

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

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Table 1. Overview of the Data

Data Subsets	Observations
Total stops	760,910
-2014	29,676
-Passengers	11,884
-Checkpoint stops	85
Stops for analysis	719,715
Searches	23,487

Search Rate = 3.26

Figure 1. Number of Traffic Stops per Year

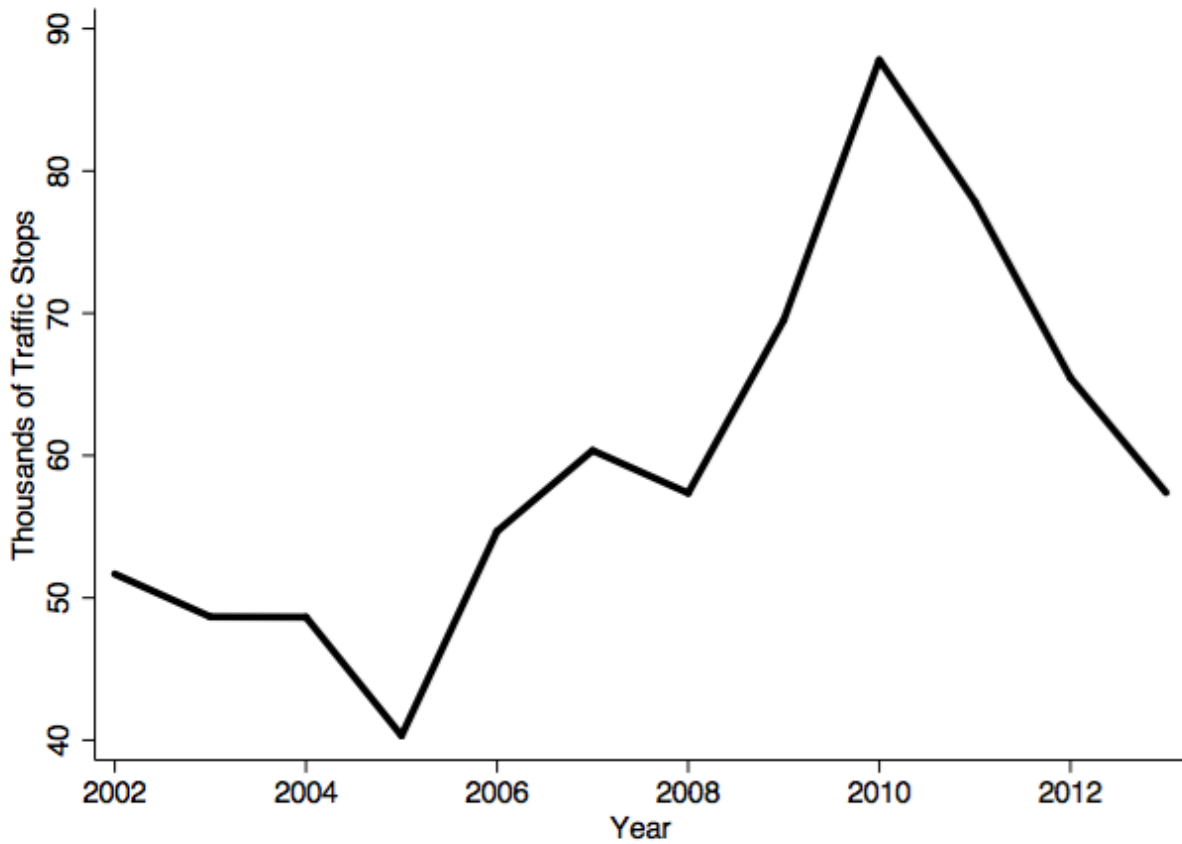


Figure 2. Ethnic Composition of Traffic Stops by Year

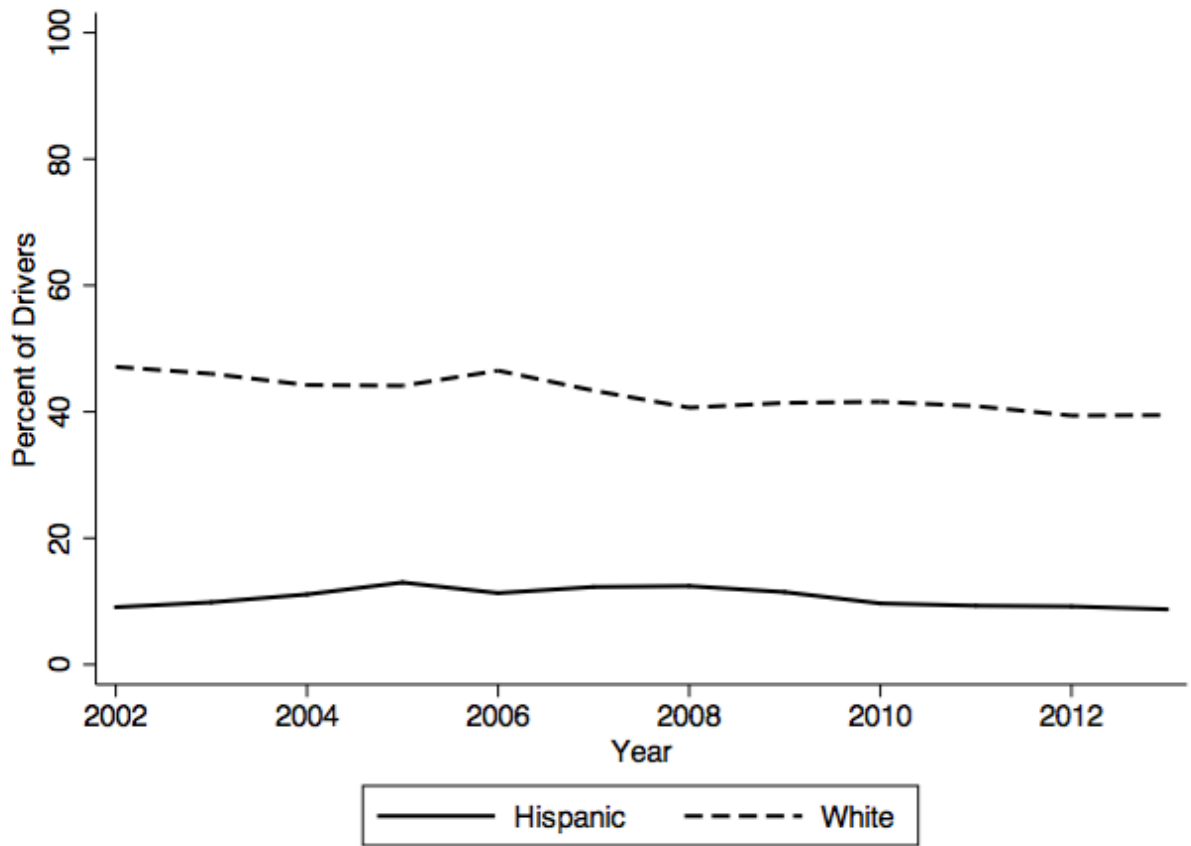


Table 2. Ethnic Composition of Traffic Stops by Purpose, Drivers

Purpose	Number	Percent	
		White	Hispanic
Total Stops	719,715	47.59	10.50
Speed Limit	216,451	56.37	7.55
Stop Light/Sign	46,609	54.21	10.50
Driving Impaired	10,025	65.07	21.08
Safe Movement	39,924	50.32	10.43
Vehicle Equipment	74,500	35.86	11.15
Vehicle Regulatory	215,598	44.27	9.77
Seat Belt	23,529	47.34	8.00
Investigation	32,481	33.43	17.35
Other Vehicle	60,598	38.24	18.41

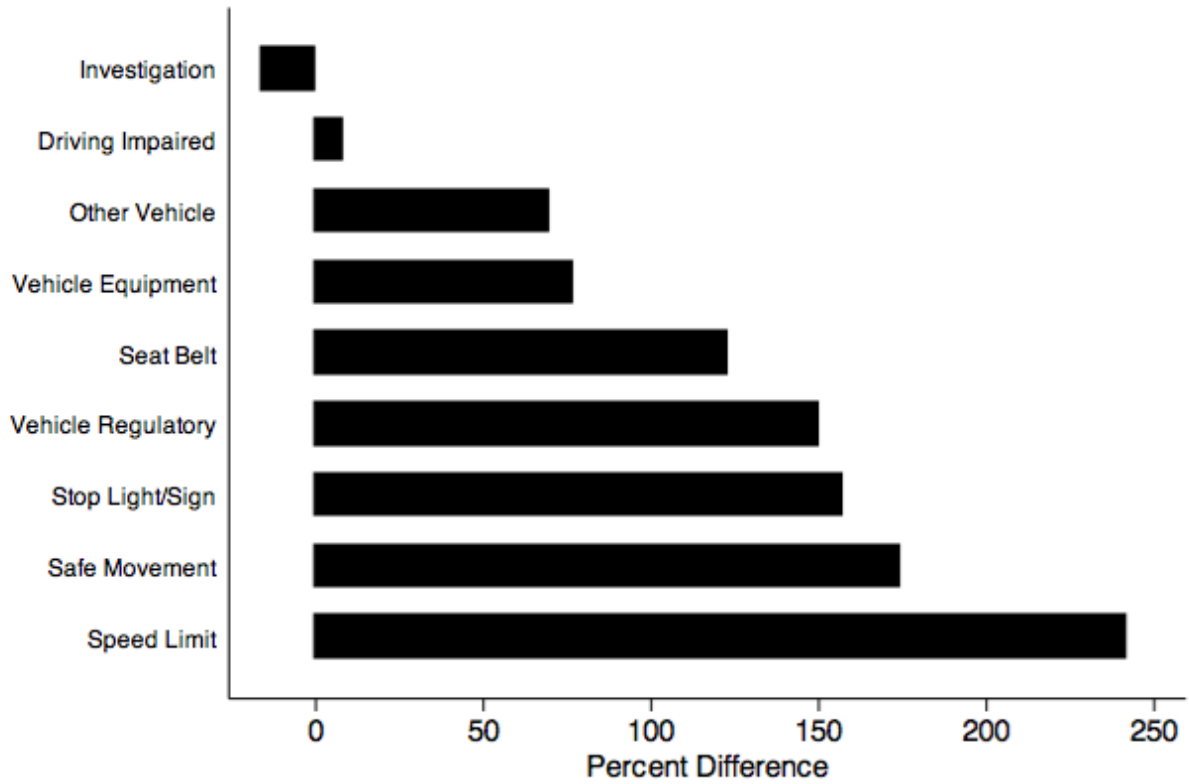
Note: Includes only drivers. Excludes 85 checkpoint stops. Excludes 11,884 passengers.

Table 3. Percent Searched by Ethnicity and Purpose of Stop

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	719,715	-	47.59	10.50	-
Total Searches	23,487	3.26	2.10	4.70	2.24
Speed Limit	216,451	0.99	0.53	1.80	3.40
Stop Light/Sign	46,609	1.93	1.07	2.74	2.56
Driving Impaired	10,025	47.58	49.05	53.01	1.08
Safe Movement	39,924	2.97	1.59	4.37	2.75
Vehicle Equipment	74,500	3.43	1.98	3.50	1.77
Vehicle Regulatory	215,598	2.51	1.22	3.06	2.51
Seat Belt	23,529	2.29	0.81	1.81	2.23
Investigation	32,481	10.09	7.75	6.48	0.84
Other Vehicle	60,598	4.49	2.58	4.38	1.70

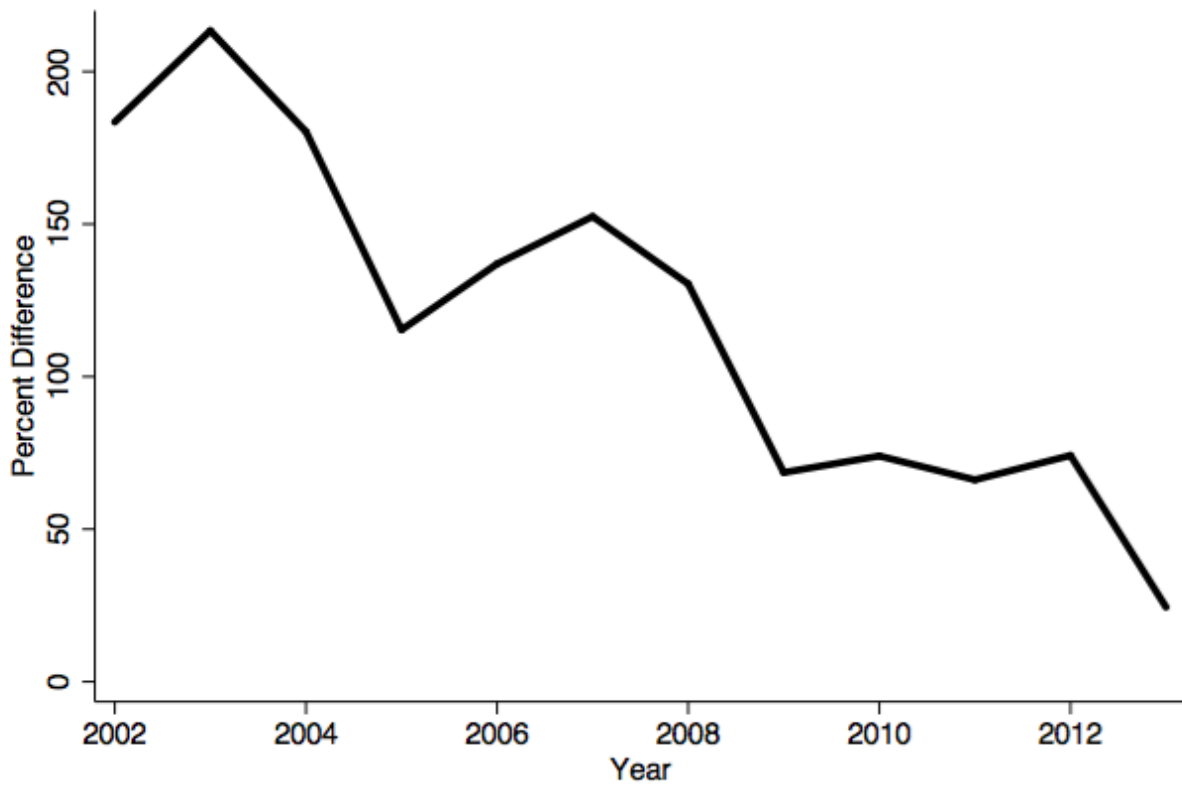
Note: See the appendix for this same table broken down for Men and Women.

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



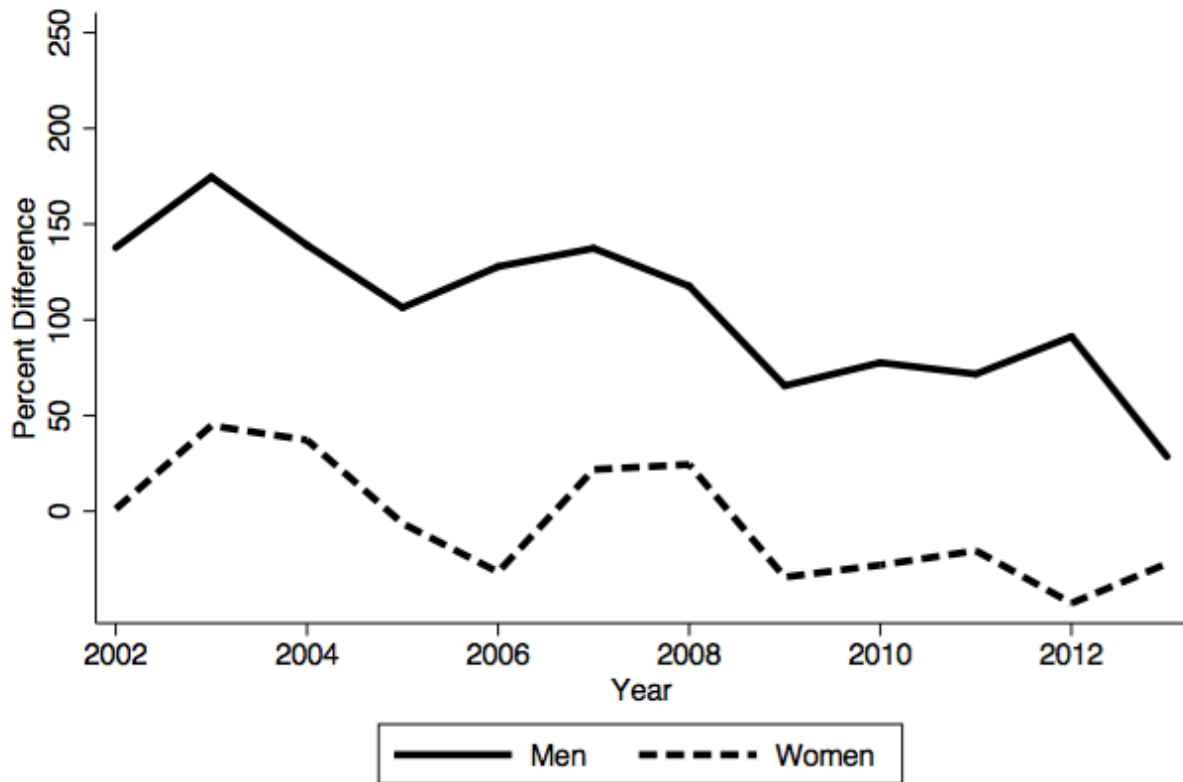
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by purpose of stop.

Figure 4. Ethnic Differences in the Likelihood of Search



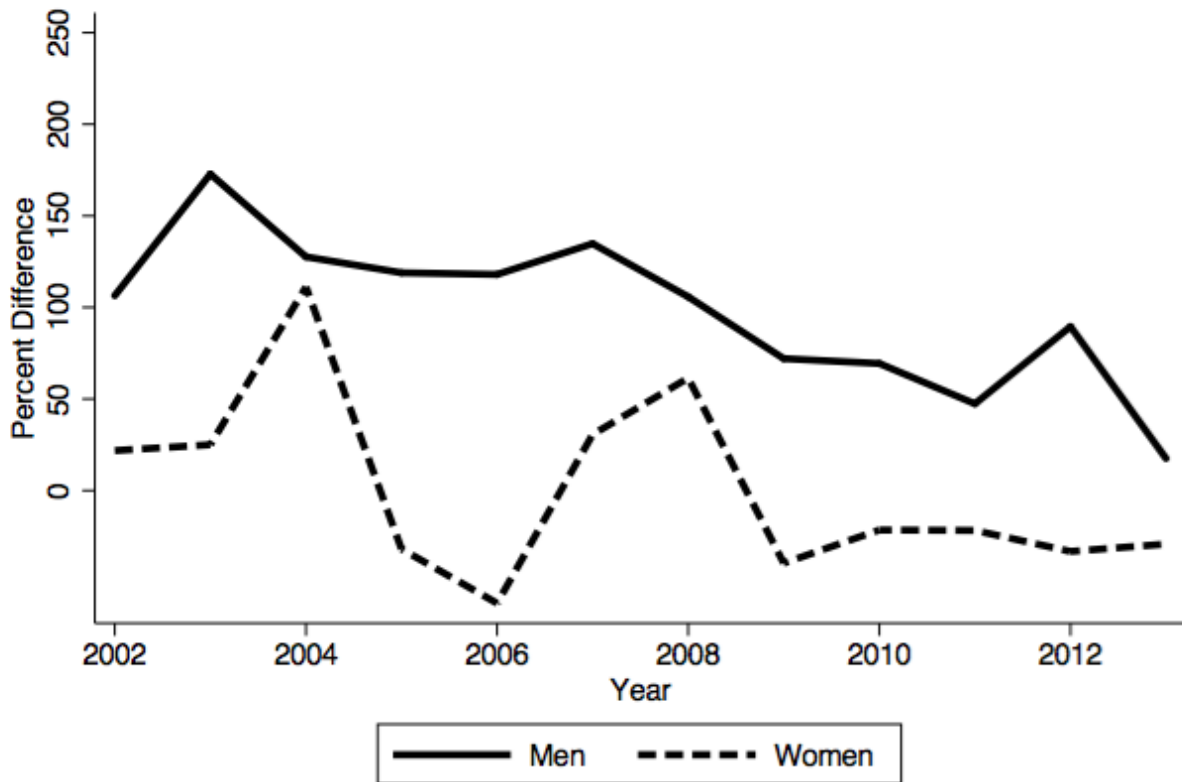
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites.

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



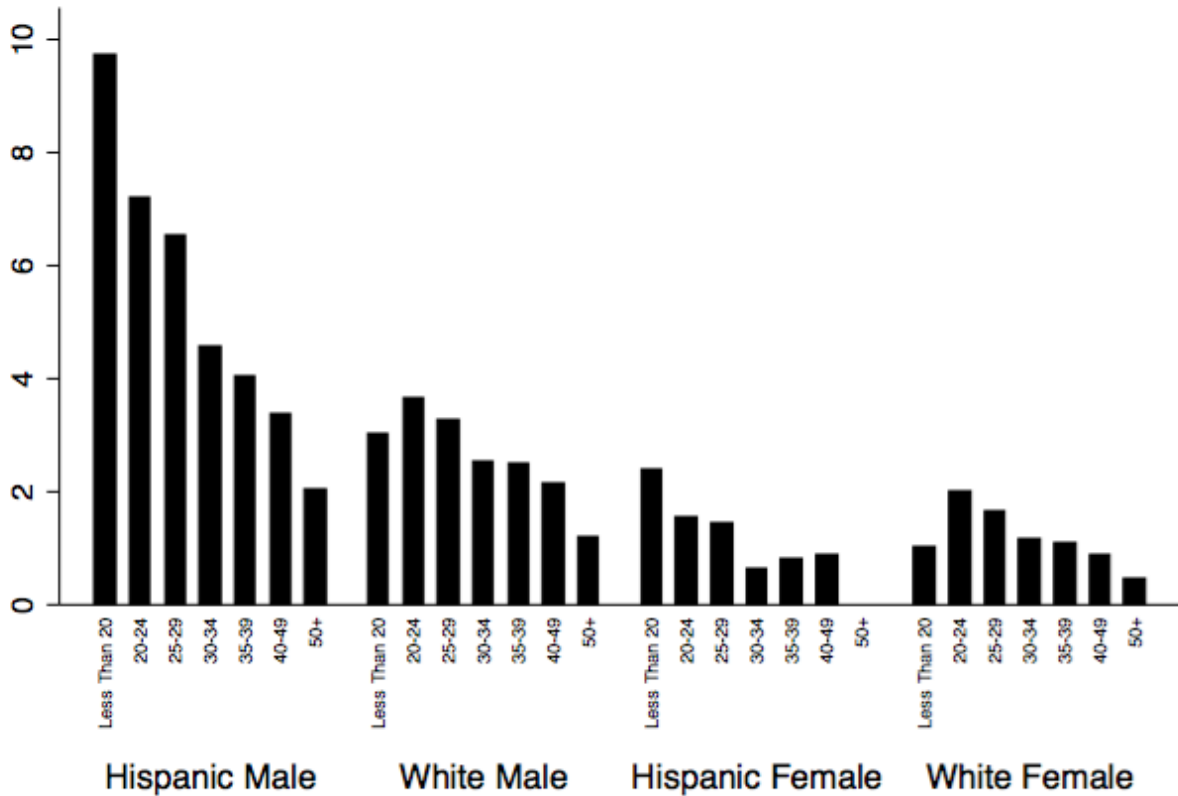
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by gender.

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 719,715 traffic stops from 2002 through 2013, and 23,487 searches. Overall rate of search: 3.26 percent. No data are presented for categories with fewer than 10 searches.

Figure 8. Number of Stops, by Ethnicity and Gender

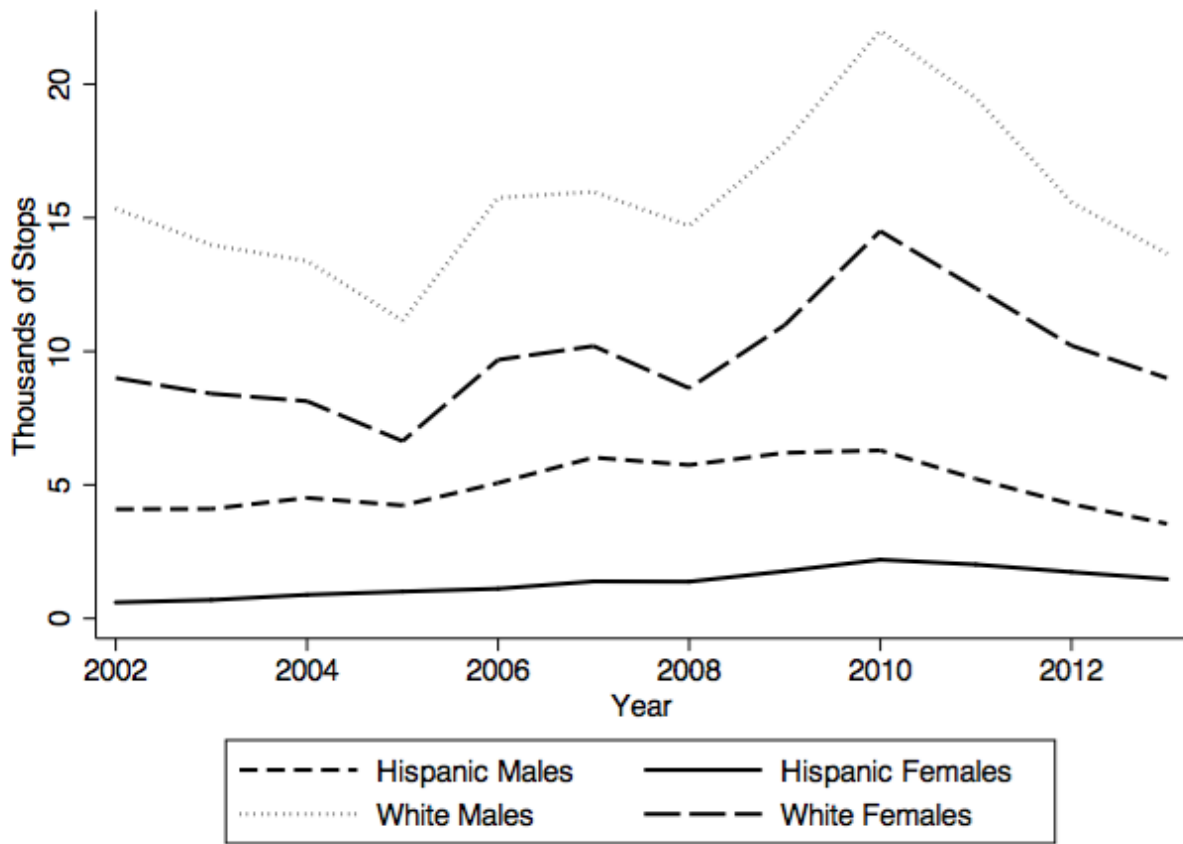


Figure 9. Percent of Stops Resulting in a Search, by Ethnicity and Gender

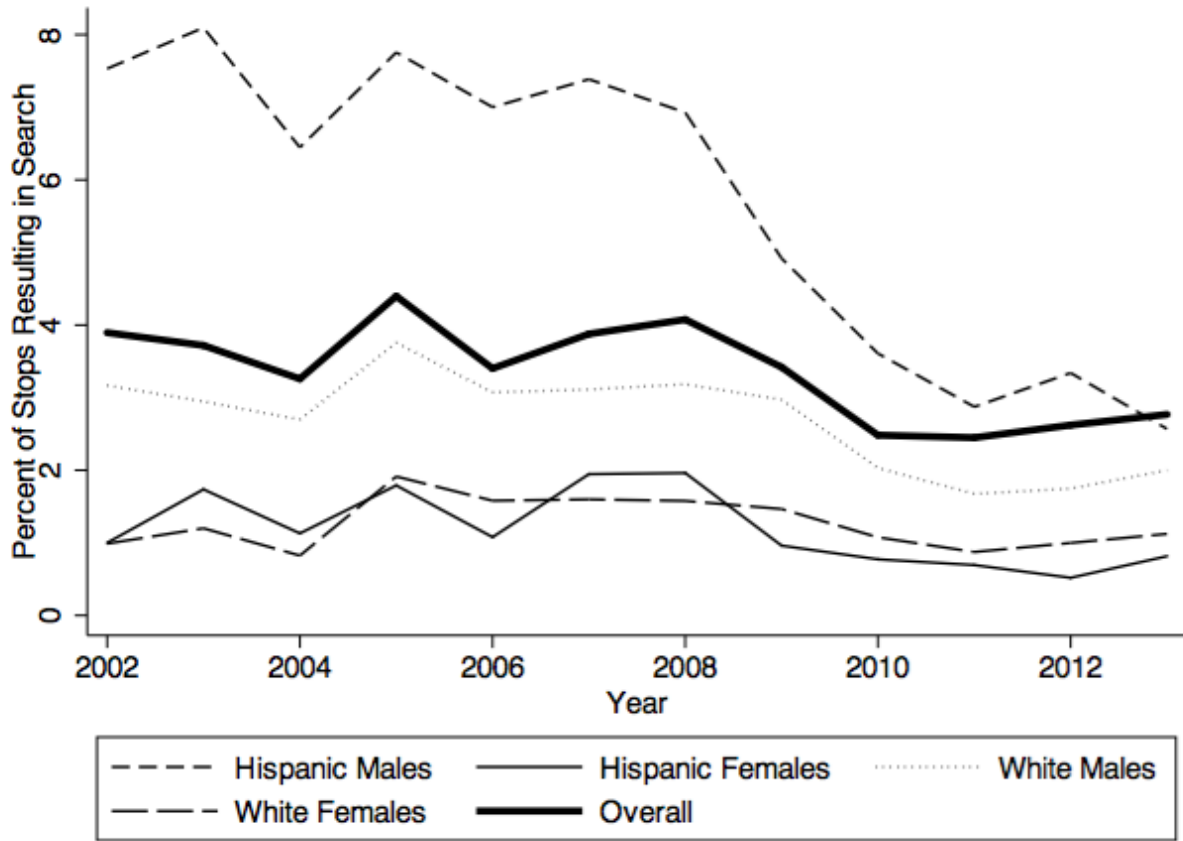


Table 4. Type of Search by Ethnicity

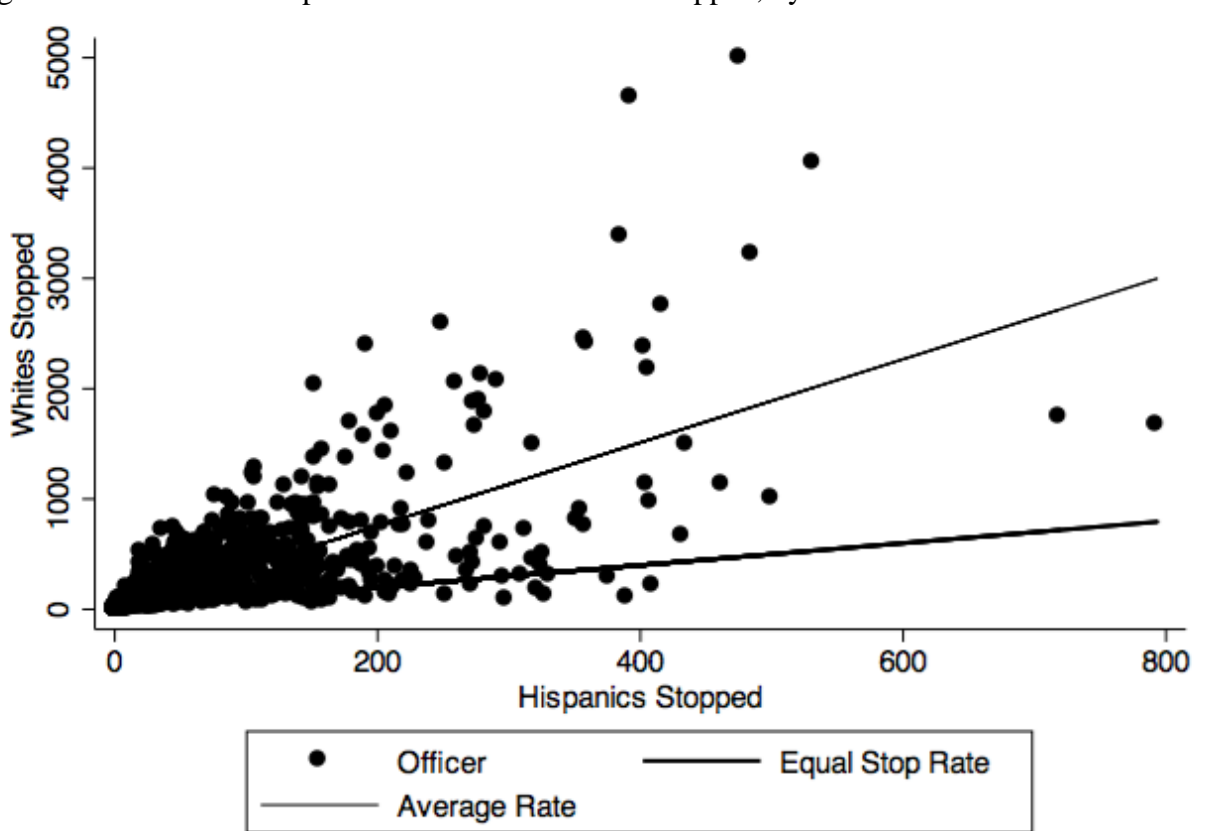
Search Type	Number	% Total	% White	Ratio	
				% Hispanic	Hispanic:White
Total Stops	719,715	-	47.59	10.50	-
Total Searches	23,487	3.26	2.10	4.70	2.24
Consent	7,441	1.03	0.56	1.08	1.93
Search Warrant	6	-	-	-	-
Probable Cause	4,547	0.63	0.31	0.48	1.55
Incident to Arrest	11,087	1.54	1.21	3.10	2.56
Protective Frisk	406	0.06	0.02	0.05	2.50

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

Table 5. Distribution of Officer IDs by Stop

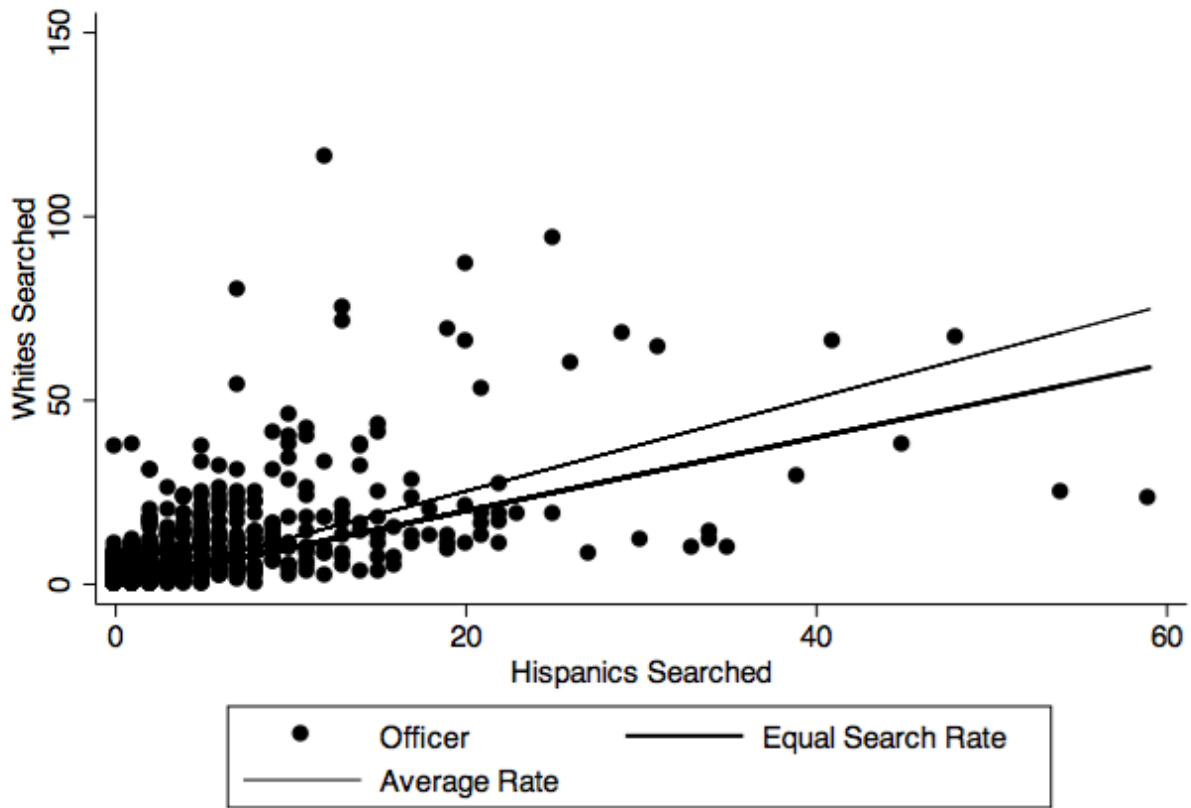
Number of Stops	Officers w/ this many Stops	Percent of Officers	Cumulative Percent	Percent of Stops	Cumulative Percent
1	28	2.40	2.40	-	-
2 - 10	80	6.86	9.26	0.05	0.05
11 - 100	175	15.01	24.27	1.14	1.19
101 - 1,000	656	56.26	80.53	41.97	43.16
1,001 +	227	19.47	100.00	56.84	100.00
Total	1,166	100	-	100	-

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



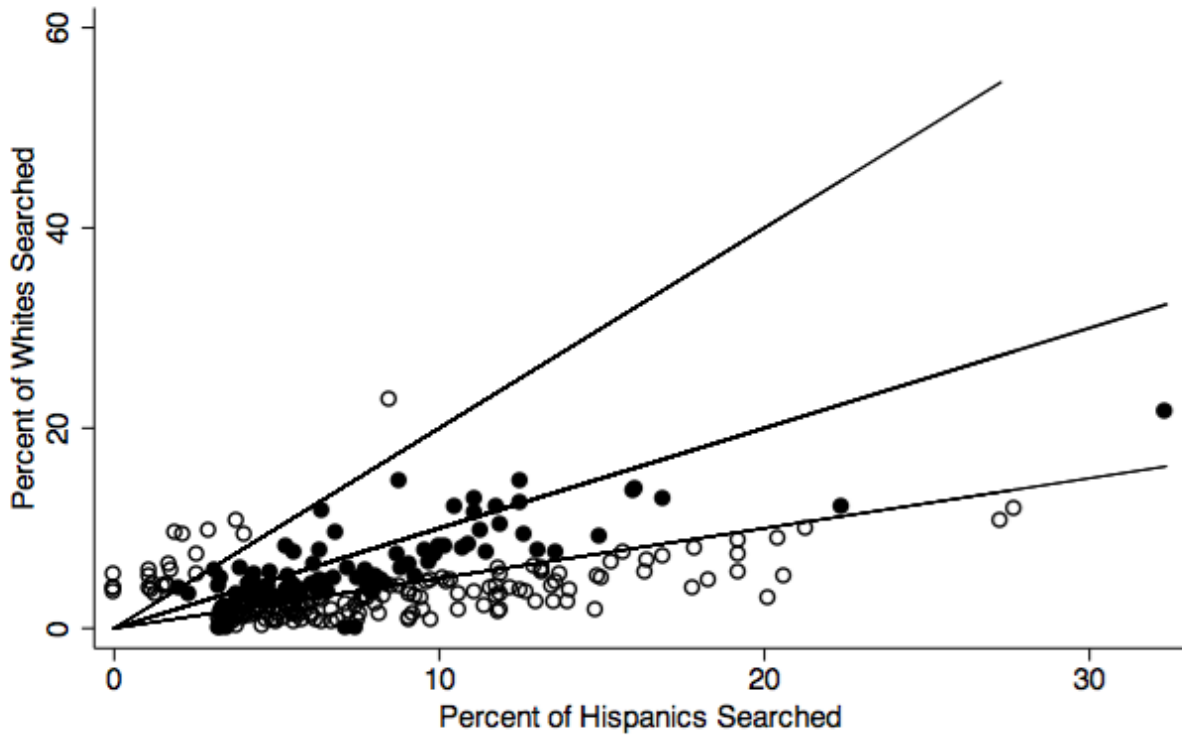
On average, officers stop 3.78 Whites for each Hispanic stopped.

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



On average, officers search 1.27 Whites for each Hispanic searched.

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



Includes 257 officers with a minimum of 50 White stops, 50 Hispanic stops, and a search rate above the department average of 3.26 for either ethnicity. The hollow circles indicate high disparity officers. 23 officers search Whites at more than twice the rate that they search Hispanics. 149 officers search Hispanics at more than twice the rate that they search Whites.

Appendix

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

Purpose	Number	Percent	
		White	Hispanic
Total Stops	11,881	22.85	11.94
Speed Limit	985	23.81	12.59
Stop Light/Sign	565	29.35	12.57
Driving Impaired	998	59.52	24.75
Safe Movement	674	26.96	13.06
Vehicle Equipment	1,694	16.58	9.21
Vehicle Regulatory	3,112	19.17	10.64
Seat Belt	388	15.75	6.70
Investigation	2,095	19.70	8.88
Other Vehicle	1,370	18.20	13.80

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	455,949	-	47.60	13.01	0.27
Total Searches	19,658	4.31	2.63	5.69	2.16
Speed Limit	127,933	1.44	0.75	2.32	3.09
Stop Light/Sign	29,533	2.66	1.44	3.40	2.36
Driving Impaired	7,739	49.15	50.30	54.39	1.08
Safe Movement	26,390	4.02	2.08	5.34	2.57
Vehicle Equipment	50,311	4.34	2.43	4.26	1.75
Vehicle Regulatory	131,911	3.39	1.59	3.74	2.35
Seat Belt	17,110	2.79	0.96	2.06	2.15
Investigation	23,785	11.47	0.57	7.19	12.61
Other Vehicle	41,177	5.59	3.14	5.20	1.66

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	263,766	-	47.57	6.16	0.13
Total Searches	3,829	1.45	1.24	1.11	0.90
Speed Limit	88,458	0.34	0.21	0.29	1.38
Stop Light/Sign	17,076	0.67	0.47	0.53	1.13
Driving Impaired	2,286	42.26	46.02	36.59	0.80
Safe Movement	13,534	0.92	0.72	0.88	1.22
Vehicle Equipment	24,189	1.55	1.13	0.37	0.34
Vehicle Regulatory	83,687	1.11	0.66	0.72	1.09
Seat Belt	6,419	0.93	0.42	0.79	1.88
Investigation	8,696	6.30	5.79	3.14	0.54

Other Vehicle	19,421	2.14	1.54	0.98	0.64
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Table A4. Type of Search by Ethnicity: Men

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	455,949	-	47.60	13.01	0.27
Total Searches	19,658	4.31	2.63	5.69	2.16
Consent	6,583	1.44	0.75	1.32	1.76
Search Warrant	5	-	-	-	-
Probable Cause	3,780	0.83	0.39	0.57	1.46
Incident to Arrest	8,921	1.96	1.46	3.73	2.55
Protective Frisk	369	0.08	0.03	0.06	2.00

Table A5. Type of Search by Ethnicity: Women

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	263,766	-	47.57	6.16	0.13
Total Searches	3,829	1.45	1.24	1.11	0.90
Consent	858	0.33	0.26	0.18	0.69
Search Warrant	1	-	-	-	-
Probable Cause	767	0.29	0.18	0.14	0.78
Incident to Arrest	2,166	0.82	0.79	0.80	1.01
Protective Frisk	37	0.01	-	-	-

Figure A1. Stops by Day of the Week

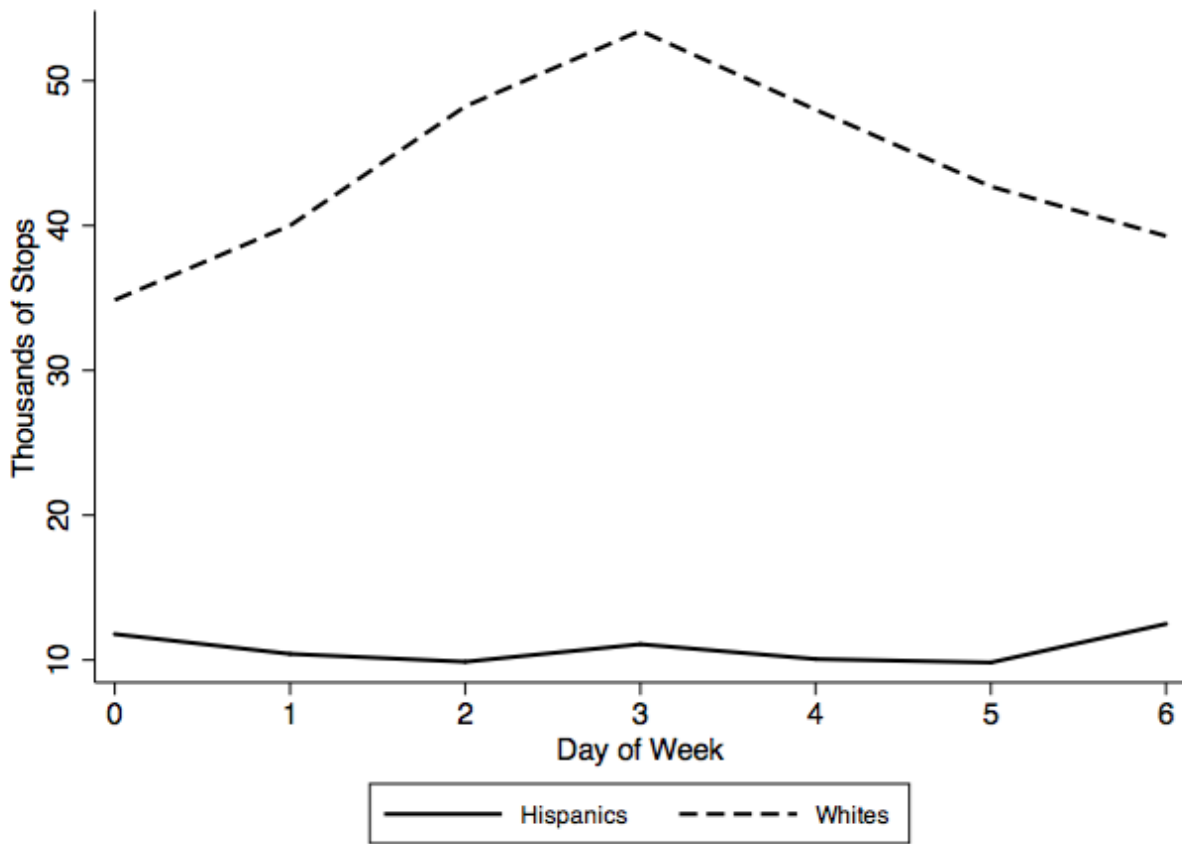


Figure A2. Searches by Day of the Week

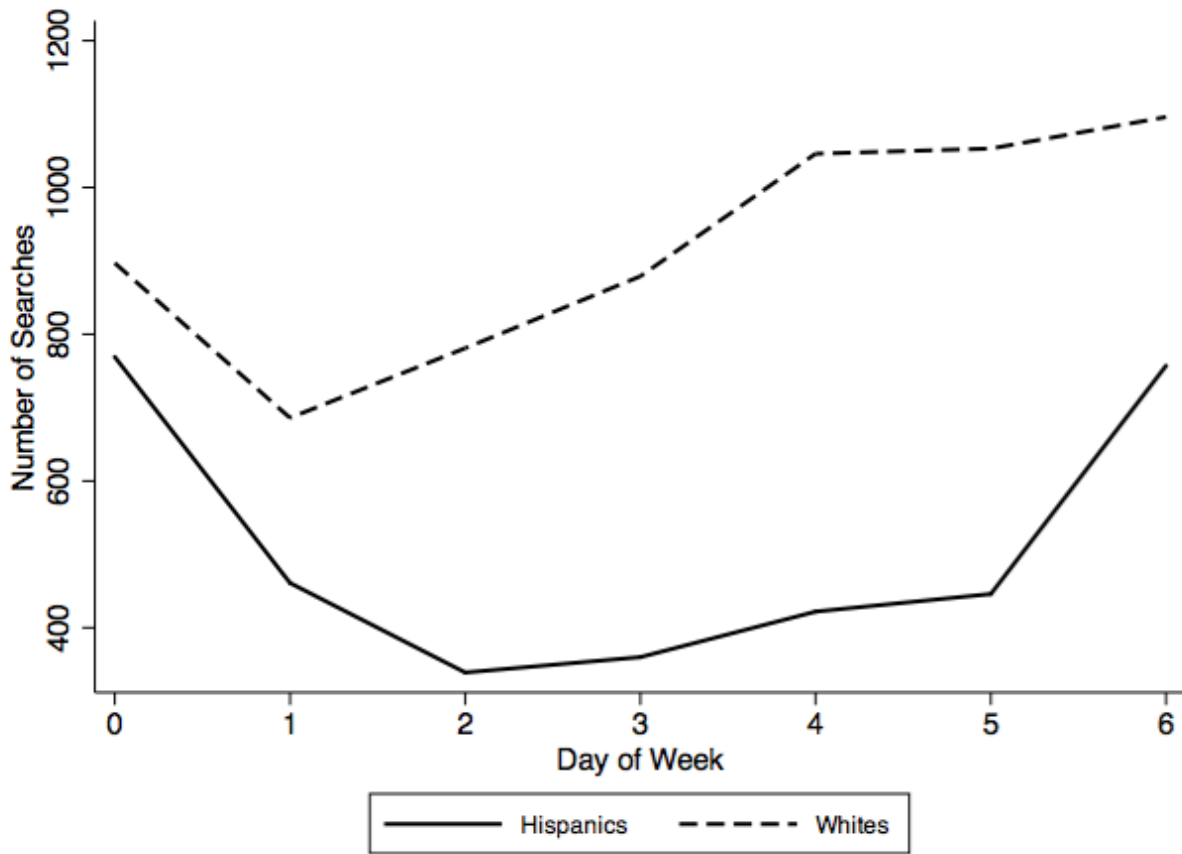
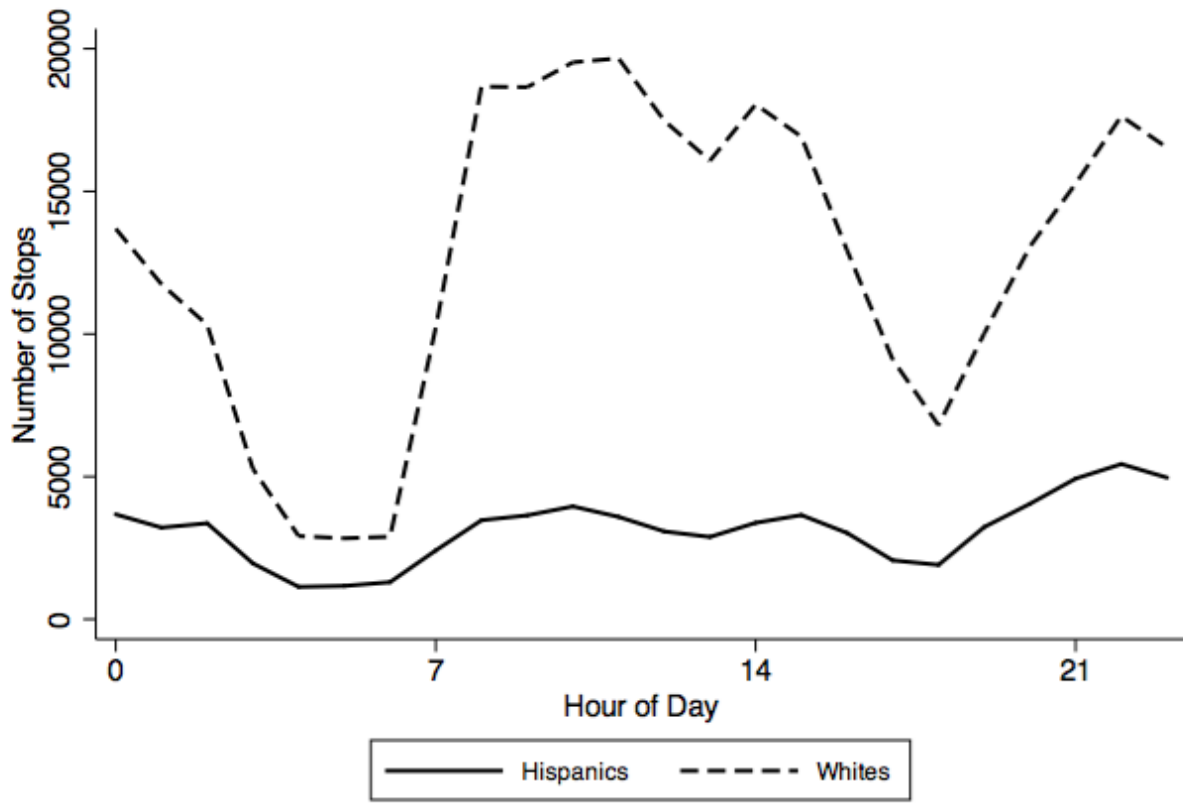
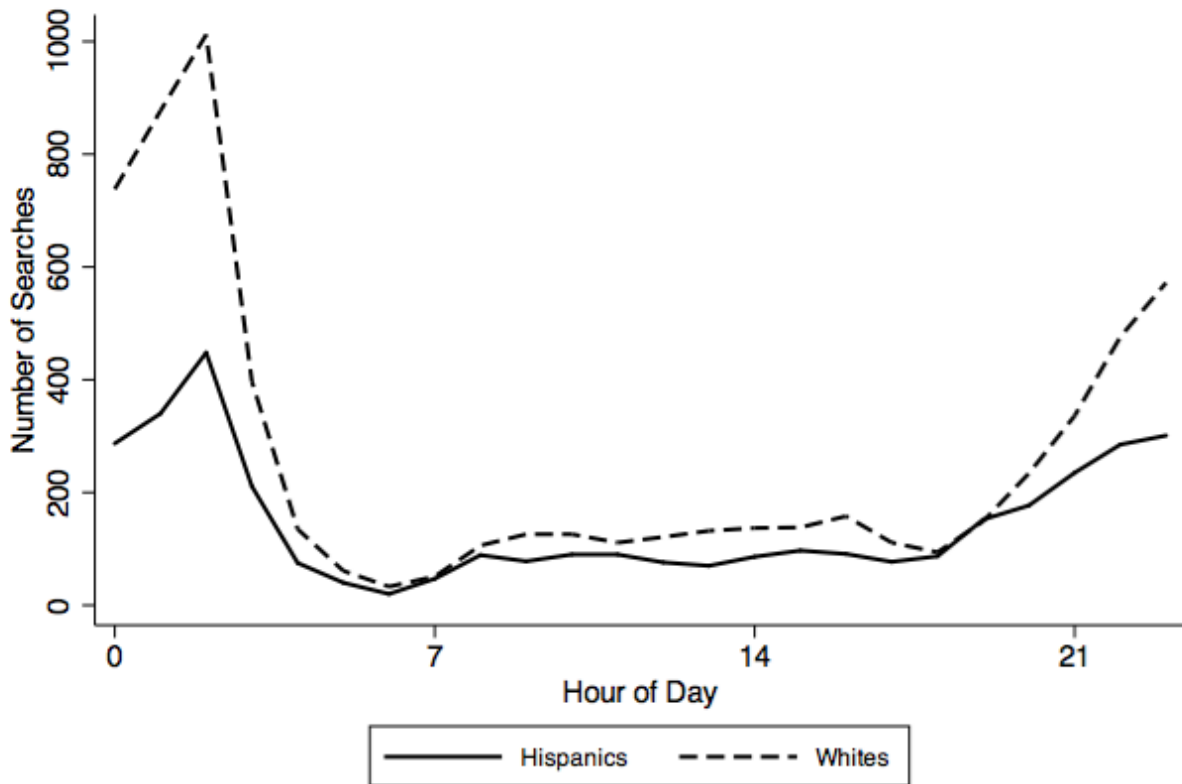


Figure A3. Stops by Hour of the Day



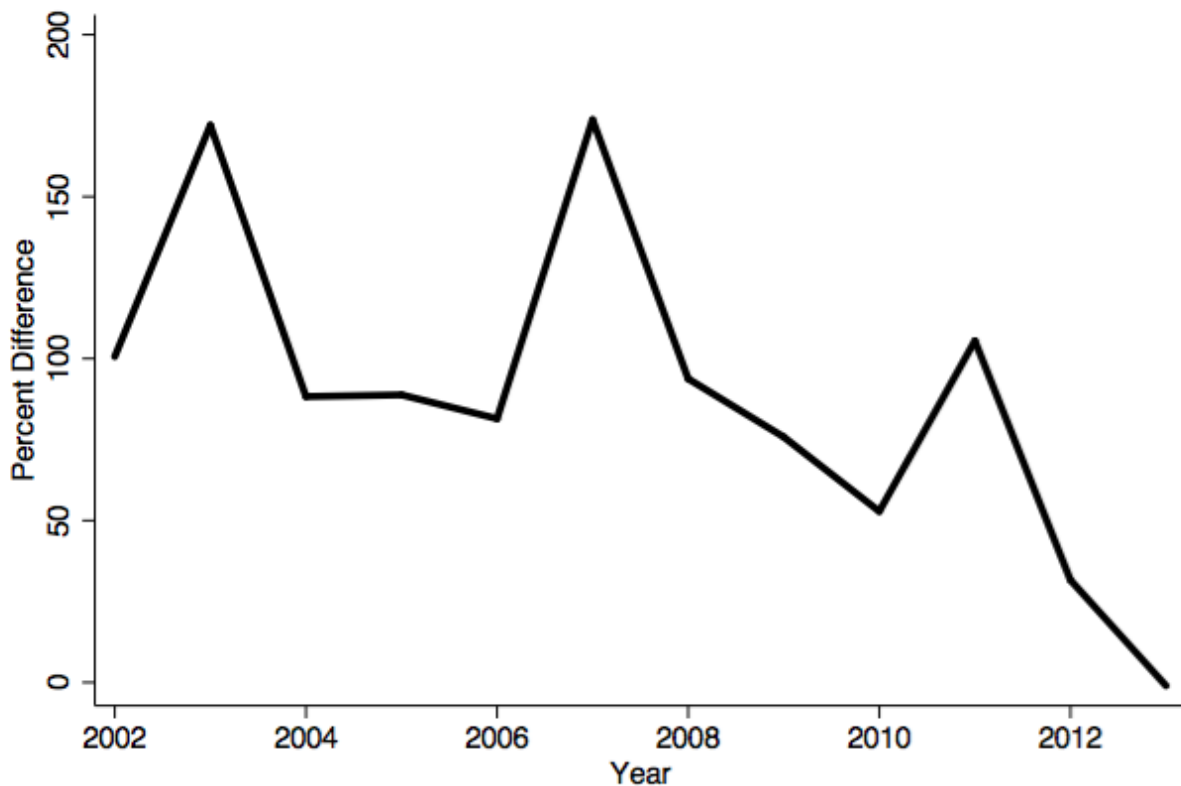
The figure excludes cases where the hour and minute was exactly 0:00. These cases were presumed to be missing data.

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 A5. 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 Ethnicity

Contraband	Number	% Total	% White	% Hispanic
Yes	2,795	11.90	12.26	5.60
No	20,692	88.10	87.74	94.40
Total	23,487	100.00	100.00	100.00

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

Ethnicity	Search Occur	N	Differential Outcomes					
			No Action	Verbal Warning	Written Warning	Citation Issued	Arrest	Total
White	No	300,092	1.88	28.78	6.00	62.56	0.78	100.0
Hispanic	No	72,007	2.50	25.04	2.33	68.15	1.98	100.0
Total	No	696,228	2.31	31.73	4.62	60.28	1.06	100.0
White	Yes	6,438	1.20	9.16	0.37	26.30	62.97	100.0
Hispanic	Yes	3,544	0.79	6.87	0.28	22.79	69.27	100.0
Total	Yes	23,487	1.33	13.02	0.49	32.52	52.64	100.0