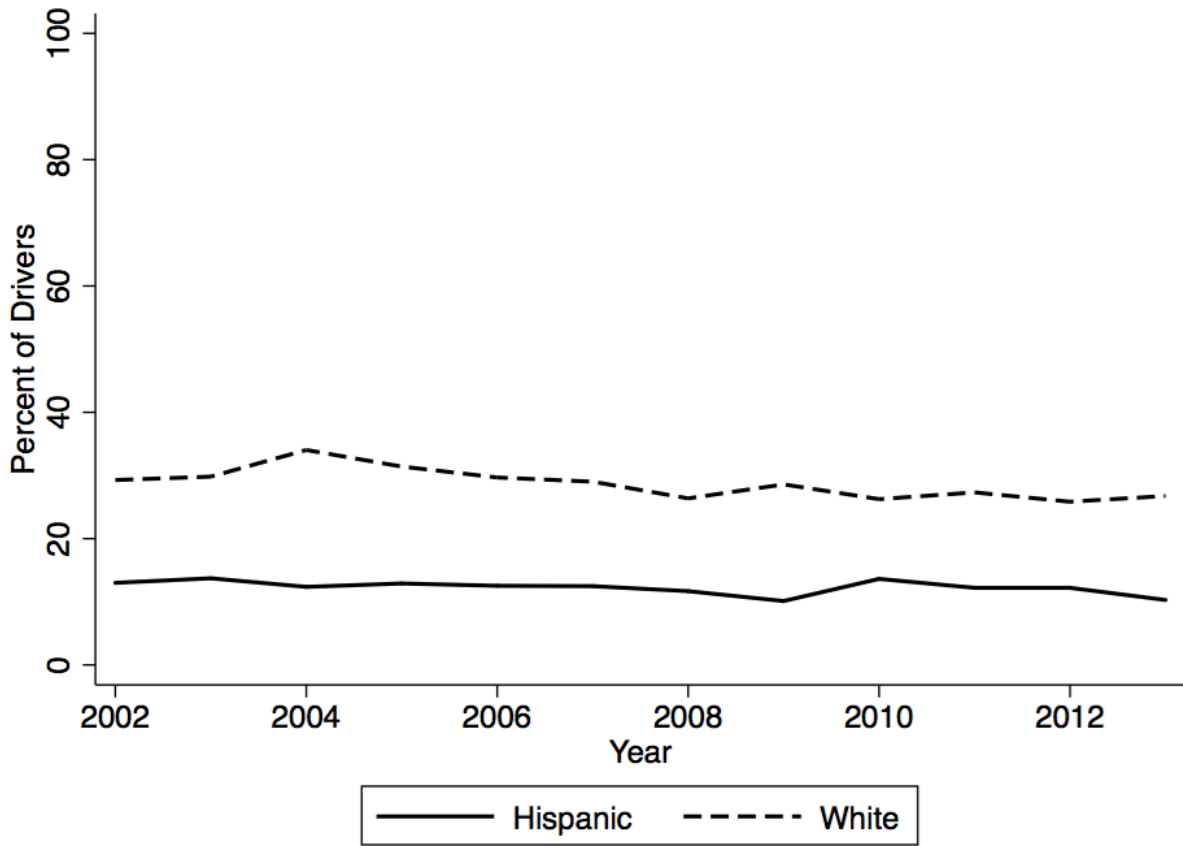


Table 2. Ethnic Composition of Traffic Stops by Purpose, Drivers

Purpose	Number	Percent	
		White	Hispanic
Total Stops	229,550	32.01	12.21
Speed Limit	72,780	42.83	8.25
Stop Light/Sign	15,913	33.51	12.73
Driving Impaired	990	38.10	45.66
Safe Movement	17,050	32.54	14.33
Vehicle Equipment	33,373	21.39	13.24
Vehicle Regulatory	49,576	27.66	11.34
Seat Belt	8,621	29.72	7.73
Investigation	19,248	21.76	21.46
Other Vehicle	11,999	23.46	18.90

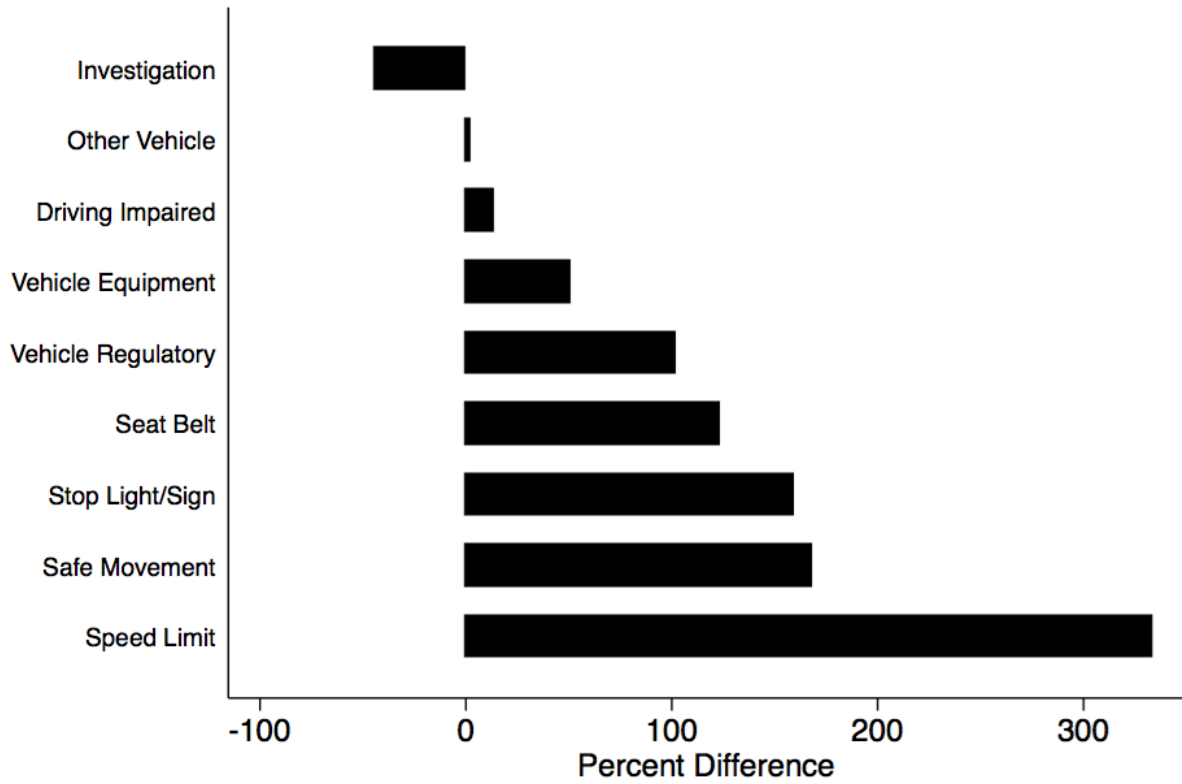
Note: Includes only drivers. Excludes 3,166 checkpoint stops. Excludes 9,515 passengers.

Table 3. Percent Searched by Ethnicity and Purpose of Stop

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	229,551	-	32.01	12.21	-
Total Searches	14,067	6.13	2.73	6.59	2.41
Speed Limit	72,781	2.27	0.93	4.03	4.33
Stop Light/Sign	15,913	4.35	1.85	4.79	2.59
Driving Impaired	990	46.67	44.88	51.11	1.14
Safe Movement	17,050	8.08	4.36	11.67	2.68
Vehicle Equipment	33,373	8.53	5.00	7.54	1.51
Vehicle Regulatory	49,576	6.06	2.38	4.82	2.03
Seat Belt	8,621	7.42	2.62	5.86	2.24
Investigation	19,248	12.61	10.06	5.57	0.55
Other Vehicle	11,999	8.03	5.17	6.59	1.27

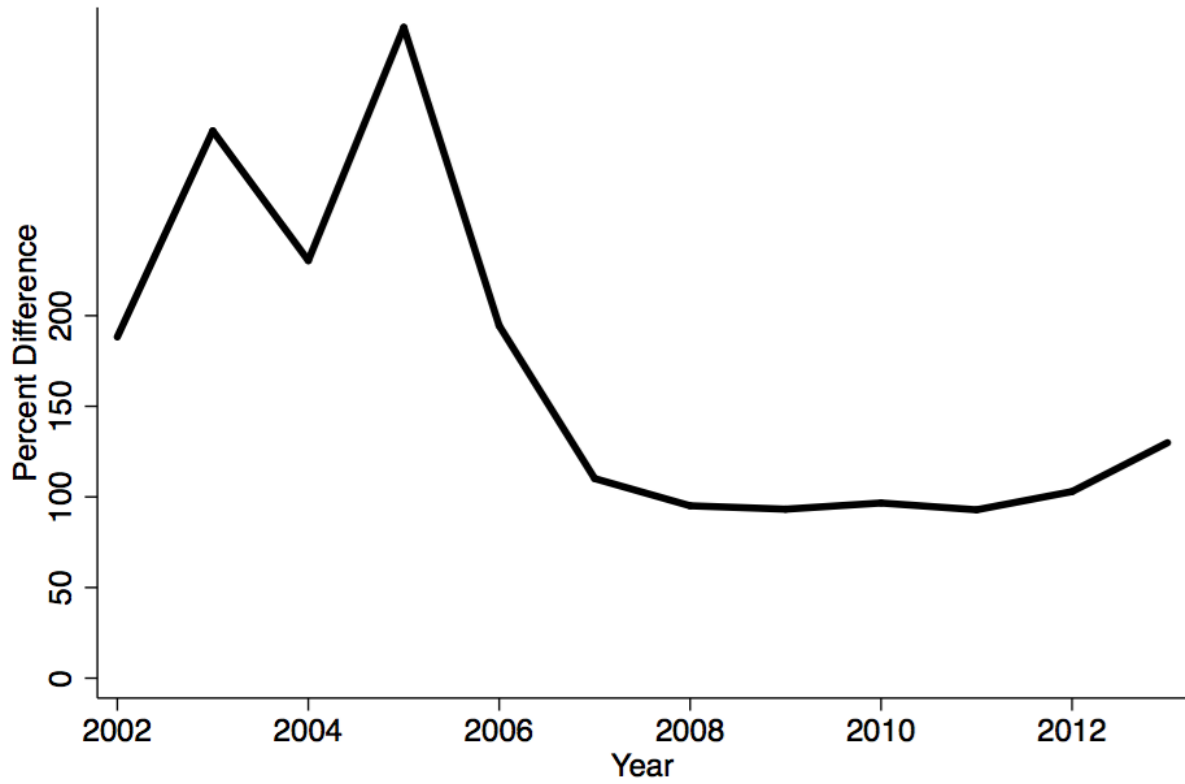
Note: See the appendix for this same table broken down for Men and Women.

Figure 3. Difference in Likelihood of Being Searched, by Ethnicity and Type of Stop



The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by purpose of stop.

Figure 4. Ethnic Differences in the Likelihood of Search



The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites.

Figure 5. Ethnic Differences in the Likelihood of Search by Gender



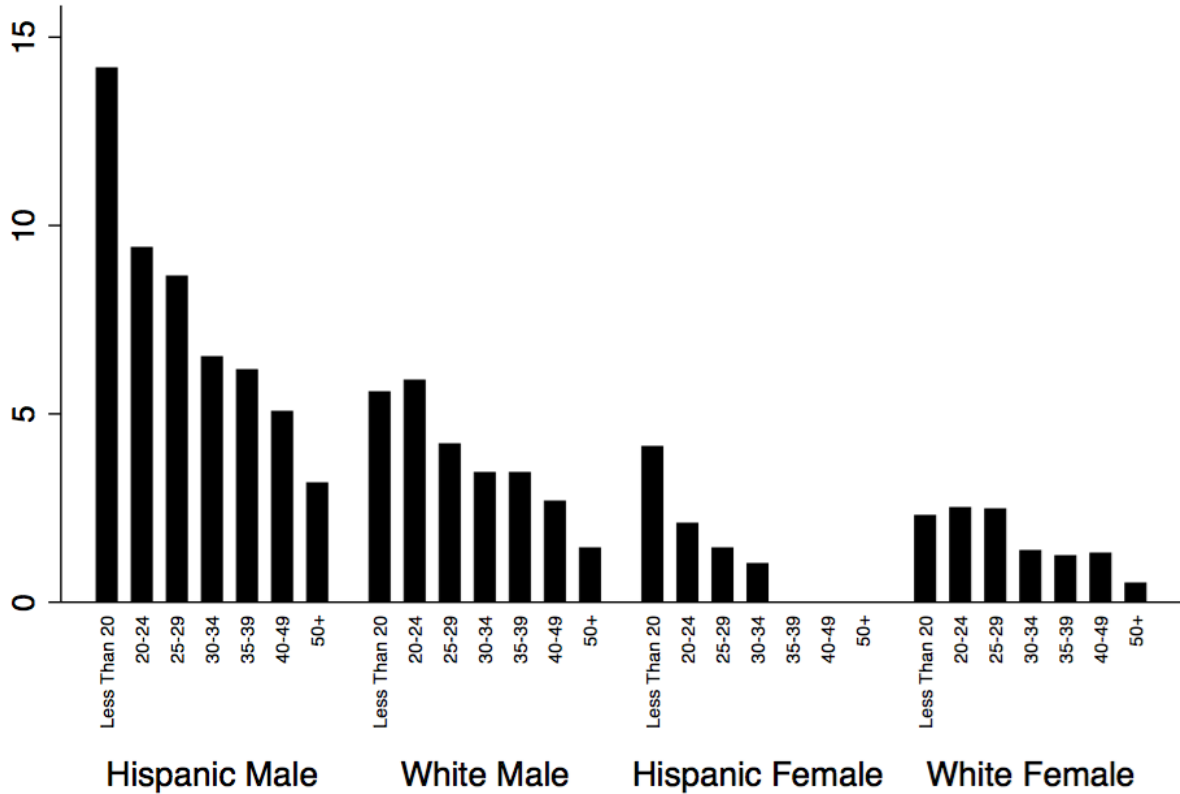
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by gender.

Figure 6. Ethnic Differences in the Likelihood of Search by Gender, for Drivers Under 30



The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by gender for motorists under 30.

Figure 7. Search Rates by Ethnicity, Gender, and Age Group



Based on 229,551 traffic stops from 2002 through 2013, and 14,067 searches. Overall rate of search: 6.13 percent. No data are presented for categories with fewer than 10 searches.

Figure 8. Number of Stops, by Ethnicity and Gender

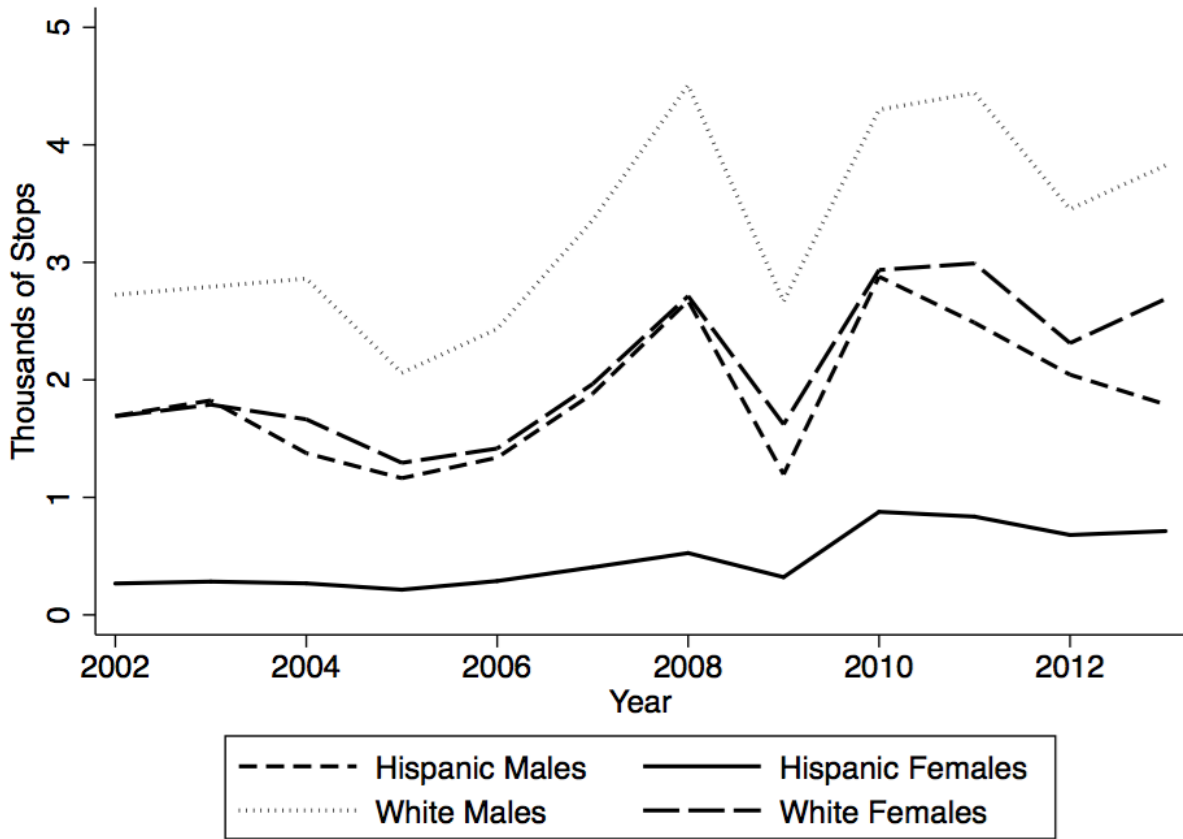


Figure 9. Percent of Stops Resulting in a Search, by Ethnicity and Gender

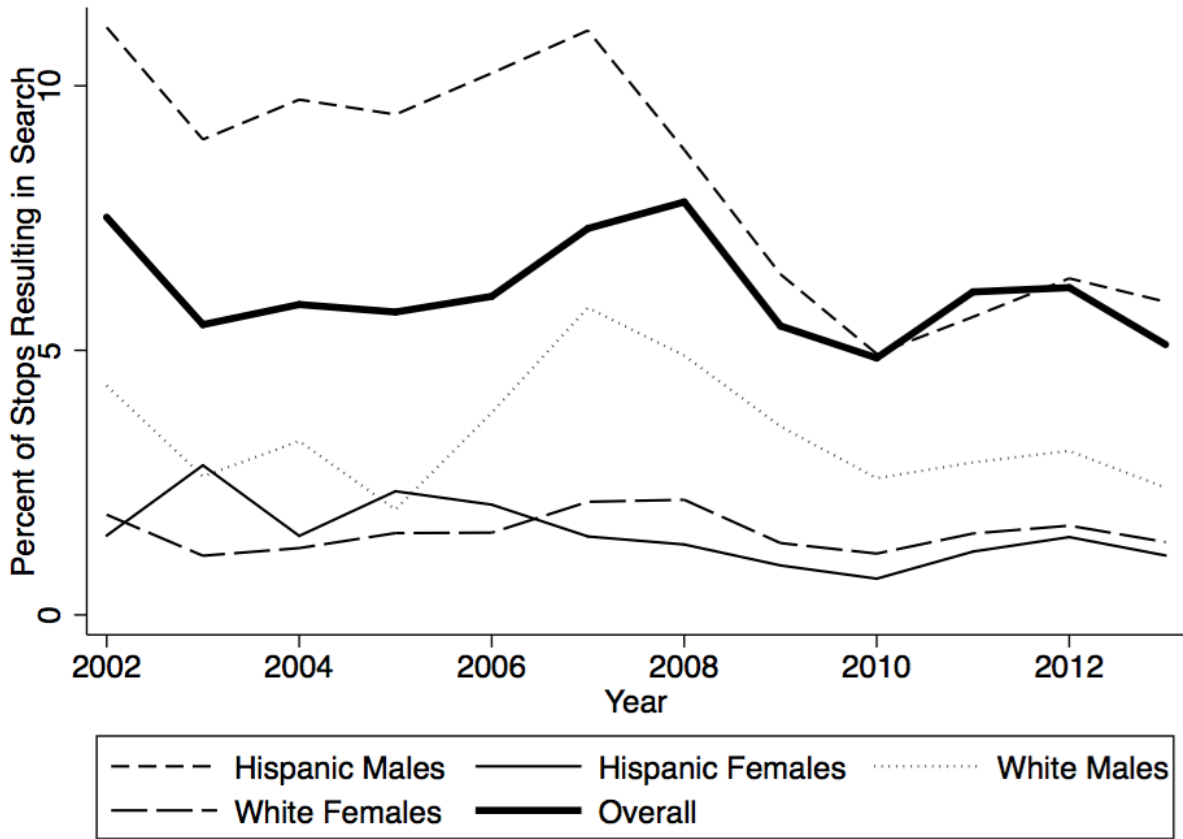


Table 4. Type of Search by Race

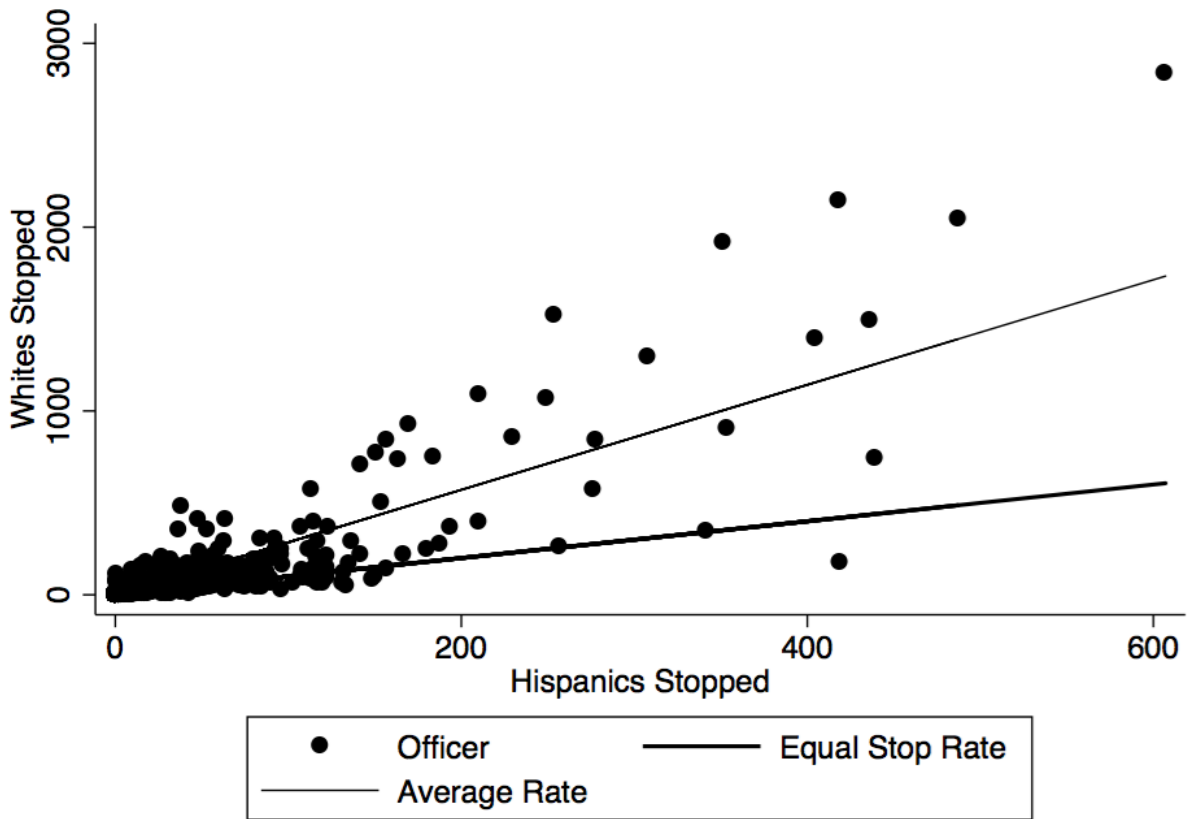
Search Type	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	229,551	-	32.01	12.21	-
Total Searches	14,067	6.13	2.73	6.59	2.41
Consent	8,028	3.50	1.77	3.29	1.86
Search Warrant	10	-	-	-	-
Probable Cause	2,476	1.08	0.36	0.57	1.58
Incident to Arrest	3,042	1.33	0.53	2.54	4.79
Protective Frisk	511	0.22	0.07	0.20	2.86

Note: See the appendix for this same table separately for Men and Women.

Table 5. Distribution of Officer IDs by Stop

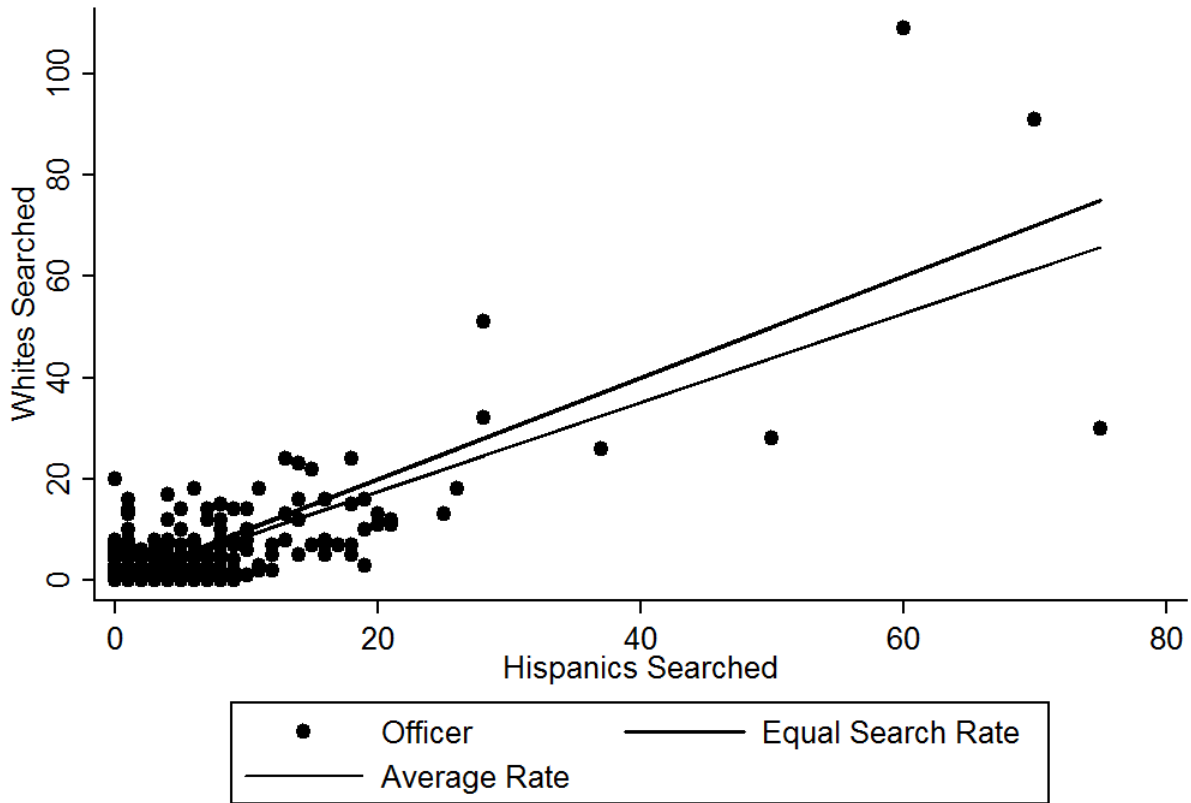
Number of Stops	Officers w/ this many Stops	Percent of Officers	Cumulative Percent	Percent of Stops	Cumulative Percent
1	233	20.69	20.69	0.10	0.10
2 – 10	186	16.52	37.21	0.34	0.44
11 - 100	290	25.75	62.97	5.85	6.19
101 – 1,000	379	33.66	96.63	54.31	60.50
1,001 +	38	3.37	100.00	39.39	100.00
Total	1,126	100	-	100	-

Figure 10. Number of Hispanic and White Motorists Stopped, by Officer



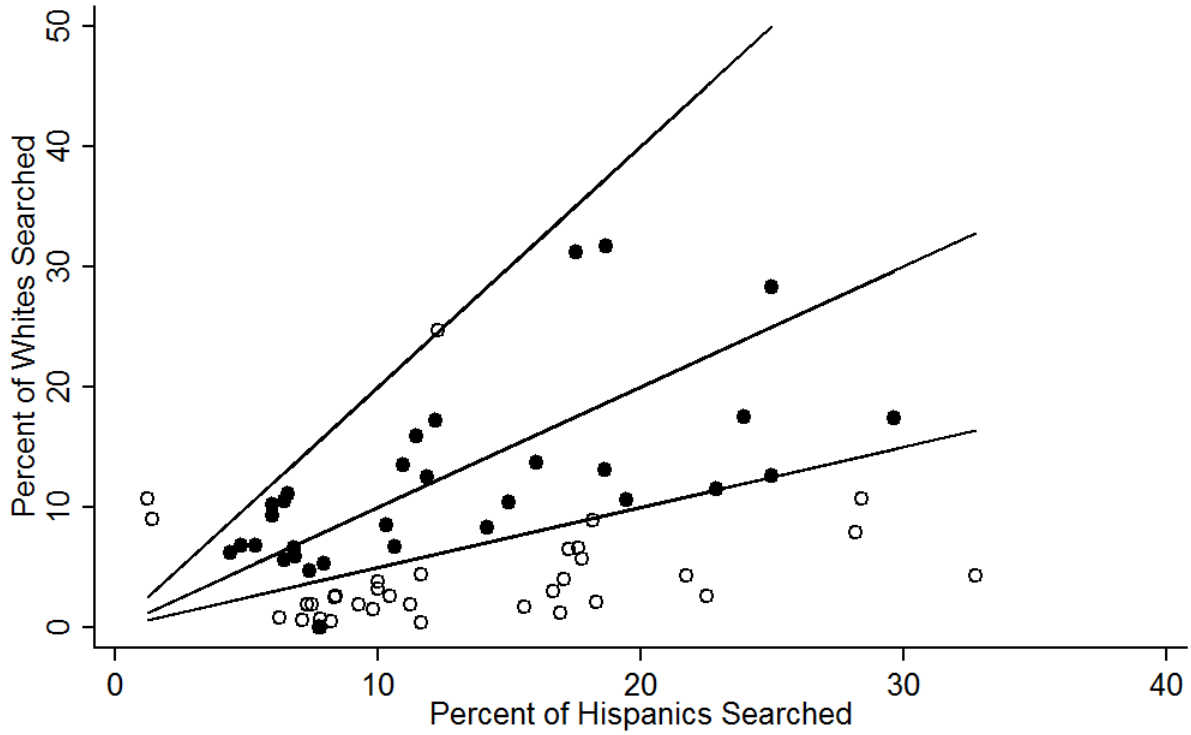
On average, officers stop 2.86 Whites for each Hispanic stopped.

Figure 11. Number of Hispanic and White Motorists Searched, by Officer



On average, officers search 0.88 Whites for each Hispanic searched.

Figure 12. Percent of White and Hispanic Drivers Searched, by Officer



Includes 63 officers with a minimum of 50 White stops, 50 Hispanic stops, and a search rate above the department average of 6.13 for either ethnicity. The hollow circles indicate high disparity officers. 3 officers searches Whites at more than twice the rate that they search Hispanics. 30 officers search Hispanics at more than twice the rate that they search Whites.

Appendix

Table A1. Racial Composition of Traffic Stops by Purpose, Passengers

Purpose	Number	Percent	
		White	Hispanic
Total Stops	9,431	11.40	11.76
Speed Limit	979	15.34	12.77
Stop Light/Sign	503	13.29	14.71
Driving Impaired	134	25.00	49.25
Safe Movement	827	14.20	17.41
Vehicle Equipment	2,090	8.98	12.06
Vehicle Regulatory	2,080	9.58	8.65
Seat Belt	501	7.84	5.79
Investigation	1,659	12.97	9.34
Other Vehicle	658	11.85	12.77

Table A2. Percent of Men Searched by Race and Purpose of Stop

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	146,492	-	31.75	15.25	-
Total Searches	12,174	8.31	3.47	7.93	2.29
Speed Limit	43,238	3.28	1.21	5.04	4.17
Stop Light/Sign	9,846	6.08	2.25	5.91	2.63
Driving Impaired	858	48.60	50.65	51.24	1.01
Safe Movement	11,885	10.33	5.54	13.69	2.47
Vehicle Equipment	22,312	11.16	6.06	8.86	1.46
Vehicle Regulatory	29,990	8.37	3.00	5.67	1.89
Seat Belt	6,364	9.22	3.03	6.91	2.28
Investigation	13,752	15.03	11.27	6.69	0.59
Other Vehicle	8,247	10.42	6.61	6.16	0.93

Table A3. Percent of Women Searched by Race and Purpose of Stop

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	83,058		32.41	6.84	-
Total Searches	1,893	2.28	1.57	1.36	0.87
Speed Limit	29,542	0.79	0.51	0.83	1.63
Stop Light/Sign	6,067	1.55	1.24	0.88	0.71
Driving Impaired	132	34.09	27.45	44.44	1.62
Safe Movement	5,165	2.90	1.97	2.11	1.07
Vehicle Equipment	11,061	3.24	3.15	1.61	0.51
Vehicle Regulatory	19,586	2.53	1.57	1.73	1.10
Seat Belt	2,257	2.35	1.54	0.86	0.56
Investigation	5,496	6.55	7.53	0.88	0.12
Other Vehicle	3,752	2.80	2.72	1.44	0.53

Table A4. Type of Search by Race: Men

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	146,492	-	31.75	15.25	-
Total Searches	12,174	8.31	3.47	7.93	2.29
Consent	6,953	4.75	2.24	3.93	1.75
Search Warrant	8	0.01	-	-	-
Probable Cause	2,135	1.46	0.44	0.67	1.52
Incident to Arrest	2,607	1.78	0.68	3.08	4.53
Protective Frisk	471	0.32	0.10	0.24	2.40

Table A5. Type of Search by Race: Women

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	83,058	-	32.41	6.84	-
Total Searches	1,893	2.28	1.57	1.36	0.87
Consent	1,075	1.29	1.02	0.74	0.73
Search Warrant	2	-	-	-	-
Probable Cause	341	0.41	0.24	0.16	0.67
Incident to Arrest	435	0.52	0.29	0.42	1.45
Protective Frisk	40	0.05	0.02	0.04	2.00

Figure A1. Stops by Day of the Week

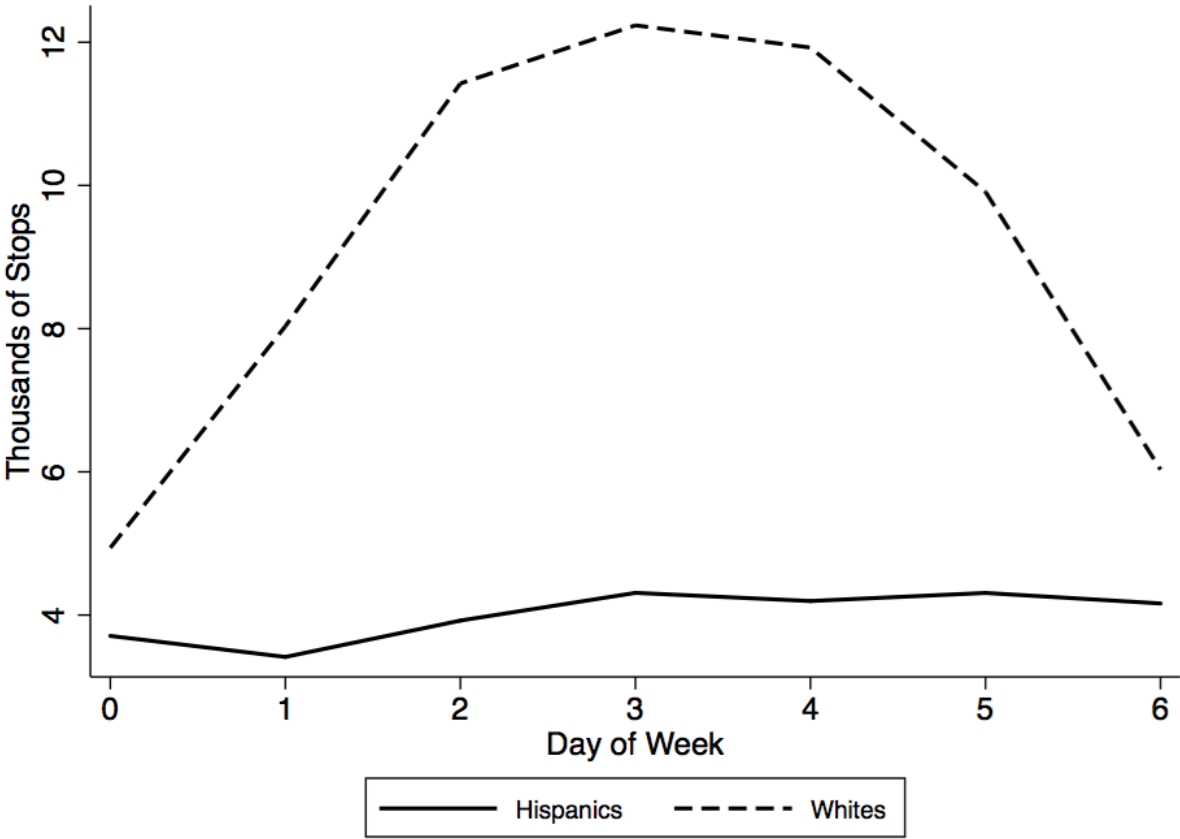


Figure A2. Searches by Day of the Week

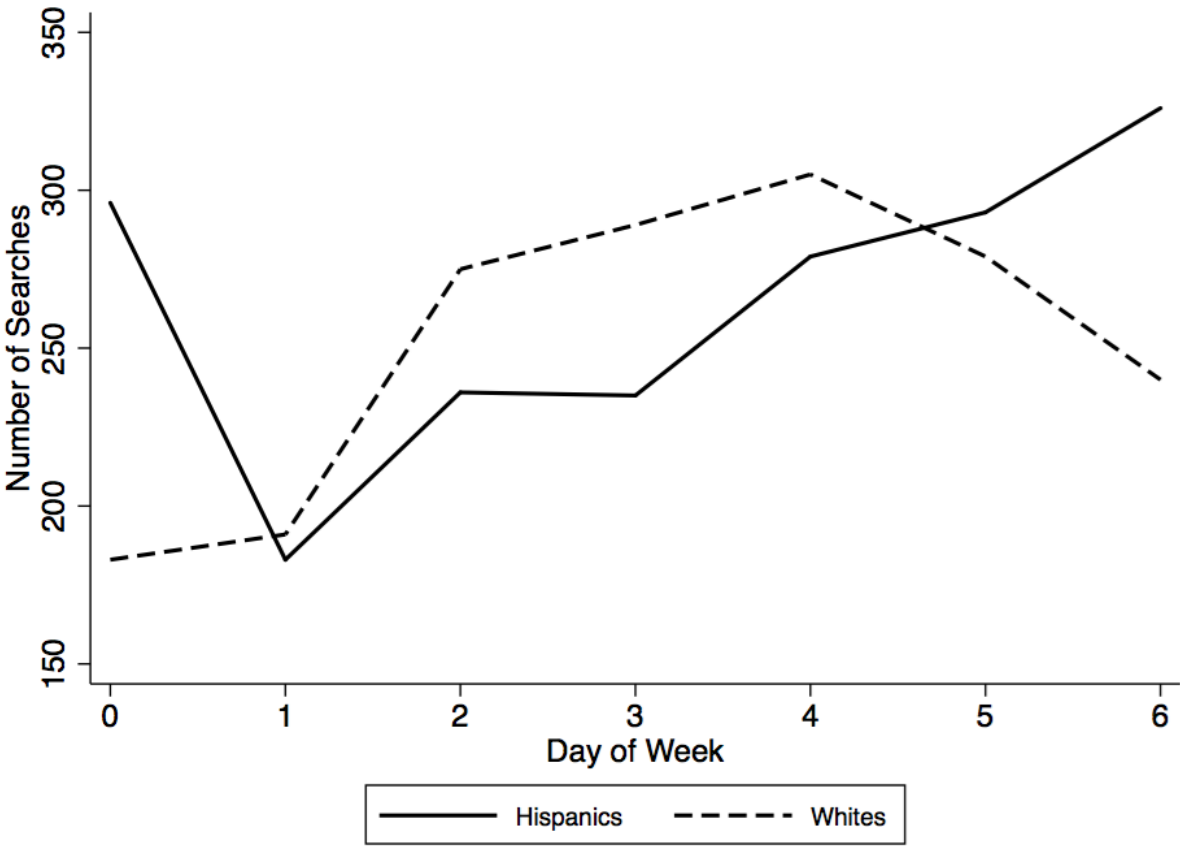
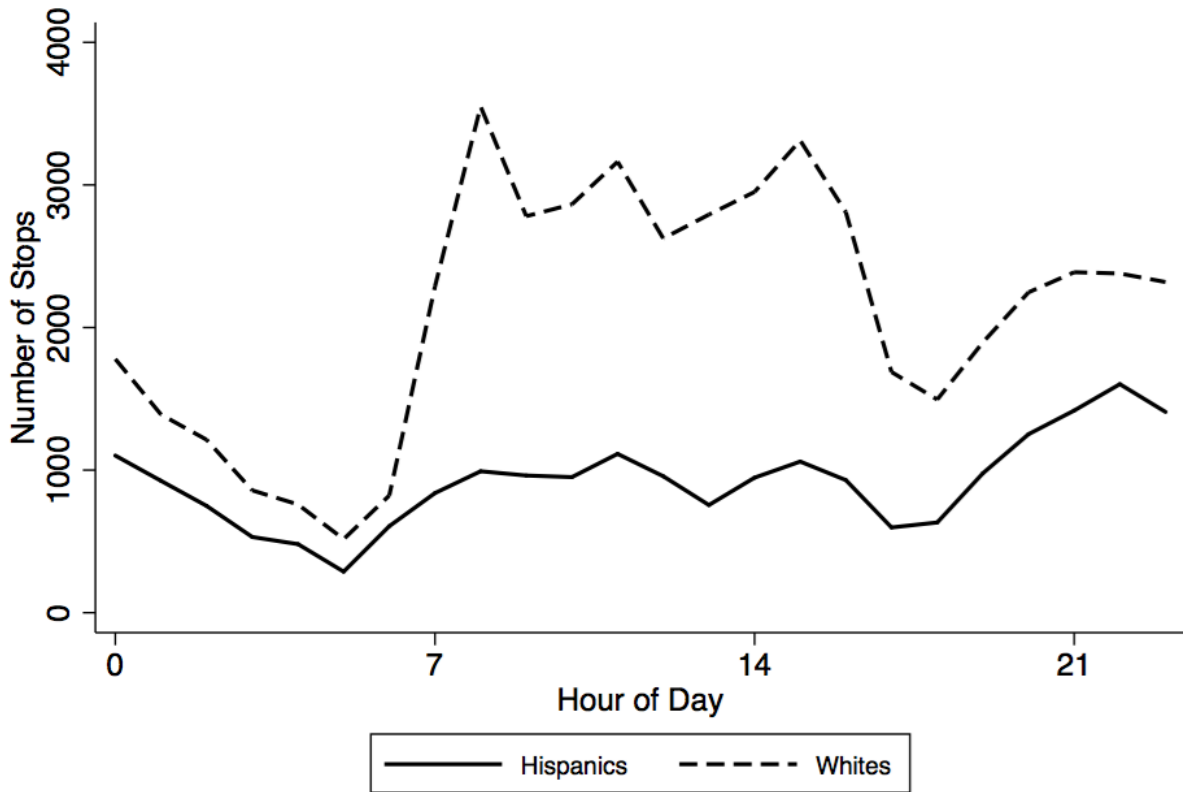
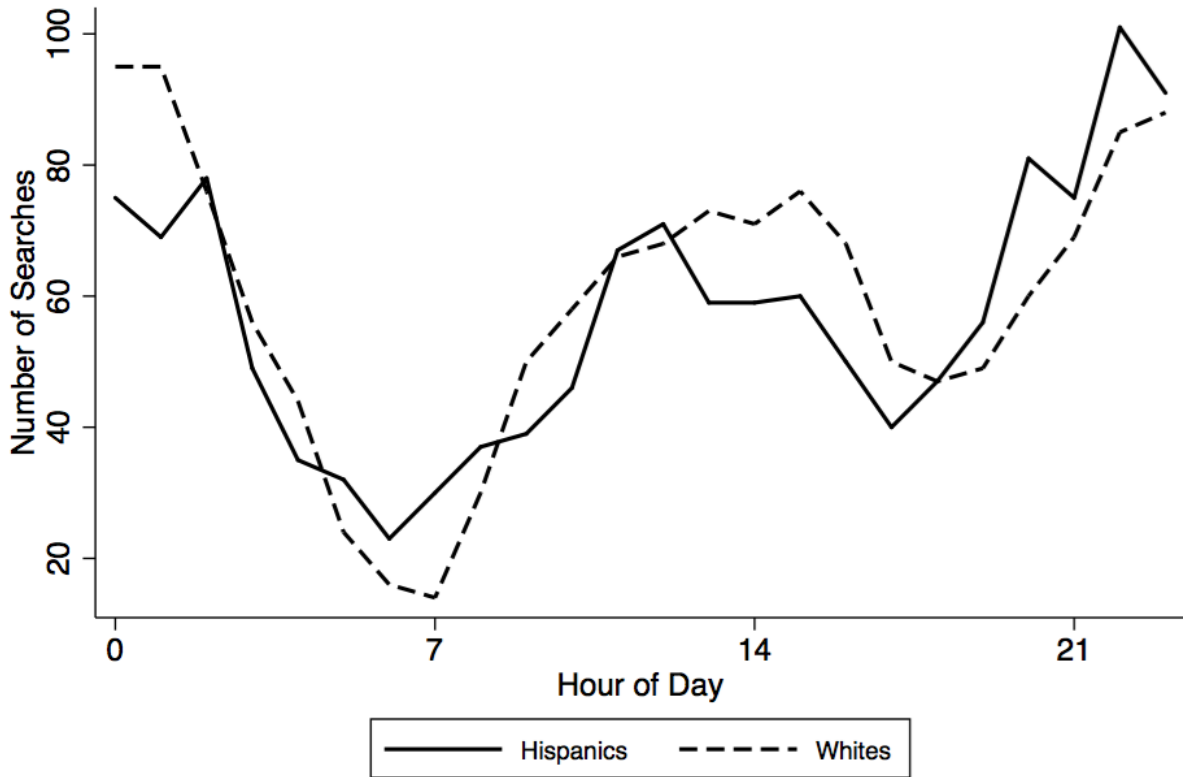


Figure A3. Stops by Hour of the Day



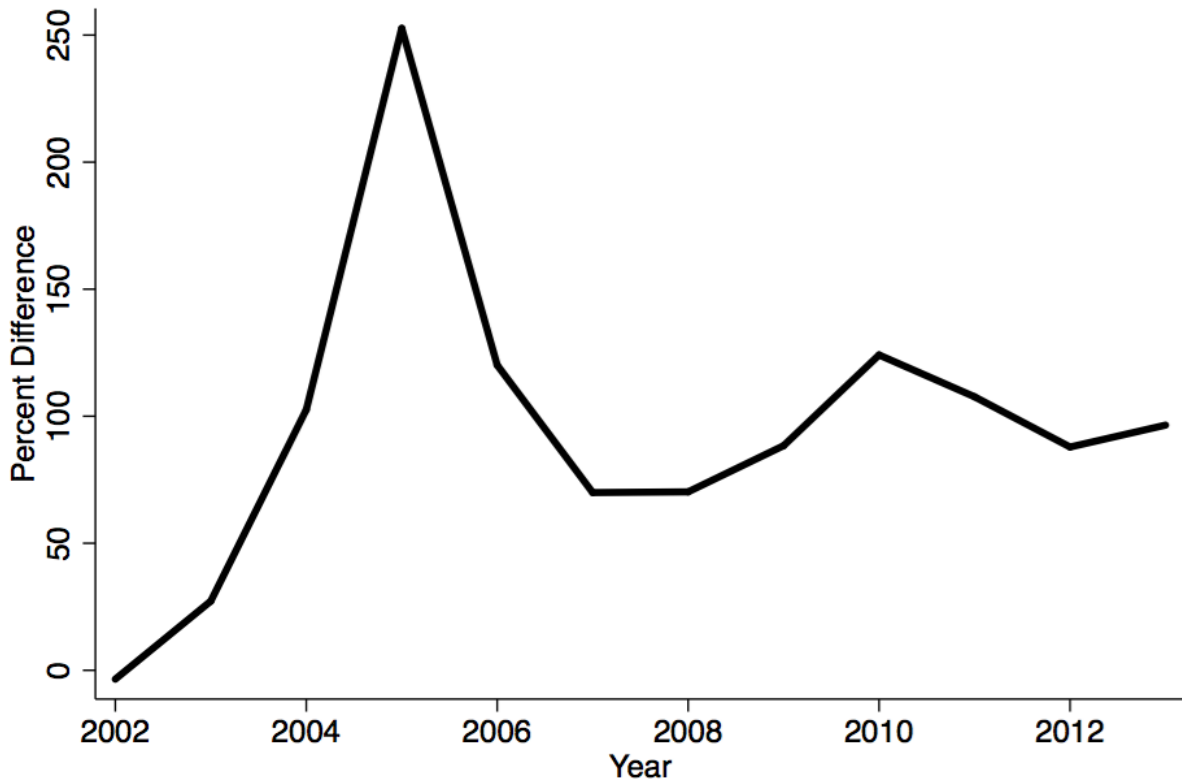
The figure excludes cases where the hour and minute was exactly 0:00. These cases were presumed to be missing data.

Figure A4. Searches by Hour of the Day



The figure excludes cases where the hour and minute was exactly 0:00. These cases were presumed to be missing data.

Figure A12. Ethnic Differences in the Likelihood of Search: Consent Searches Only



The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites; consent searches only.

Table A6. Likelihood of Finding Contraband Given a Search, by Race

Contraband	Number	% Total	% White	% Hispanic
Yes	3,409	24.23	24.12	14.12
No	10,658	75.77	75.88	85.88
Total	14,067	100.00	100.00	100.00

Table A7. Differential Outcomes by Whether or not a Search Occurs

Race	Search Occur	N	No Action	Verbal Warning	Written Warning	Citation Issued	Arrest	Total
White	No	62,740	3.06	33.32	7.43	55.84	0.35	100.00
Hispanic	No	26,176	3.20	28.15	3.36	63.71	1.59	100.00
Total	No	215,483	3.87	35.96	6.31	53.18	0.69	100.00
White	Yes	1,762	3.80	26.50	6.64	38.08	24.97	100.00
Hispanic	Yes	1,848	1.57	17.21	7.68	34.31	39.23	100.00
Total	Yes	14,067	2.93	22.41	6.42	41.37	26.88	100.00