

Online Appendix

Are Lawyers' Case Selection Decisions Biased? A Field Experiment on Access to Justice

Appendices C–H

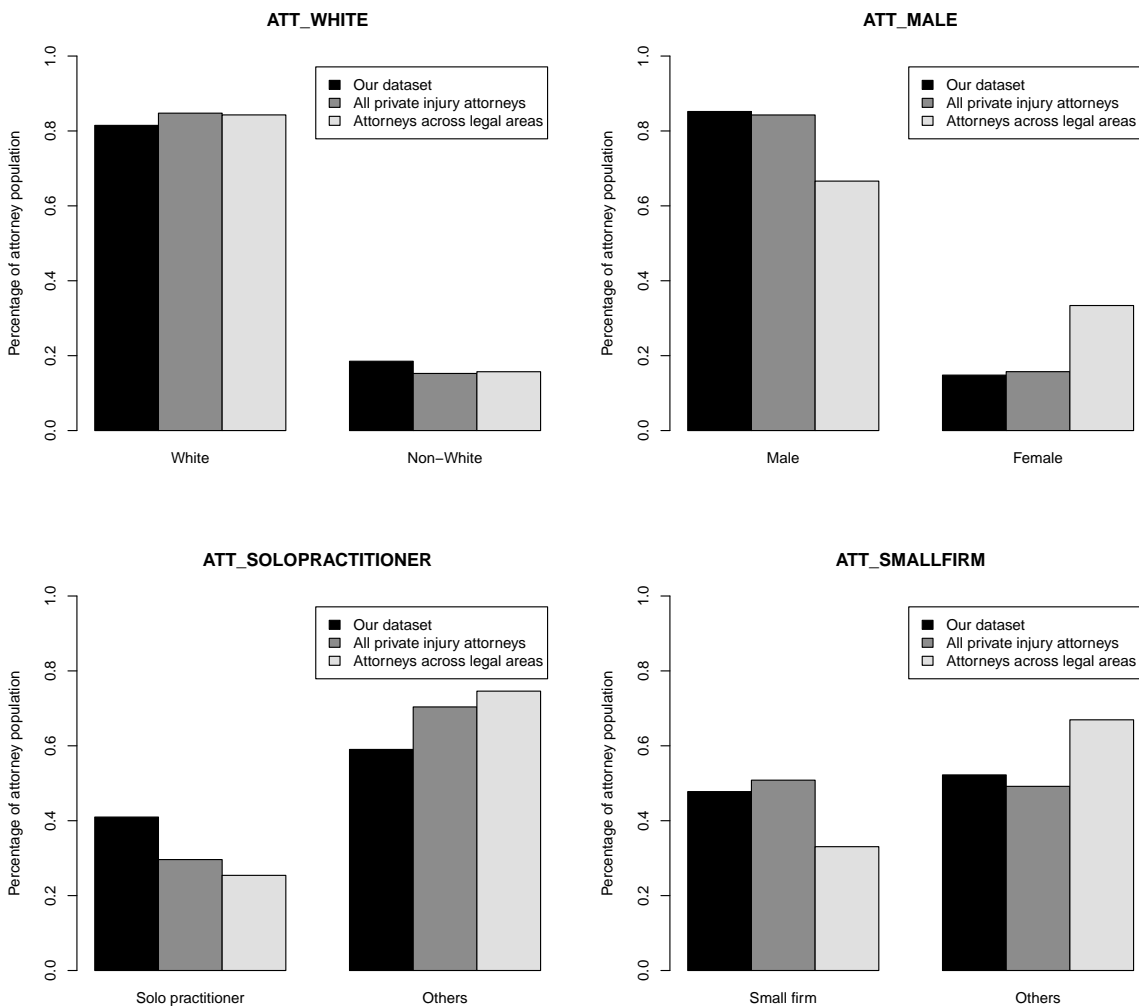
Appendix C – Information on Attorney Sample

Table C1: Information on personal injury lawyers by state.

	Population estimate for 2017	Number lawyers in data	Lawyers per 100k inhabitants	Number lawyers w/ email	Percent. lawyers w/ email
Alabama	4,874,747	1,916	39.30	1,154	60.23
Alaska	739,795	279	37.71	185	66.31
Arizona	7,016,270	1,444	20.58	817	56.58
Arkansas	3,004,279	867	28.86	445	51.33
California	39,536,653	7,045	17.82	3,115	44.22
Colorado	5,607,154	920	16.41	608	66.09
Connecticut	3,588,184	1,284	35.78	922	71.81
Delaware	961,939	263	27.34	179	68.06
District of Columbia	693,972	344	49.57	205	59.59
Florida	20,984,400	5,754	27.42	4,673	81.21
Georgia	10,429,379	2,709	25.97	2,041	75.34
Hawaii	1,427,538	373	26.13	279	74.80
Idaho	1,716,943	351	20.44	187	53.28
Illinois	12,802,023	4,430	34.60	2,359	53.25
Indiana	6,666,818	1,874	28.11	952	50.80
Iowa	3,145,711	800	25.43	429	53.62
Kansas	2,913,123	779	26.74	386	49.55
Kentucky	4,454,189	893	20.05	585	65.51
Louisiana	4,684,333	2,813	60.05	1,583	56.27
Maine	1,335,907	154	11.53	108	70.13
Maryland	6,052,177	843	13.93	594	70.46
Massachusetts	6,859,819	3,137	45.73	1,621	51.67
Michigan	9,962,311	2,104	21.12	1,526	72.53
Minnesota	5,576,606	1,602	28.73	1,075	67.10
Mississippi	2,984,100	1,039	34.82	583	56.11
Missouri	6,113,532	2,269	37.11	1,351	59.54
Montana	1,050,493	501	25.57	284	56.69
Nebraska	1,920,076	627	32.65	379	60.44
Nevada	2,998,039	675	22.51	404	59.85
New Hampshire	1,342,795	506	37.86	257	50.79
New Jersey	9,005,644	3,754	41.68	1,993	53.09
New Mexico	2,088,070	659	31.56	336	50.97
New York	19,849,399	6,874	34.63	3,663	53.29
North Carolina	10,273,419	1,181	11.50	902	76.38
North Dakota	755,393	184	24.36	134	72.83
Ohio	11,658,609	3,300	28.31	1,803	54.64
Oklahoma	3,930,864	1,430	36.38	806	56.36
Oregon	4,142,776	963	23.24	708	73.52
Pennsylvania	12,805,537	4,940	38.58	2,589	52.41
Rhode Island	1,059,639	577	54.45	324	56.15
South Carolina	5,024,369	851	16.94	611	71.80
South Dakota	869,666	444	51.05	260	58.56
Tennessee	6,715,984	1,754	26.12	1,121	63.91
Texas	28,304,596	6,611	23.36	3,758	56.84
Utah	3,101,833	511	16.47	349	68.30
Vermont	623,657	310	49.71	182	58.71
Virginia	8,470,020	1,912	22.57	1,129	59.05
Washington	7,405,743	2,208	29.81	1,262	57.16
West Virginia	1,815,857	851	46.86	478	56.17
Wisconsin	5,795,483	898	15.49	514	57.24
Wyoming	579,315	238	41.08	120	50.42
TOTAL	325,719,178	89,045	27.34	52,328	58.77

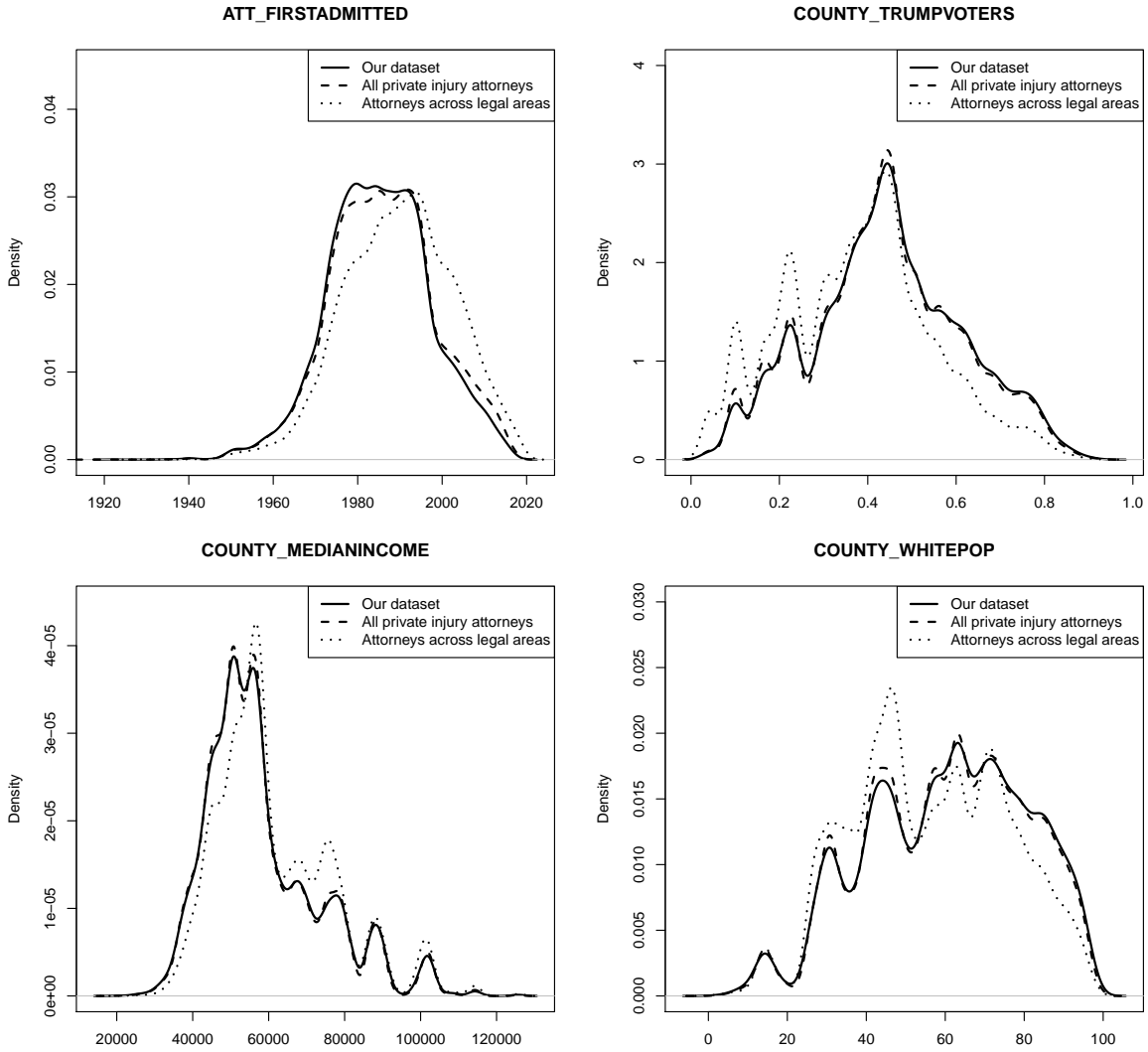
Notes. Population estimates obtained from U.S. Census Bureau, available online at <https://www2.census.gov/programs-surveys/popest/tables/20102017/state/totals/nstest2017-01.xlsx> (last accessed January 29, 2019).

Figure C1: Representativeness of attorney sample (1)



Notes. Bar plots comparing characteristics of attorneys in our dataset (black) with all private injury attorneys for which we obtained email addresses (dark grey) and a random sample of attorneys from all practice areas (medium grey).

Figure C2: Representativeness of attorney sample (2)



Notes. Density plots comparing characteristics of attorneys in our dataset (black solid line) with all private injury attorneys for which we obtained email addresses (dashed line) and a random sample of attorneys from all practice areas (dashed and dotted line).

Appendix D – Regression Analysis

In this Appendix, we report the results from a series of regressions aimed at confirming the existence of the main effect documented in this paper, namely the impact of senders’ purported race/ethnicity and gender on response rates.

Table D1 reports the results from a number of different logit regressions. In both panels in Table D1, Columns (1) and (2) report results of regressions using the first round data, columns (3) and (4) results for the second round data, and columns (5) and (6) results for the combined data from both rounds. The odd-numbered columns report results using all inquiries, while the results reported in even-numbered columns were obtained from regressions using only emails that did not result in an error message. All regressions include state fixed effects. Standard errors are clustered at the state level.¹

The regressions reported in Panel (a) compare the response rates for Black and Hispanic senders with those for White senders. As can be seen from the table, the estimates for both Black and Hispanic are negative and significant in all specifications. This confirms that members of minority groups indeed have a harder time initiating a relationship with attorneys. Furthermore, the negative effect for MALE confirms that attorneys preferentially respond to female senders.

The introduction of separate variables for each combination of racial/ethnic group and gender in the even-numbered columns confirms the finding that the difference in responses between different groups is largely driven by differences in responses to female inquirers.

The size of the estimates is also substantially significant. For example, the point estimate of -.227 for Black female senders in column (9) suggests that an attorney who responds with a probability of 30% to senders using a name common among White females will only respond to a sender writing under a name common with Black females with a probability of 25.4%.

Because of the random assignment of sender names to attorneys, our estimates for the main treatment effects would be unbiased even in absence of controls for attorney characteristics. Nevertheless, as described above, all regressions reported in Table D1 include state fixed effects. Under randomized assignment, the inclusion of these variables should not substantially affect the size of the estimated coefficients. In a series of unreported regressions, we confirm that the inclusion of fixed effects does not meaningfully alter the size of our estimates, suggesting that our method of randomization worked as expected.

Substantially similar results can be obtained when using the alternative outcome variable described in Appendix B *in lieu* of our main outcome variable. Table D2 reports the results

1. Using “standard” Huber-White standard errors instead of clustered standard errors does not materially affect the results.

Table D1: Logit Regressions.

(a) Aggregated Group Categories						
	1st Round		2nd Round		Combined Data	
	(1)	(2)	(3)	(4)	(5)	(6)
BLACK	-0.174*** (.041)	-0.194*** (.041)	-0.108* (.050)	-0.113* (.055)	-0.138*** (.033)	-0.146*** (.037)
HISPANIC	-0.139* (.064)	-0.165* (.075)	-0.104* (.050)	-0.107* (.045)	-0.120** (.036)	-0.131** (.038)
MALE	-0.053 (.037)	-0.053 (.044)	-0.153*** (.038)	-0.160*** (.040)	-0.105*** (.025)	-0.112*** (.027)
<i>Intercept</i>	-1.41*** (.107)	-0.467*** (.126)	-1.31*** (.065)	-1.01*** (.072)	-1.35*** (.082)	-.801*** (.088)
<i>N</i>	11,317	8,003	12,894	9,442	24,211	17,445
(b) Disaggregated Group Categories						
	1st Round		2nd Round		Combined Data	
	(1)	(2)	(3)	(4)	(5)	(6)
BLACK-FEMALE	-0.339*** (.091)	-.330** (.098)	-.134+ (.073)	-.184** (.068)	-.227*** (.063)	-.247*** (.061)
BLACK-MALE -	-0.245*** (.061)	-.253*** (.070)	-.259*** (.072)	-.273** (.085)	-.250*** (.046)	-.262*** (.053)
HISPANIC-FEMALE -	-0.247* (.085)	-.248** (.095)	-.117+ (.071)	-.148* (.066)	-.182** (.051)	-.193*** (.051)
HISPANIC-MALE	-0.259** (.077)	-.277** (.087)	-.270*** (.072)	-.300*** (.066)	-.261*** (.050)	-.287*** (.050)
WHITE-MALE	-0.242*** (.068)	-.200** (.071)	-.180** (.068)	-.235*** (.065)	-.207*** (.048)	-.222*** (.047)
<i>Intercept</i>	-1.38*** (.102)	-.460*** (.113)	-1.45*** (.047)	-1.13*** (.043)	-1.41*** (.077)	-.863*** (.080)
<i>N</i>	11,317	8,003	12,894	9,442	24,211	17,445

Notes. Dependent variable: binary variable indicating whether a response was received. Odd-numbered columns report results from regressions including bounced emails, even numbered columns results from regressions excluding these emails. Standard errors clustered at the state level in parentheses. Controls for different emails and state fixed effects included in all regressions. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Reference categories: Panel (a): WHITE. Panel (b): WHITE-FEMALE.

of regressions that mirror those reported in Table D1, with the exception that we use positive responses as the outcome variable. All estimates for differences between Black senders and White or White female senders remain significant. The same is not true for Hispanic senders, which suggests that attorneys are less likely to respond to inquiries by perceived Black senders than to those by senders perceived to belong to other racial/ethnic minorities.

Table D2: Regression results.

(a) Aggregated Group Categories						
	1st Round		2nd Round Data		Combined Data	
	(1)	(2)	(3)	(4)	(5)	(6)
BLACK	-.143*** (.035)	-.154*** (.039)	-.142** (.047)	-.151** (.051)	-.141*** (.029)	-.147*** (.031)
HISPANIC	-.095 (.067)	-.110 (.078)	-.059 (.059)	-.056 (.055)	-.075+ (.039)	-.078+ (.041)
MALE	-.033 (.043)	-.029 (.049)	-.169*** (.044)	-.174*** (.047)	-.105*** (.028)	-.109*** (.031)
<i>Intercept</i>	-1.93*** (.115)	-1.09*** (.134)	-1.68*** (.074)	-1.40*** (.081)	-1.79*** (.089)	-1.28*** (.095)
<i>StateF.E.</i>	Y	Y	Y	Y	Y	Y
<i>N</i>	11,317	8,003	12,894	9,442	24,211	17,445

(b) Disaggregated Group Categories						
	1st Round		2nd Round Data		Combined Data	
	(1)	(2)	(3)	(4)	(5)	(6)
BLACK-FEMALE	-.305*** (.078)	-.286** (.086)	-.199** (.075)	-.250** (.073)	-.246*** (.059)	-.262*** (.058)
BLACK-MALE	-.174* (.067)	-.165* (.077)	-.324*** (.079)	-.340*** (.090)	-.250*** (.047)	-.256*** (.054)
HISPANIC-MALE	-.179* (.085)	-.152 (.093)	-.112 (.075)	-.138* (.070)	-.142** (.054)	-.143** (.053)
HISPANIC-MALE	-.202* (.083)	-.208* (.094)	-.245** (.075)	-.265*** (.071)	-.223*** (.051)	-.238*** (.053)
WHITE-MALE	-.195* (.076)	-.144+ (.079)	-.245*** (.070)	-.298*** (.070)	-.221*** (.052)	-.230*** (.054)
<i>Intercept</i>	-1.89*** (.110)	-1.07*** (.119)	-1.82*** (.048)	-1.52*** (.044)	-1.84*** (.085)	-1.33*** (.086)
<i>StateF.E.</i>	Y	Y	Y	Y	Y	Y
<i>N</i>	11,317	8,003	12,894	9,442	24,211	17,445

Notes. Dependent variable: binary variable indicating whether a positive response was received. Odd-numbered columns report results from regressions including bounced emails, even numbered columns results from regressions excluding these emails. Standard errors clustered at the state level in parentheses. Controls for different emails and state fixed effects included in all regressions. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Reference categories: Panel (a): WHITE. Panel (b): WHITE-FEMALE.

Appendix E – Geographic Variation

In this Online Appendix, we explore how the treatment of different senders varies between attorneys located in different areas. This analysis is motivated by the assumption that the relative value of representing clients from different racial/ethnic groups might vary across the country, most importantly because the legal system in some parts of the country might treat members of certain groups more or less favorably than others. Here and in the following, we focus on differences between the response rate for White senders and the response rate for Black and Hispanic senders combined. The reason for this is the fact that the response rates for the latter groups were similar in both rounds of the study.

As can be seen from Figure E1, there is considerable geographical variation in differences in response rates between states. Panel (a) shows differences in response rates between White senders and the combined data for Black and Hispanic senders, calculated on the basis of the data gathered during both rounds of the study. States colored red indicate higher response rates for White senders, while blue states indicate more responses for purported members of the other groups. The areas of the bins correspond to the overall number of inquiries sent in a state. The difference between inquiries by White and other senders is indicated in log odds ratios in order to increase the comparability of the effect sizes in different states despite different overall response levels. Because log odds ratios defy a straightforward interpretation, we provide two examples to illustrate the magnitude of these effects. The state of Michigan is depicted in medium red in the graph. Its log odds ratio is .383, indicating a substantially higher response rates for White senders as compared to the other groups combined. In fact, the response rates for White inquirers was 21.5%, while the response rates for the other groups was 15.7% on average. Pennsylvania, by contrast is depicted in a lighter red, corresponding to a log odds ratio of 0.135 and response rates of 29.1% and 26.4%, respectively.

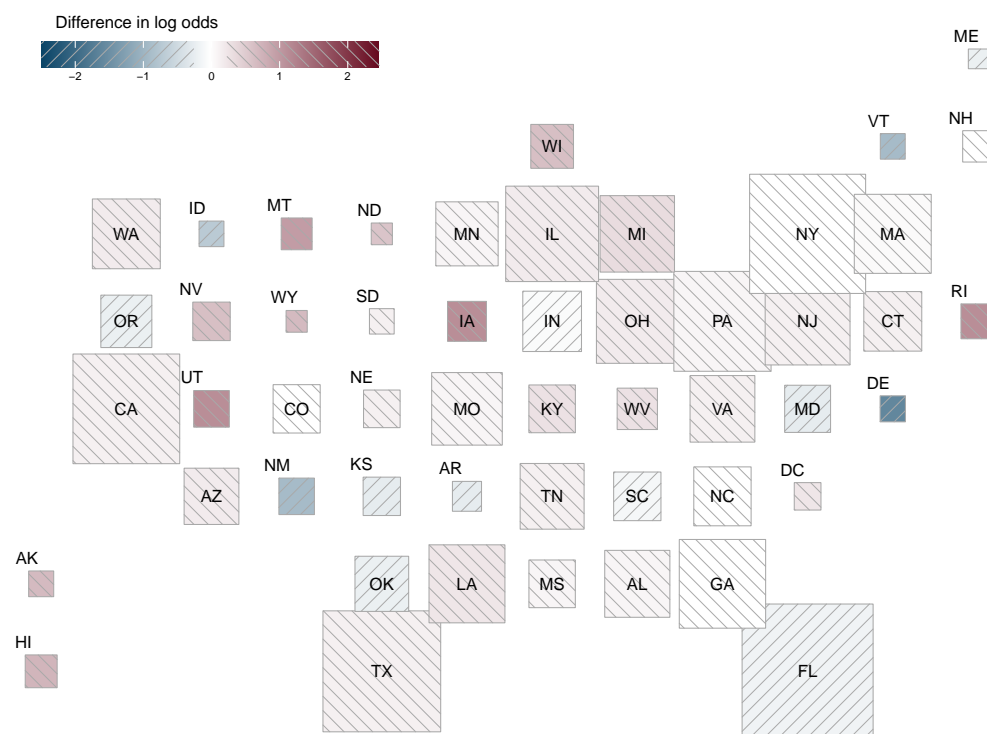
Overall, the graphic suggests considerable geographic heterogeneity, but not necessarily one that tracks intuitive regional categories. However, the preferential treatment of White senders is not restricted to only a few localities: 27 out of 51 states show a difference in log odds in favor of White senders of at least .15.²

Panels (b) and (c) show the same results separately for Black and Hispanic senders. The geographic patterns of discrimination for both groups appear to be roughly similar.

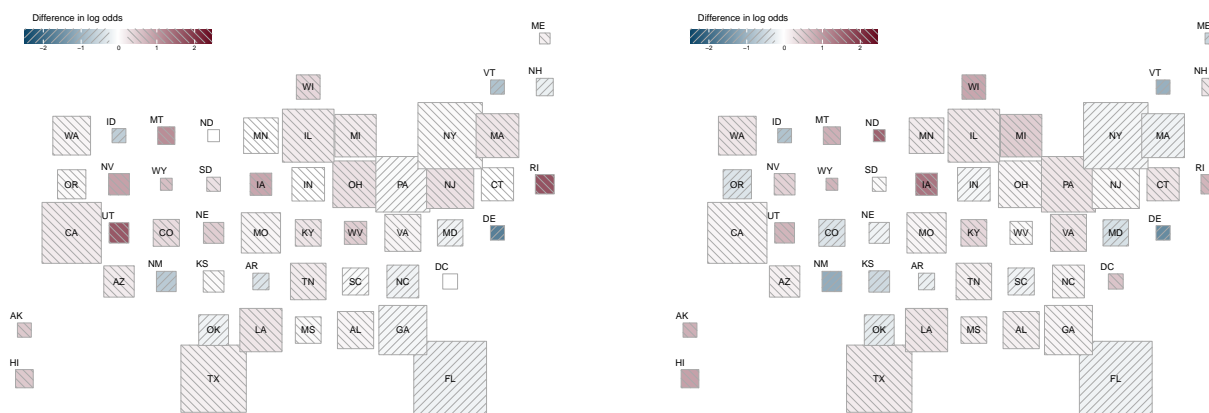
Figure E2 displays the differences in response rates between White female senders and other senders. This graphic shows comparable geographic patterns to the ones in Figure

2. Results for states with a small number of attorneys in the dataset (of which New Mexico is an example, as can also be seen from the size of the bins in Figure E2) should be taken with a grain of salt, as a small number of inquiries of course increases the probability of more extreme result.

Figure E1: Differences between treatment effects by state



(a) White vs. Black and Hispanic senders



(b) White vs. Black senders

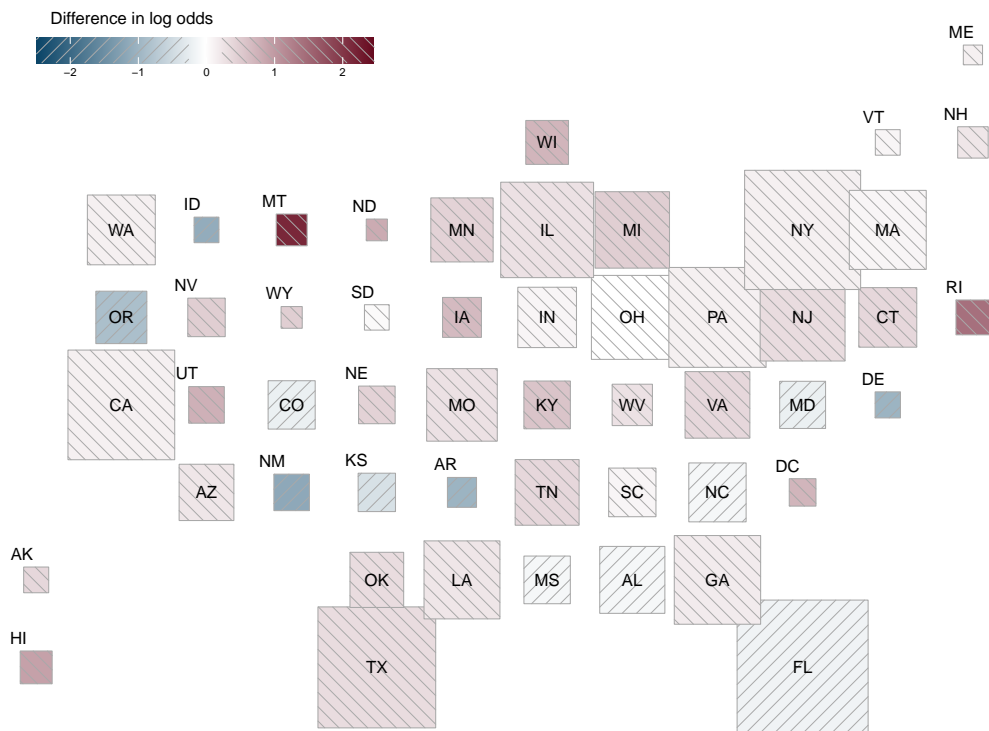
(c) White vs. Hispanic senders

Notes. “State bins” plot indicating differences in response rates for purported inquirers who are members of different race/ethnicity groups by state. Each state is represented by one squared “bin”, with the surface area of the bin equivalent to the overall numbers of inquiries sent to attorneys located in this state. The color of the bin and the direction of the lines in the bin indicate the gap between the response rates for inquiries by purported White inquirers and the response rates for inquiries by various groups of other inquirers, calculated in log odds. A red bin (with downward-facing lines) indicates a higher response rate for White inquirers, while a blue bin (with upward-facing lines) indicates a higher response rate for the other inquirers combined.

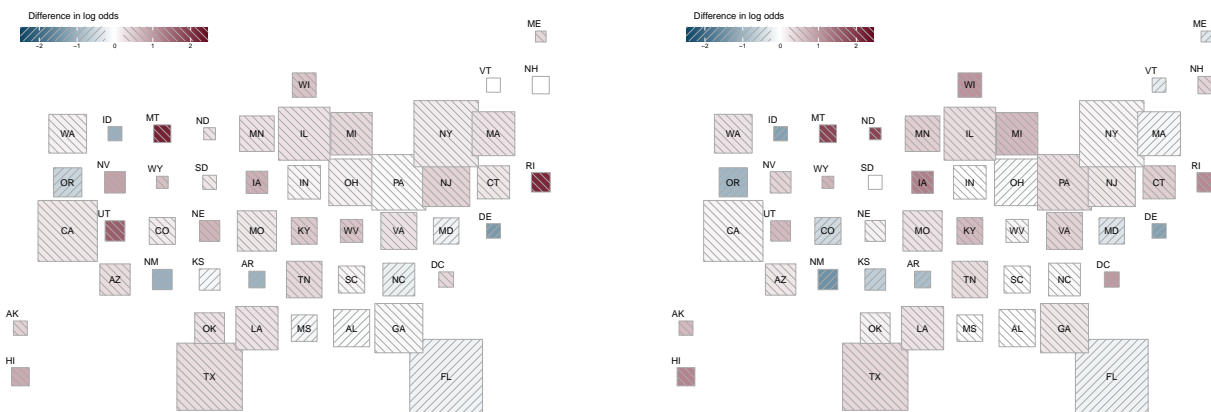
E1, although the differences in response rates between White female and other senders are generally higher than the differences in response rates between White senders on the one hand side and Black and Hispanic senders on the other hand side.

We also investigate whether differences in the response rates for different groups vary systematically with geographic factors at the sub-state level. We test variables indicative of the economic well-being of residents in particular areas (median income, poverty rates), the composition of the population (percentage of Whites in a certain area) as well as the economic fortunes of different groups of the population (the difference between the overall rate of poverty and the poverty rates of non-Hispanic Whites in an area). Most variables do not show a systematic relationship with the treatment of different groups. As Figure E3 shows, we discovered a relationship between the percentage of votes for presidential candidate Donald Trump in the 2016 election in the county in which the attorney's office is located and the treatment of Black and Hispanic vs. White senders in the first round data: Both White female and White male senders fared considerably better in areas with high numbers of Trump voters. However, the same relationship did not exist in the second round data.

Figure E2: Differences between treatment effects by state



(a) White female vs. Black and Hispanic senders

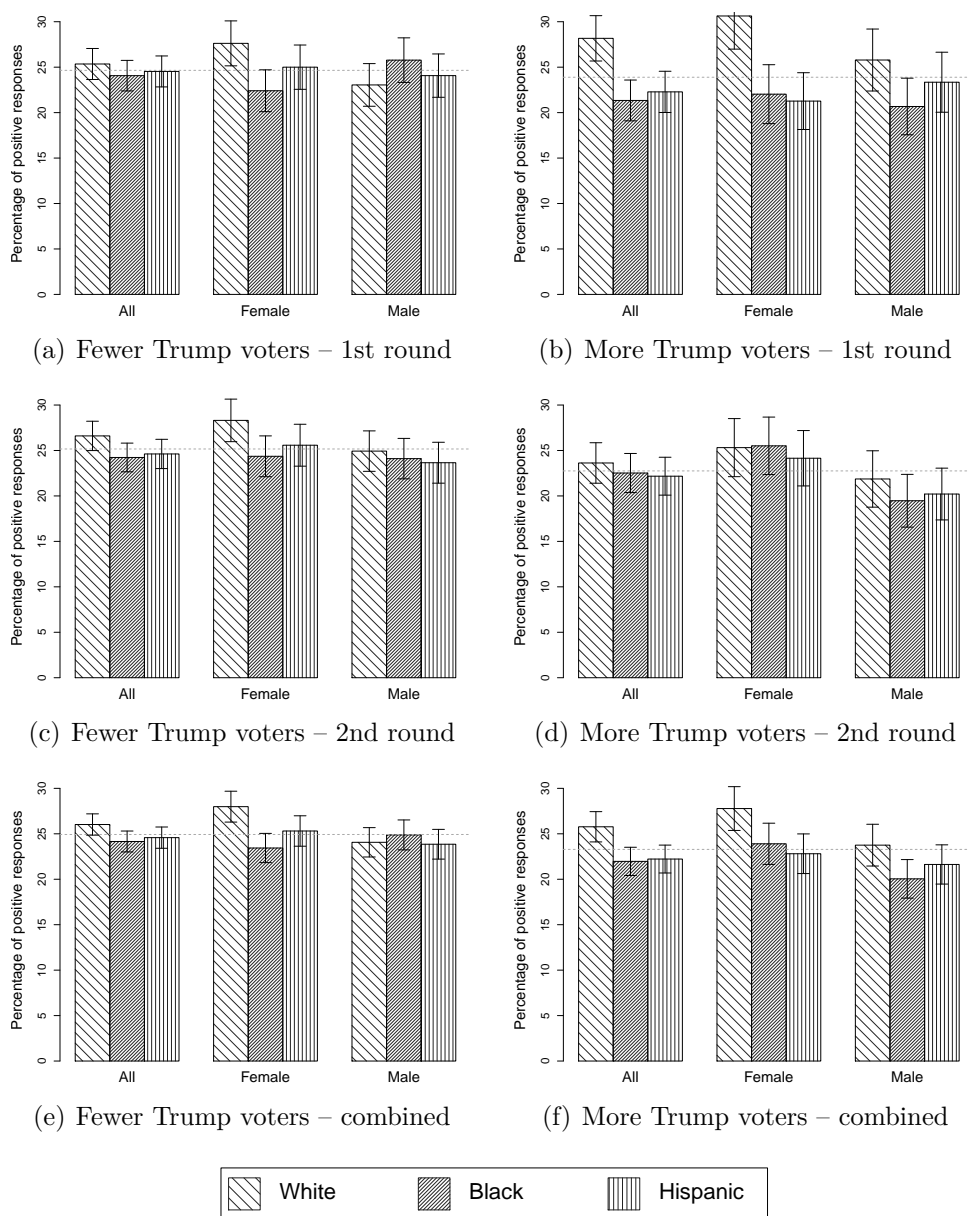


(b) White female vs. Black senders

(c) White female vs. Hispanic senders

Notes. “State bins” plot indicating differences in response rates for purported inquirers who are members of different race/ethnicity groups by state. Each state is represented by one squared “bin”, with the surface area of the bin equivalent to the overall numbers of inquiries sent to attorneys located in this state. The color of the bin and the direction of the lines in the bin indicate the gap between the response rates for inquiries by purported White female inquirers and the response rates for inquiries by various groups of other inquirers, calculated in log odds. A red bin (with downward-facing lines) indicates a higher response rate for White female inquiries, while a blue bin (with upward-facing lines) indicates a higher response rate for the other inquirers combined.

Figure E3: Differences between treatment effects by % of Trump voters



Notes. Barplots indicating the percentage of responses received by race/ethnicity group and gender of the purported inquirer. In each panel, White inquirers are represented by bar with wide lines facing downward, Black inquirers by bars with narrow lines facing upward, and Hispanic inquirers by bars with vertical lines. Panels (a) and (b) display results from the first round data, panels (c) and (d) from the second round data, and panels (e) and (f) from the data form both rounds combined. Panels (a), (c), and (e) show the response rates for inquiries sent to attorneys in areas with a share of votes for President Trump in the lower two terciles of the distribution, panels (b), (d) and (f) response rates for inquiries sent to attorneys in areas in the upper tercile. Error bars represent 95% confidence intervals.

Appendix F – Exploratory Analysis of Attorney Race Effects

In this Online Appendix, we document the results from an analysis using the combined data from both rounds of the study to generate a best guess as to the existence of a preferential treatment of White senders by White attorneys. We stress that the results in this section were not corroborated by our split sample design, and we leave it to future research to determine whether these results can be replicated.

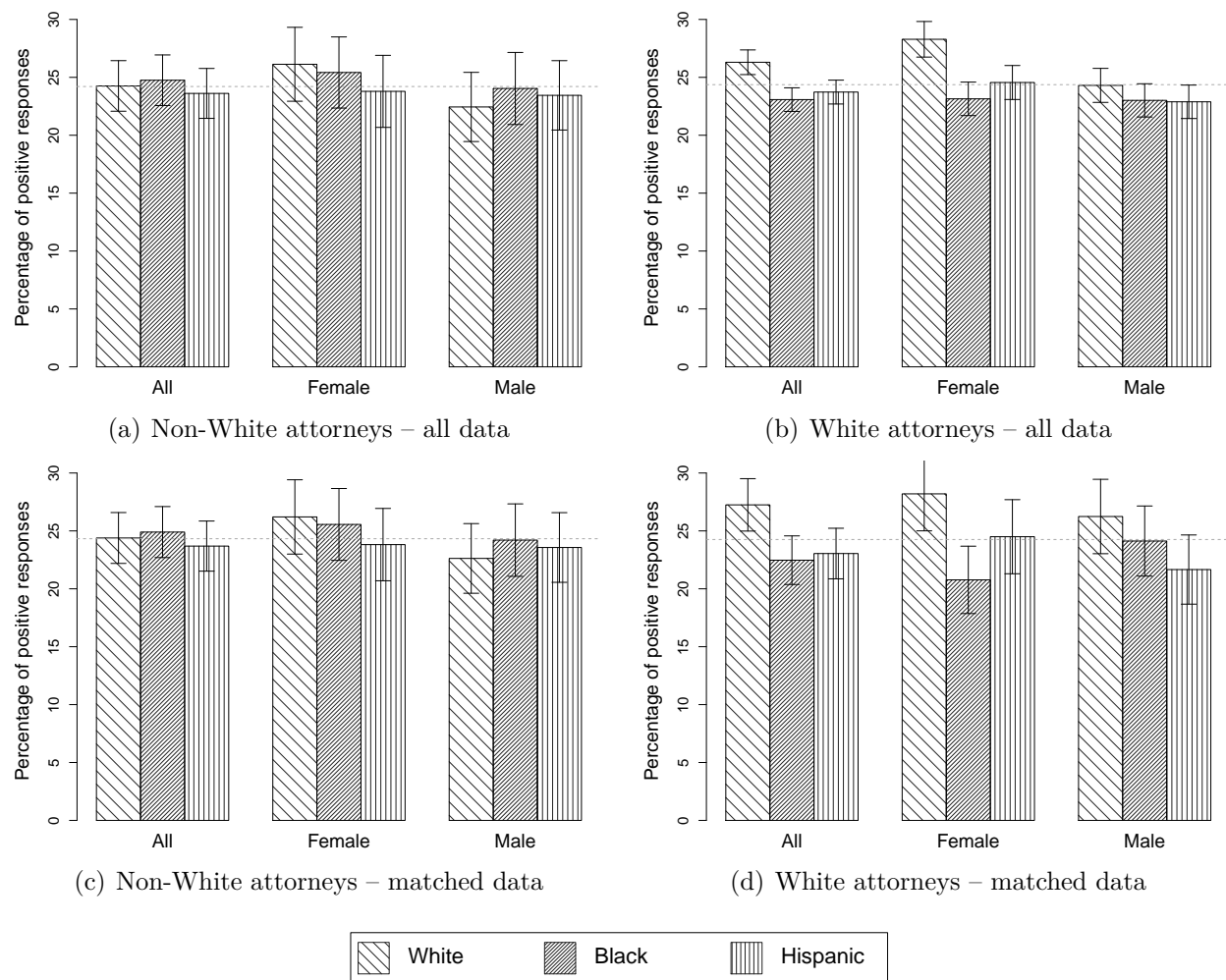
Figure F1 panels (a) and (b) display response rates for all inquiries sent to non-White and White attorneys in both rounds of the study. This graph confirms the finding in Section 5.3 in the paper that White senders receive a comparably higher share of responses from White attorneys. When we combine the data from both rounds of the study, this effect can be observed for both White female and White male senders.

In a first step, we use regression analysis to confirm that the difference in the treatment of White senders by attorneys from different groups is statistically significant. For this, we replicate the regressions in Table 2 panel (b) columns (5) and (6), using `ATT_WHITE` as well as an interactions between `ATT_WHITE` and an indicator for White sender as additional independent variables. The interaction term between `ATT_WHITE` and `WHITE` is the main variable of interest in these regressions.

The results from these regressions are reported in columns (1) and (4) in Table F1. The coefficients for the interaction term `ATT_WHITE*WHITE` is positive and (at least weakly) significant. The point estimates of .154 and .181 also confirm that this effect is substantial. For example, the regression model in column (1) predicts that, if a White sender receives an average of 30% responses from non-White attorneys in a particular state, the probability of receiving a response from a White attorney is 32.3%. By comparison, for senders from other groups, the probability of receiving a response from a White attorney is lower than the probability of receiving a response from a non-White attorney.

In Table F2, we report the results from a series of regressions that include other attorney characteristics as well as interactions between these attorney characteristics and `WHITE` as additional control variables. It can be seen that the inclusion of most of these variables does not meaningfully alter the size of the estimated coefficient for `ATT_WHITE*WHITE`. The only attorney characteristic whose inclusion affects this estimate is attorney age. This result suggests that the estimated effect for `ATT_WHITE*WHITE` as reported in Table F1 might partly capture the fact that older attorneys (who also mostly have names more common among Whites) treat White inquirers preferentially. However, as we are not postulating a

Figure F1: Differences between treatment effects by predicted attorney race (combined data)



Notes. Barplots indicating the percentage of responses received by race/ethnicity group and gender of the purported inquirer. In each panel, White inquirers are represented by bar with wide lines facing downward, Black inquirers by bars with narrow lines facing upward, and Hispanic inquirers by bars with vertical lines. Panels (a) and (b) display results from all inquiries sent during both rounds of the study, panels (c) and (d) from the matched data. Panels (a) and (c) show the response rates for inquiries sent to attorneys for which $ATT_WHITE = 0$, panels (b) and (d) response rates for inquiries sent to attorneys for which $ATT_WHITE = 1$. Error bars represent 95% confidence intervals.

causal relationship between attorney race and the treatment of different sender groups, this finding does not threaten the validity of our results.

This result persists when we use our matching strategy to isolate the effects of personal attorney characteristics from potentially confounding effects of geography. Following the steps described in Section 5.3.2, we assemble a dataset that consists of 4,444 non-White attorneys and 4,444 White attorneys who have their offices in the same geographic area. Figure F1 panels (c) and (d) display response rates for different different sender types for these two groups. The differences in the treatment of White senders that could be observed in panels (a) and (b) persists despite the considerable drop in observations.

Columns (7) and (8) in Table F1 report the results of regressions using the data obtained from the matching procedure. In these regressions, the point estimates for WHITE*ATT_WHITE are larger than in the ones that use the unmatched data. Also, despite the reduction of the size of the dataset, the effects are significant.

Table F1: Logit Regressions.

	Full Dataset (Combined Data)						Matched Data	
	Including Bounced Emails			Excluding Bounced Emails			(7)	(8)
	(1)	(2)	(3)	(4)	(5)	(6)		
BLACK-FEMALE	-.102 (.087)	-.141 (.270)	-.248 (.640)	-.100 (.090)	-.114 (.238)	-.002 (.672)	-.096 (.101)	-.107 (.108)
BLACK-MALE	-.123 (.089)	-.162 (.267)	-.263 (.643)	-.113 (.092)	-.126 (.234)	-.005 (.675)	-.040 (.105)	-.069 (.108)
HISPANIC-FEMALE	-.057 (.092)	-.096 (.270)	-.204 (.644)	-.046 (.095)	-.060 (.239)	-.050 (.676)	-.043 (.109)	-.004 (.114)
HISPANIC-MALE	-.132 (.083)	-.171 (.267)	-.251 (.643)	-.136 (.086)	-.150 (.236)	-.005 (.676)	-.128 (.102)	-.117 (.105)
WHITE-MALE	-.208*** (.048)	-.208*** (.048)	-.214** * (.050)	-.223*** (.051)	-.226*** (.051)	-.222*** (.053)	-.145+ (.080)	-.157+ (.082)
ATT.WHITE	-.043 (.051)	-.039 (.051)	-.047 (.055)	-.028 (.051)	-.021 (.051)	-.043 (.543)	-.087 (.060)	-.083 (.064)
WHITE* ATT.WHITE	.154+ (.083)	.143+ (.082)	.091 (.082)	.181* (.088)	.168* (.088)	.113 (.089)	.233* (.109)	.243* (.118)
<i>Intercept</i>	-1.27*** (.164)	-1.25*** (.232)	-1.11* (.486)	-.721** (.164)	-.710** (.214)	-.054 (.077)	-1.06*** (.150)	-.624*** (.163)
<i>Controls include interactions between WHITE and</i>								
- State F.E.	N	Y	Y	N	Y	Y	N	N
- Geographical characteristics	N	N	Y	N	N	Y	N	N
<i>N</i>	24,128	24,128	22,896	17,392	17,392	16,491	8,888	6,471

Notes. Dependent variable: binary variable indicating whether a response was received. Standard errors clustered at the county level in parentheses. Controls for different emails and state fixed effects included in all regressions. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

When controlling for geographical characteristics by way of regression analysis, this result appears attenuated in some specifications. Columns (2) and (5) report results for regressions that include interactions between state fixed effects and WHITE. The inclusion of the variables controls for geographic factors that influence differential response rates at the state level. As can be seen, the estimates are almost identical to those reported in columns (1) and (4). This is true both for the point estimates and the estimated standard errors.

However, when we include additional control variables capturing socio-economic characteristics of the area in which an attorney is based (columns (3) and (6)), the effect appears substantially attenuated. This attenuation also results in p-values above all common thresholds for statistical significance. At the same time, the fact that our preferred matching strategy (which “controls” for the same variables) yields different results points to the possibility that these regressions might underestimate the true relationship between ATT_WHITE*WHITE and the probability of a response.

Note that our results are robust to using the alternative outcome variable described in Appendix B *in lieu* of our main outcome variable. Figure F2 and Table F3 replicate the analyses presented and Figure F1 and Table F1, with substantially similar results.

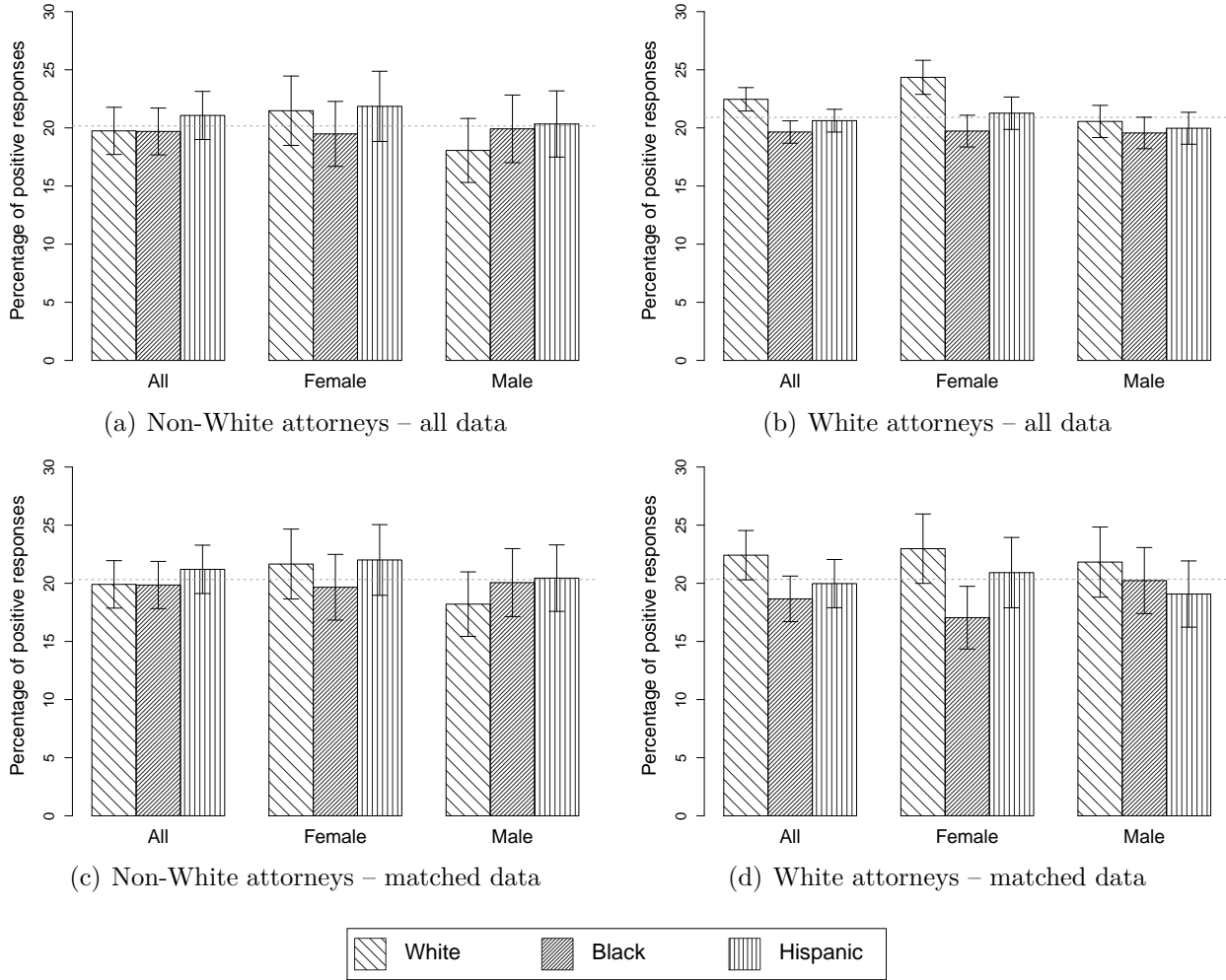
Overall, the results presented in this Online Appendix lend support to the hypothesis that the observed differential treatment of senders is at least partly driven by a tendency of White attorneys to respond preferentially to inquiries by members of their own racial/ethnic group. In other words, these results suggest that the differential treatment cannot be explained by objective differences in the expected value of lawsuits brought by different client types.

Table F2: Logit Regressions.

	Full Dataset (Combined Data)											
	Including Bounced Emails						Excluding Bounced Emails					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
BLACK-FEMALE	-.102 (.087)	-.021 (.131)	-.045 (.090)	-.138 (.095)	-.007 (.134)	-.030 (.197)	-.100 (.090)	-.015 (.138)	-.049 (.092)	-.134 (.097)	-.065 (.141)	-.015 (.210)
BLACK-MALE	-.123 (.089)	-.060 (.129)	-.065 (.129)	-.166+ (.097)	-.016 (.138)	-.056 (.201)	-.113 (.092)	-.047 (.135)	-.063 (.093)	-.150 (.100)	-.035 (.145)	-.008 (.213)
HISPANIC-FEMALE	-.057 (.092)	.016 (.133)	.002 (.094)	-.113 (.101)	.054 (.140)	.049 (.205)	-.046 (.095)	.035 (.139)	.004 (.097)	-.104 (.104)	.010 (.149)	.072 (.220)
HISPANIC-MALE	-.132 (.083)	-.062 (.126)	-.074 (.087)	-.180+ (.092)	-.058 (.143)	-.086 (.205)	-.136 (.086)	-.063 (.133)	-.085 (.091)	-.176+ (.093)	-.102 (.149)	-.056 (.221)
WHITE-MALE	-.208*** (.048)	-.204*** (.049)	-.209*** (.048)	-.235*** (.051)	-.257*** (.067)	-.279*** (.075)	-.223*** (.051)	-.221*** (.051)	-.229*** (.051)	-.244*** (.056)	-.237*** (.074)	-.258** (.084)
ATT.WHITE	-.043 (.051)	-.056 (.050)	-.044 (.051)	-.030 (.055)	-.058 (.070)	-.045 (.075)	-.028 (.051)	-.035 (.050)	-.028 (.051)	-.025 (.055)	-.075 (.074)	-.076 (.079)
WHITE*	.154+ (.083)	.145+ (.084)	.156+ (.083)	.112 (.091)	.199+ (.118)	.149 (.128)	.181* (.088)	.177* (.089)	.184* (.088)	.147 (.095)	.247+ (.126)	.204 (.136)
ATT.MALE	-	.168*** (.054)	-	-	-	.175+ (.093)	-	.166** (.057)	-	-	-	.141 (.096)
WHITE*	-	.086 (.103)	-	-	-	-.052 (.172)	-	.086 (.108)	-	-	-	.028 (.181)
ATT.SOLOPRACTITIONER	-	-	-.056 (.038)	-	-	-.066 (.061)	-	-	.060 (.039)	-	-	.025 (.064)
WHITE*	-	-	.138* (.066)	-	-	.183+ (.100)	-	-	.125+ (.070)	-	-	.150 (.111)
ATT.OLDER	-	-	-	-1.11*** (.097)	-	-.941*** (.122)	-	-	-	-.901*** (.101)	-	-.804*** (.127)
WHITE*	-	-	-	.357* (.144)	-	.228 (.178)	-	-	-	.308* (.149)	-	.248 (.183)
ATT.OLDER	-	-	-	-	-.170** (.057)	-.143* (.061)	-	-	-	-	-.120* (.058)	-.101 (.063)
ATT.CONSERVATIVE	-	-	-	-	.124 (.095)	.142 (.102)	-	-	-	-	.004 (.102)	.031 (.108)
WHITE*	-	-	-	-	.124 (.095)	.142 (.102)	-	-	-	-	.004 (.102)	.031 (.108)
ATT.CONSERVATIVE	-	-	-	-	.124 (.095)	.142 (.102)	-	-	-	-	.004 (.102)	.031 (.108)
<i>Intercept</i>	-1.27*** (.164)	-1.49*** (.178)	-1.31*** (.164)	-1.21*** (.188)	-1.44*** (.253)	-1.44*** (.307)	-.721** (.164)	-.958*** (.183)	-.789*** (.164)	-.650*** (.187)	-.882** (.254)	-.893** (.311)
<i>N</i>	24,128	23,677	24,128	20,533	10,841	9,390	17,392	17,069	17,392	14,530	8,079	6,898

Notes. Dependent variable: binary variable indicating whether a response was received. Standard errors clustered at the county level in parentheses. Controls for different emails and state fixed effects included in all regressions. Additional variables are defined as follows: $ATT_WHITE = 1(ATT_PROBMALE > .5)$; $ATT_OLDER = 1(FIRSTADMITTED \leq 1970)$; $ATT_CONSERVATIVE = 1(ATT_CFSCORE > -.665)$. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Figure F2: Differences between treatment effects by attorney race (combined data)



Notes. Barplots indicating the percentage of positive responses received by race/ethnicity group and gender of the purported inquirer. In each panel, White inquirers are represented by bar with wide lines facing downward, Black inquirers by bars with narrow lines facing upward, and Hispanic inquirers by bars with vertical lines. Panels (a) and (b) display results from all inquiries sent during both rounds of the study, panels (c) and (d) from the matched data. Panels (a) and (c) show the response rates for inquiries sent to attorneys for which $ATT_WHITE = 0$, panels (b) and (d) response rates for inquiries sent to attorneys for which $ATT_WHITE = 1$. Error bars represent 95% confidence intervals.

Table F3: Logit Regressions.

	Full Dataset (Combined Data)						Matched Data	
	Including Bounced Emails			Excluding Bounced Emails			(7)	(8)
	(1)	(2)	(3)	(4)	(5)	(6)		
BLACK-FEMALE	-.094 (.095)	.088 (.295)	-.147 (.642)	-.090 (.098)	-.136 (.260)	.100 (.666)	-.131 (.110)	-.141 (.115)
BLACK-MALE	-.098 (.093)	-.084 (.291)	-.143 (.642)	-.084 (.096)	-.143 (.255)	.118 (.664)	-.014 (.107)	-.036 (.110)
HISPANIC-FEMALE	.010 (.099)	.192 (.294)	-.049 (.645)	-.029 (.102)	-.255 (.259)	.214 (.666)	.064 (.114)	.114 (.117)
HISPANIC-MALE	-.068 (.090)	.114 (.292)	-.096 (.644)	-.063 (.092)	-.164 (.256)	.159 (.668)	-.040 (.105)	-.017 (.107)
WHITE-MALE	-.221*** (.052)	-.221*** (.052)	-.228*** (.054)	-.231*** (.054)	-.233*** (.054)	-.228*** (.057)	-.138+ (.081)	-.145+ (.083)
ATT.WHITE	-.024 (.060)	-.021 (.060)	-.036 (.064)	-.007 (.061)	-.002 (.061)	-.033 (.063)	-.077 (.071)	-.070 (.077)
WHITE* ATT.WHITE	.185+ (.095)	.175+ (.094)	.117 (.091)	.211* (.100)	.196+ (.101)	.139 (.097)	.225+ (.119)	.227+ (.129)
<i>Intercept</i>	-1.57*** (.165)	-1.69*** (.263)	-1.51** (.553)	-1.05*** (.165)	-1.20*** (.244)	-1.13+ (.582)	-1.39*** (.160)	-.994*** (.171)
<i>Controls include interactions between WHITE and</i>								
- State F.E.	N	Y	Y	N	Y	Y	N	N
- Geographical characteristics	N	N	Y	N	N	Y	N	N
<i>N</i>	24,128	24,128	22,896	17,392	17,392	16,491	8,888	6,471

Notes. Dependent variable: binary variable indicating whether a positive response was received. Standard errors clustered at the county level in parentheses. Controls for different emails and state fixed effects included in all regressions. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Appendix G – Additional Tables and Graphics

Table G1: Summary statistics

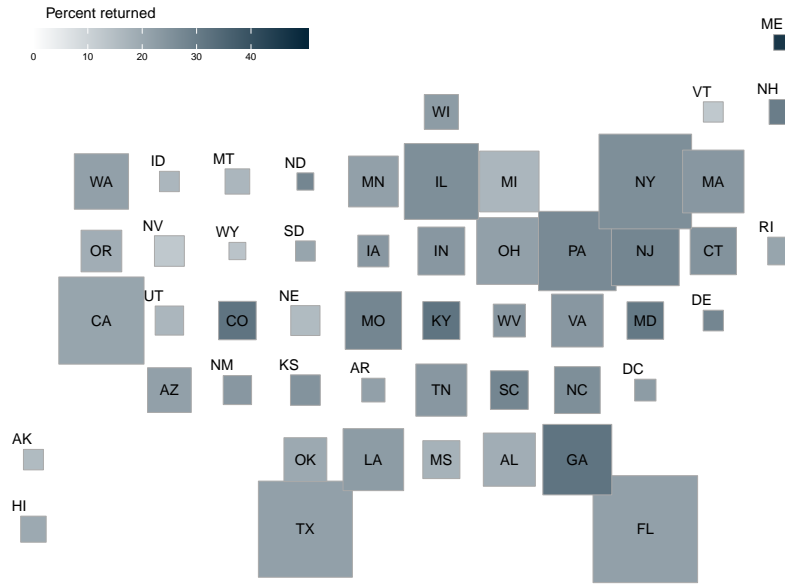
	Obs.	Mean	Std. Dev.	Min	25th Perc.	Median	75th Perc.	Max
<hr/>								
Features of the inquiry								
BLACK	24,211	.334	.472	0	0	0	1	1
HISPANIC	24,211	.333	.471	0	0	0	1	1
WHITE	24,211	.333	.471	0	0	0	1	1
MALE	24,211	.500	.500	0	0	0	1	1
SCENARIO2	24,211	.055	.228	0	0	0	0	1
<hr/>								
Demographic characteristics								
CENSUSBLOCK_MEDIANINCOME	23,299	64,747	39,557	5,174	36,103	56,597	83,018	250,001
CENSUSBLOCK_WHITEPOP	24,154	.731	.206	0	.611	.778	.890	1
CENSUSBLOCK_UNEMPLOYED	24,138	.066	.064	0	.024	.051	.088	1
COUNTY_MEDIANINCOME	24,128	58,413	15,153	18,972	48,104	55,277	66,529	125,672
COUNTY_WHITEPOP	24,128	.605	.200	.008	.455	.622	.764	.985
COUNTY_UNEMPLOYED	24,128	.074	.019	.006	.061	.070	.085	.211
COUNTY_POVERTYLEVEL	23,842	.127	.058	.022	.085	.123	.157	.600
COUNTY_POVERTYDIFFERENCES	23,842	.045	.042	-.016	.013	.035	.065	.391
COUNTY_FOREIGNBORN	24,128	.137	.105	.002	.056	.107	.211	.522
COUNTY_TRUMPVOTER	24,128	.419	.163	.041	.314	.416	.528	.895
<hr/>								
Attorney characteristics								
ATT_FIRSTADMITTED	20,606	1985	12.0	1922	1977	1985	1993	2018
ATT_SOLOPRACTITIONER	24,211	.410	.492	0	0	0	1	1
ATT_PROBMALE	23,760	.847	.346	0	.992	.996	.997	1
ATT_PROBWHITE	24,211	.810	.239	0	.740	.917	.972	1
ATT_CFSCORE	10,891	-.424	.810	-3.81	-1.03	-.655	.129	2.698
ATT_WHITE	24,211	.815	.388	0	1	1	1	1

Table G2: Logit Regressions.

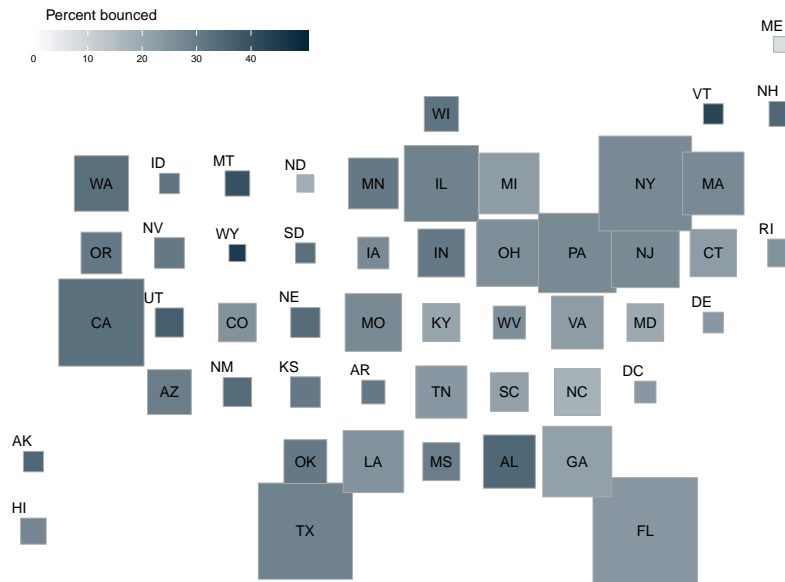
	Full Dataset (First Round Data)						Matched Data	
	Including Bounced Emails			Excluding Bounced Emails			(7)	(8)
	(1)	(2)	(3)	(4)	(5)	(6)		
WHITE-MALE	.060 (.149)	-.215 (.351)	-.315 (1.14)	.109 (.156)	-.461 (.358)	-2.01 (1.34)	.048 (.159)	.066 (.172)
MINORITY1-FEMALE	-.034 (.155)	-.310 (.352)	-.406 (1.14)	-.018 (.164)	-.591 (.359)	-2.13 (1.34)	-.064 (.151)	-.023 (.164)
MINORITY1-MALE	.060 (.155)	-.216 (.354)	-.335 (1.14)	.063 (.164)	-.508 (.360)	-2.073 (1.34)	.073 (.186)	.036 (.195)
MINORITY2-FEMALE	.047 (.161)	-.229 (.356)	-.355 (1.14)	.067 (.169)	-.503 (.361)	-2.072 (1.35)	-.005 (.171)	.081 (.180)
MINORITY2-MALE	.054 (.145)	-.222 (.348)	-.312 (1.14)	.040 (.147)	-.531 (.352)	-2.058 (1.34)	.030 (.148)	.064 (.153)
ATT_WHITE	-.036 (.060)	-.036 (.060)	-.067 (.067)	-.005 (.065)	-.004 (.066)	-.053 (.073)	-.042 (.075)	-.039 (.083)
WHITE-FEMALE* ATT_WHITE	.371* (.154)	.378* (.155)	.290+ (.156)	.381* (.165)	.390* (.173)	.305+ (.176)	.364+ (.193)	.406+ (.212)
<i>Intercept</i>	-1.43*** (.231)	-1.20** (.372)	-.994 (1.06)	-.793*** (.223)	-.321 (.357)	1.26 (1.25)	-1.29*** (.198)	-.825*** (.222)
<i>Controls include interactions between WHITE-FEMALE and</i>								
- <i>State F.E.</i>	N	Y	Y	N	Y	Y	N	N
- <i>Geographical characteristics</i>	N	N	Y	N	N	Y	N	N
<i>N</i>	11,278	11,272	10,696	7,984	7,983	7,572	4,212	3,027

Notes. Dependent variable: binary variable indicating whether a response was received. Standard errors clustered at the county level in parentheses. Controls for different emails and state fixed effects included in all regressions. $+p < 0.1$, $* p < 0.05$, $** p < 0.01$, $*** p < 0.001$.

Figure G1: Response rates and rates of bounced emails by states



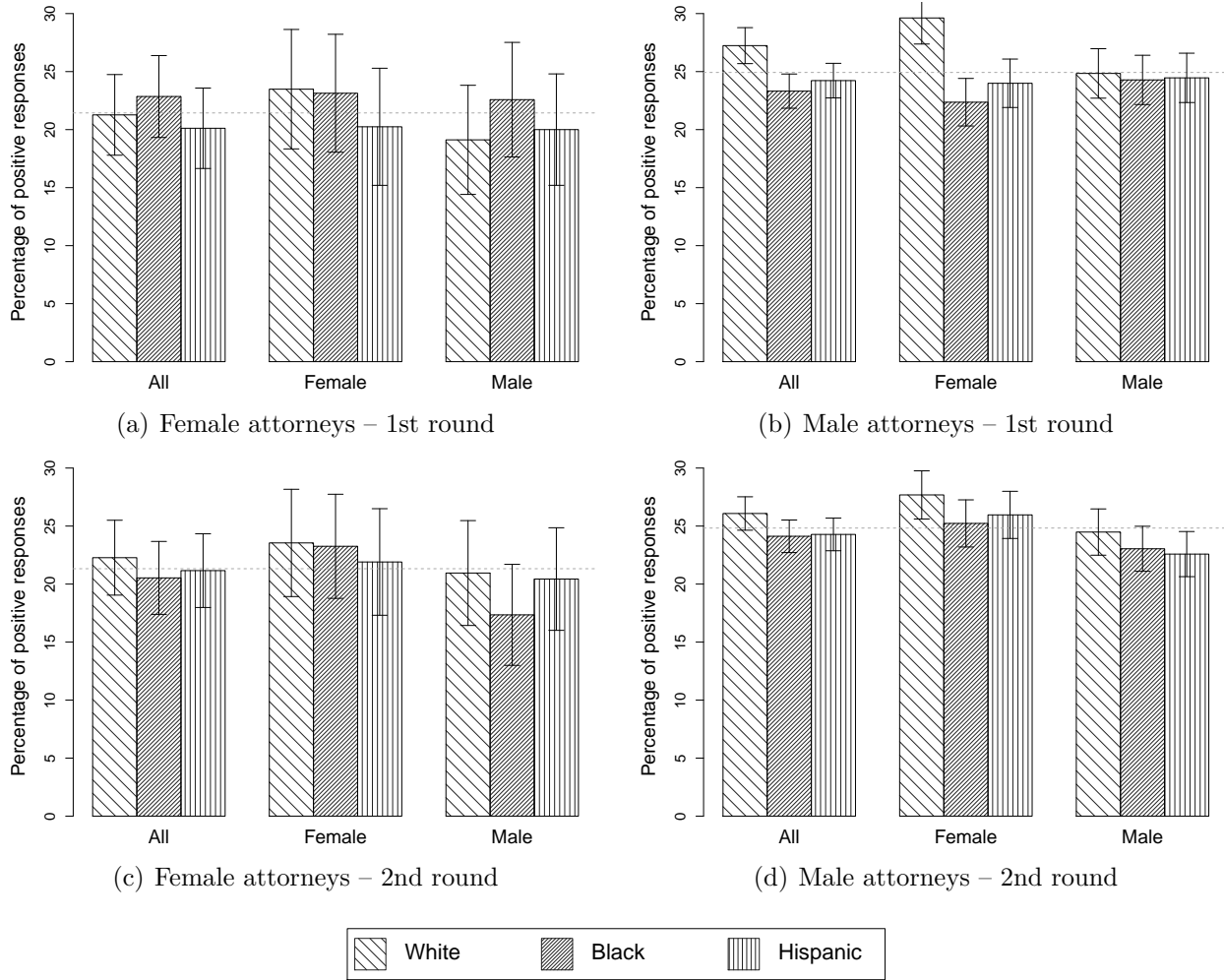
(a) Response rates



(b) Bounce rates

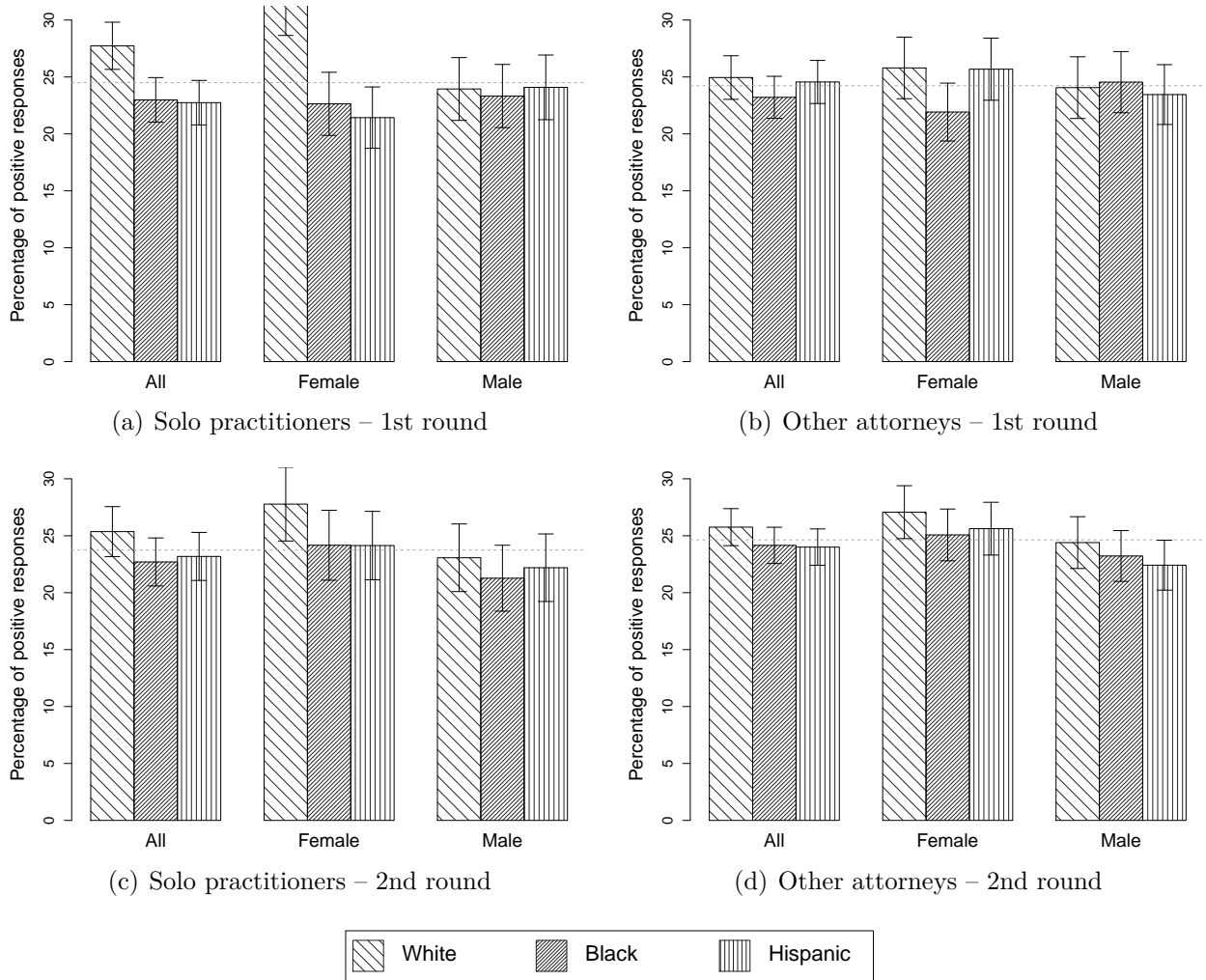
Notes. “State bins” plot indicating differences in response rates (panel (a)) and rates of bounced emails (panel (b)) by state. Each state is represented by one squared “bin”, with the surface area of the bin proportional to the overall numbers of inquiries to attorneys located in this state. The color of the bin indicates the response rate or bounce rate in the respective state. A dark blue bin indicates a higher response/bounce rate, while a light blue bin indicates a lower response/bounce rate.

Figure G2: Differences between treatment effects by attorney gender



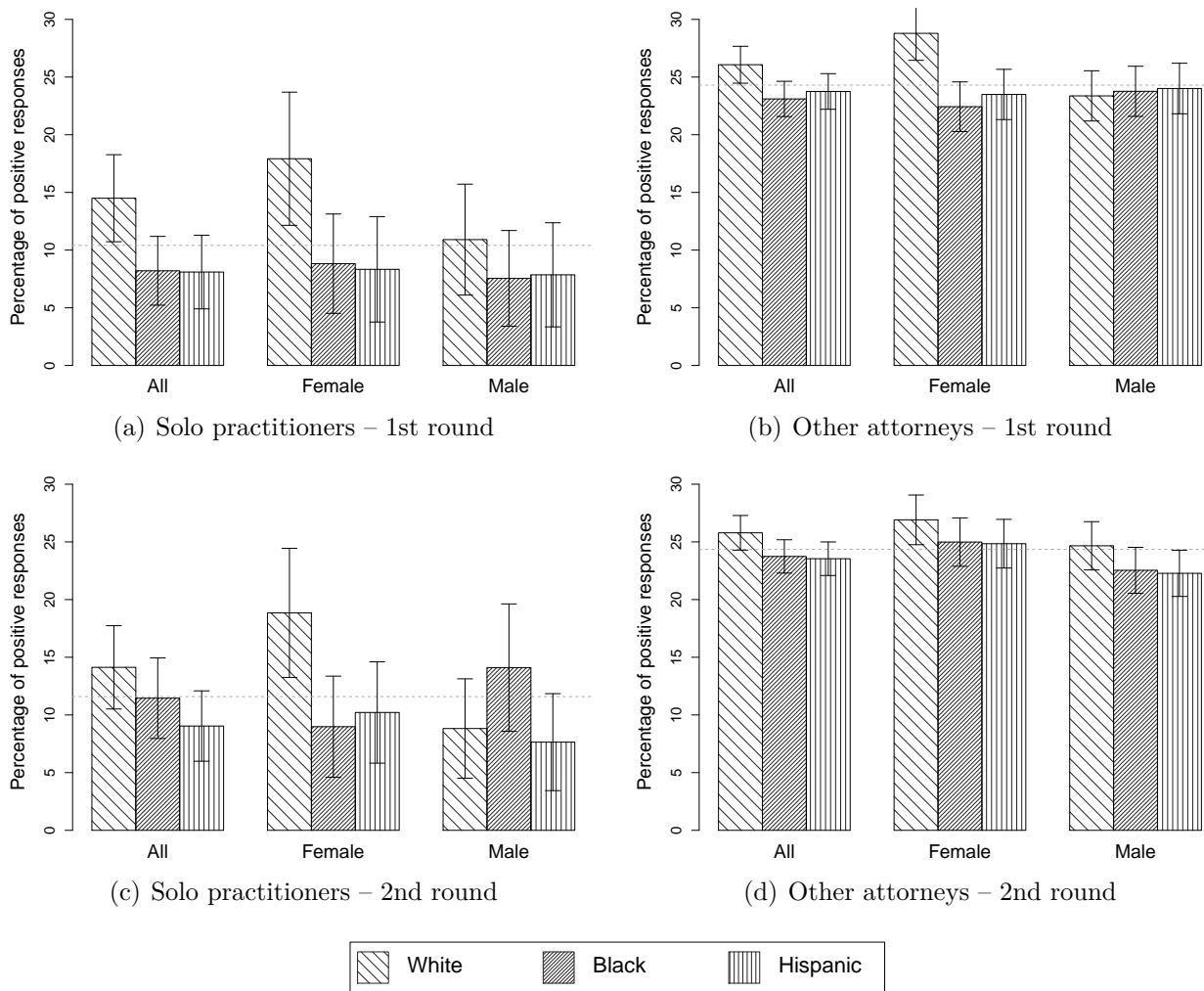
Notes. Barplots indicating the percentage of responses received by race/ethnicity group and gender of the purported inquirer. In each panel, White inquirers are represented by bar with wide lines facing downward, Black inquirers by bars with narrow lines facing upward, and Hispanic inquirers by bars with vertical lines. Panels (a) and (b) display results from the First Round Data, panels (c) and (d) from the Second Round Data. Panels (a) and (c) show the response rates for inquiries sent to attorneys for which $ATT_MALE = 0$, panels (b) and (d) response rates for inquiries sent to attorneys for which $ATT_MALE = 1$. Error bars represent 95% confidence intervals.

Figure G3: Differences between treatment effects by firm size



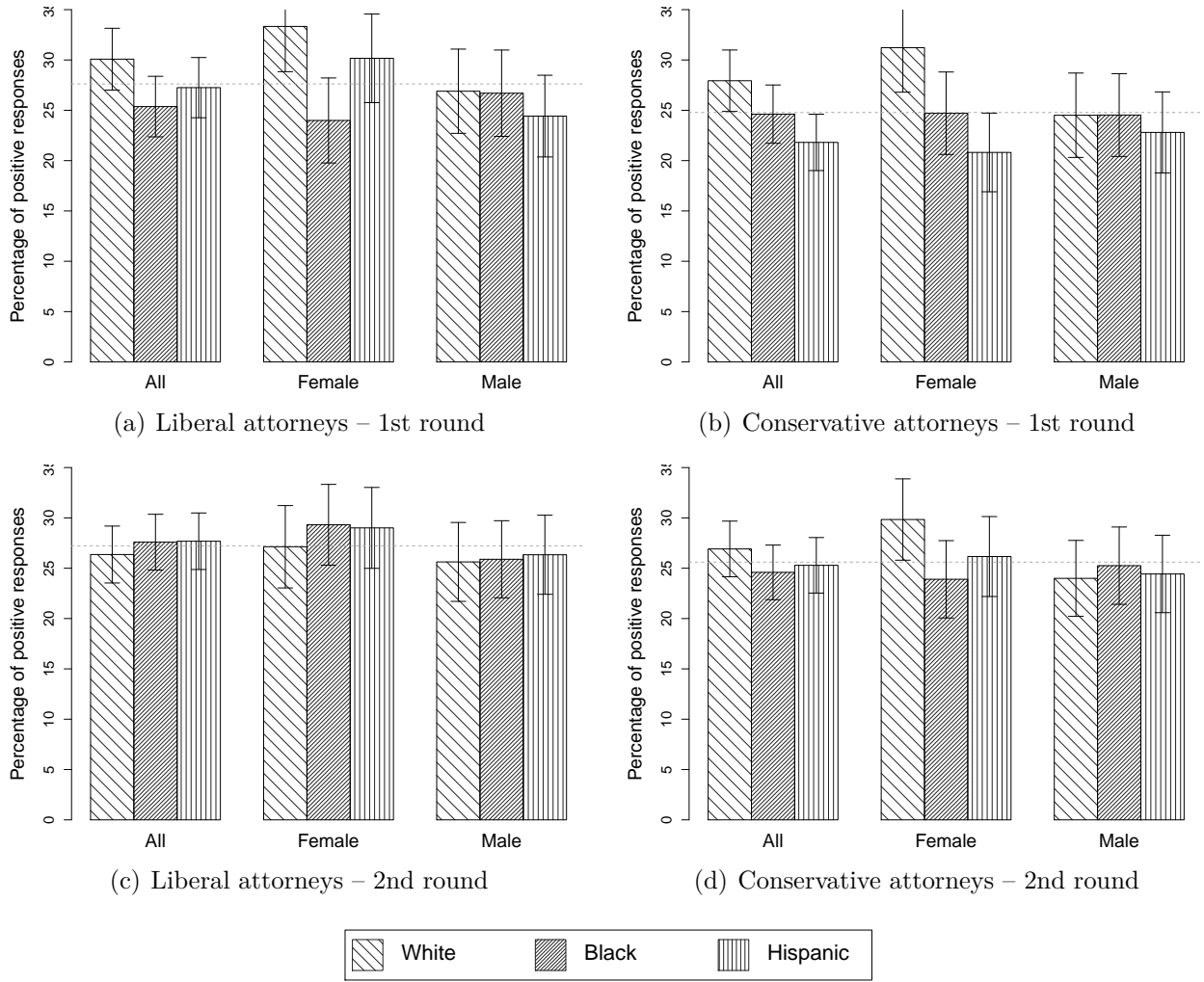
Notes. Barplots indicating the percentage of responses received by race/ethnicity group and gender of the purported inquirer. In each panel, White inquirers are represented by bar with wide lines facing downward, Black inquirers by bars with narrow lines facing upward, and Hispanic inquirers by bars with vertical lines. Panels (a) and (b) display results from the First Round Data, panels (c) and (d) from the Second Round Data. Panels (a) and (c) show the response rates for inquiries sent to solo practitioners, panels (b) and (d) response rates for inquiries sent to attorneys in other firms. Error bars represent 95% confidence intervals.

Figure G4: Differences between treatment effects by attorney age



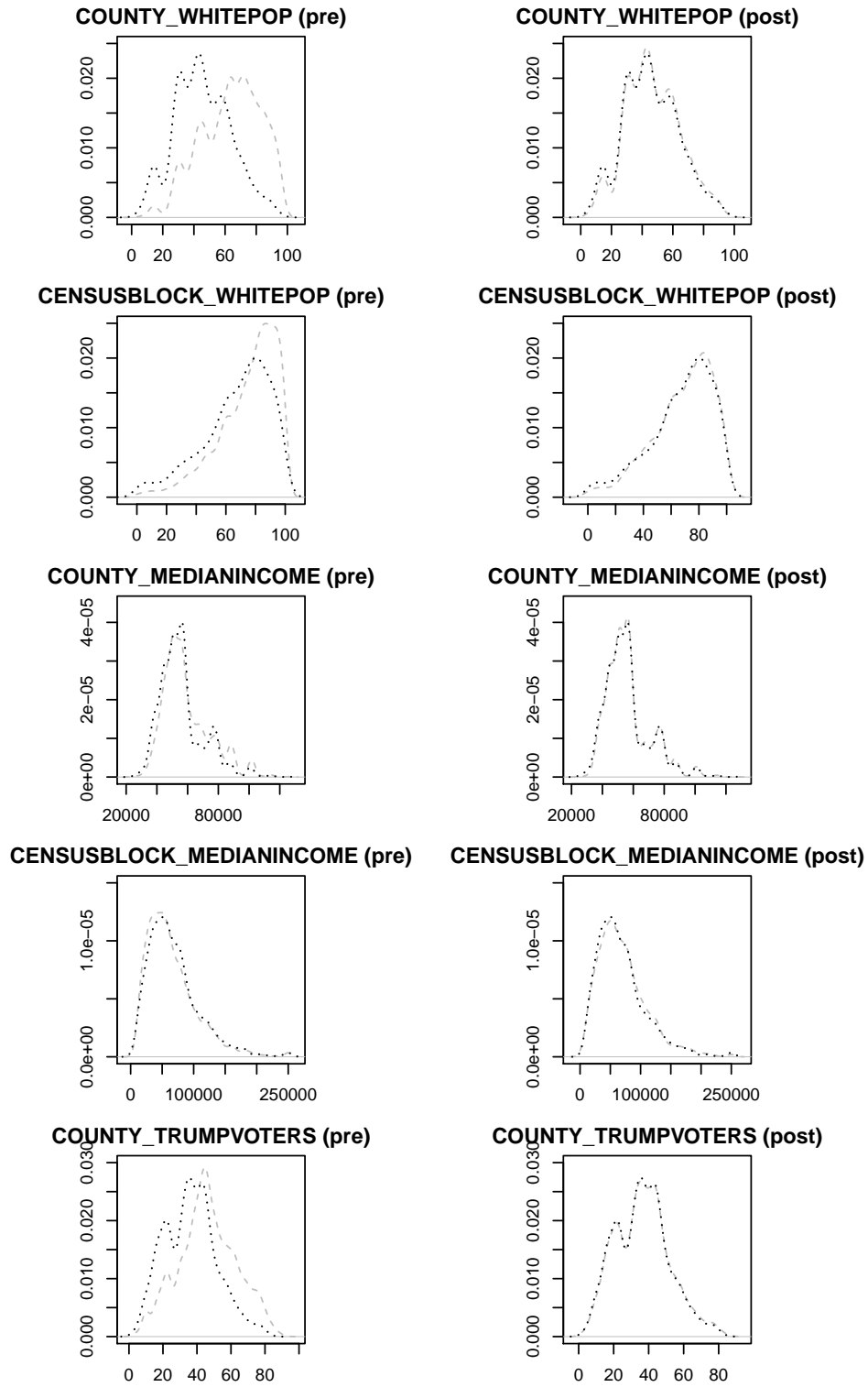
Notes. Barplots indicating the percentage of responses received by race/ethnicity group and gender of the purported inquirer. In each panel, White inquirers are represented by bar with wide lines facing downward, Black inquirers by bars with narrow lines facing upward, and Hispanic inquirers by bars with vertical lines. Panels (a) and (b) display results from the First Round Data, panels (c) and (d) from the Second Round Data. Panels (a) and (c) show the response rates for inquiries sent to attorneys first admitted in or before 1970, panels (b) and (d) response rates for inquiries sent to other attorneys. Error bars represent 95% confidence intervals.

Figure G5: Differences between treatment effects by attorney ideology



Notes. Barplots indicating the percentage of responses received by race/ethnicity group and gender of the purported inquirer. In each panel, White inquirers are represented by bar with wide lines facing downward, Black inquirers by bars with narrow lines facing upward, and Hispanic inquirers by bars with vertical lines. Panels (a) and (b) display results from the First Round Data, panels (c) and (d) from the Second Round Data. Panels (a) and (c) show the response rates for inquiries sent to attorneys with CFscores in the lower half of the distribution, panels (b) and (d) response rates for inquiries sent to attorneys with CFscores in the upper half. Error bars represent 95% confidence intervals.

Figure G6: Covariate distributions pre and post matching



Notes. Density plots of covariate distributions of non-White attorneys (dotted line) and White attorneys and pre and post matching (light grey, dashed line).

Appendix H – Preregistration Statement



CONFIDENTIAL - FOR PEER-REVIEW ONLY Are Lawyers' Case Selection Decisions Biased? (#66602)

Created: 05/23/2021 08:44 AM (PT)

Shared: 05/23/2021 09:05 AM (PT)

This pre-registration is not yet public. This anonymized copy (without author names) was created by the author(s) to use during peer-review. A non-anonymized version (containing author names) will become publicly available only if an author makes it public. Until that happens the contents of this pre-registration are confidential.

1) Have any data been collected for this study already?

It's complicated. We have already collected some data but explain in Question 8 why readers may consider this a valid pre-registration nevertheless.

2) What's the main question being asked or hypothesis being tested in this study?

This is a field experiment (conducted via email) exploring how demographic information (as encoded in the names of potential clients) affects how attorneys respond to initial inquiries by clients. Our main research question is the following: (1) Are attorneys more likely to respond to inquiries from (perceived) White potential clients than to inquiries from (perceived) Black or Hispanic clients? In addition, we explore two research questions related to the mechanism behind this effect: (2) Is this effect mostly driven by a favorable treatment of White female clients, as opposed to White male clients? (3) Are attorneys who are statistically likely to be White (based on their names) more likely to treat White (female) clients more favorably compared to other clients than other attorneys?

3) Describe the key dependent variable(s) specifying how they will be measured.

Dummy variable indicating whether we receive an email in response to our outreach that was not flagged (by an algorithm written by us in python) as an error message

4) How many and which conditions will participants be assigned to?

Six conditions: WHITE-FEMALE, WHITE-MALE, MINORITY1-FEMALE, MINORITY1-MALE, MINORITY2-FEMALE, MINORITY2-MALE (MINORITY1 indicates a sender name more common among Black persons, MINORITY2 a sender name more common among Hispanic persons).

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

Main research question: Fisher's Exact Test comparing the response rates for all WHITE senders with the response rates for all MINORITY1 and MINORITY2 senders.

Research question (2): Fisher's Exact Test comparing the response rates for WHITE-FEMALE senders with the response rates for all MINORITY1 and MINORITY2 senders and Fisher's Exact Test comparing the response rates for WHITE-MALE senders with the response rates for all MINORITY1 and MINORITY2 senders (based on our exploratory study, we expect the second test not to yield a significant result).

Research question (3): Logit regression including, as independent variables: (i) dummies for treatment group, (ii) dummy for whether attorney has name that is more common among White people (ATT_WHITE), (iii) interaction between ATT_WHITE and WHITE-FEMALE. Our main variable of interest is the interaction term described under (iii).

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

n/a (no observations will be excluded in the analysis of the second round data)

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

13,044 email inquiries / observations (see also below under 8)

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

We implement a split-sample validation method. We constructed our two datasets during two experimental rounds that used roughly half of the email addresses at our disposal in each round.

The first round of the study ran between early June 2019 and mid-July 2019. The first round data (which includes 11,317 observations) was used in an exploratory analysis to construct and test our statistical models.

In a second round (running between mid-August 2019 and late September 2019), we contacted 13,044 lawyers. Data gathered in the second round has to date not been analyzed in any way. This dataset is the dataset for which we preregister the study.