**Race and Responsiveness—Supplemental Materials**

 In this appendix, I present summary statistics (Table A-1), present results for mean differences in ``answer” rates (Table A-2), test for covariate balance across treatment assignment within the sample of non-bounced emails (Tables A-3, A-4a-c), test for average treatment effects in districts with small percentages of the other-race group (Tables A-5a & A-5b), estimate average treatment effects while controlling for councillor and district covariates (Table A-6), present observational results incorporating interactions between treatment and contextual variables (Table A-7), and correct for multiple comparisons (Table A-8). I also provide a CONSORT diagram.

**Table A-1. Summary Statistics for Non-Bounced Email Exchanges**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | No. Obs | Mean  | Standard Dev. | Min | Max |
| Responded | 1229 | 0.209 | 0.407 | 0 | 1 |
| ANC Cllr | 1229 | 0.578 | 0.494 | 0 | 1 |
| DA Cllr | 1229 | 0.357 | 0.479 | 0 | 1 |
| Other Party | 1229 | 0.065 | 0.247 | 0 | 1 |
| Ward Cllr | 1229 | 0.516 | 0.500 | 0 | 1 |
| Incumbent | 1229 | 0.463 | 0.499 | 0 | 1 |
| Uncertain Ethnicity | 1229 | 0.026 | 0.159 | 0 | 1 |
| Female | 1229 | 0.374 | 0.484 | 0 | 1 |
| Afrikaaner | 1229 | 0.179 | 0.384 | 0 | 1 |
| English | 1229 | 0.132 | 0.338 | 0 | 1 |
| Zulu | 1229 | 0.463 | 0.499 | 0 | 1 |
| Xhosa | 1229 | 0.225 | 0.417 | 0 | 1 |
| District Turnout (2011) | 1229 | 0.594 | 0.068 | 0.243 | 0.918 |
| 2011 District Vote Margin (wards) | 634 | 0.607 | 0.258 | 0.002 | 0.979 |
| 2001 Same-Race Majority (wards) | 634 | 0.696 | 0.461 | 0 | 1 |
| Shadow Cllr | 1229 | 0.159 | 0.366 | 0 | 1 |
| % Home Computer (2007) | 848 | 0.210 | 0.104 | 0.01 | 0.35 |
| % Piped Water (2001) | 1229 | 0.621 | 0.180 | 0.01 | 0.92 |
| % Black (2001) | 1229 | 0.665 | 0.282 | 0.01 | 0.99 |
| Racial Fractionalization (2001) | 1229 | 0.353 | 0.216 | 0.021 | 0.711 |

Note: Shadow councillors are PR councillors who have been assigned to communicate with constituents in a ward won by another party. District characteristics correspond to the ward for ward councillors and to the municipality for PR councillors. % Black, Racial Fractionalization (Herfindahl index across black, white, coloured and asian population categories) and % households with piped water in the home come from the 2001 census; % home computer comes from 2007 Community survey and is at the municipality level. Turnout and vote share come from elections.org.za and are from the 2011 May local elections. Same-race majority means that the councillor’s race group makes up more than 50% of the population in the councillor’s ward.

**Table A-2. Do Same-Race Constituents Receive More ``Answers” Than Other-Race Constituents? Yes.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | All Cllrs | English | Afrikaaner | Zulu | Xhosa |
| Same-Race Answer Rate | 15.6%N=604 | 27.2%N=81 | 20.0%N=110 | 11.7%N=274 | 12.9%N=139 |
| Other-Race Answer Rate | 10.4%N=625 | 17.3%N=81 | 20.7%N=111 | 6.1%N=296 | 7.3%N=137 |
| Difference | **+5.2**(p=0.004) | **+9.9**(p=0.066) | -0.7(p=0.553) | **+5.6**(p=0.010) | **+5.7**(p=0.060) |

P-values are from one-sided t-tests with unequal variances.

**Table A-3. Percent Bounded Emails, By Treatment Group**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Same-Race Condition | Other-Race Condition | Difference |
| Bounced | 35.2%N=965 | 37.8%N=971 | -2.6(p=0.242) |
|  | Roads Condition | Water Condition | Difference |
| Bounced | 35.7%N=973 | 37.3%N=963 | -1.5(p=0.490) |
|  | No Partisanship | Co-Partisan Condition | Difference |
| Bounced | 37.9%N=970 | 35.1%N=966 | +2.8(p=0.194) |

**Table A-4a. Log-likelihood Ratio Tests for Balance on Covariates, Non-Bounced**

|  |  |  |
| --- | --- | --- |
|  | DV=Same-Race Treatment(Logit) | DV=Copartisan Treatment(Logit) |
| Female | -0.118(0.145) | -0.020(0.145) |
| ANC | -0.690(0.306) | -0.025(0.302) |
| Ward | 0.137(0.180) | -0.252(0.181) |
| Pop. Computer Access | 0.988(1.49) | 0.825(1.49) |
| Pop. Race Fractionalization | -0.482(0.375) | -0.432(0.377) |
| Pop. Access Piped Water | -0.009(0.790) | 0.530(0.791) |
| Incumbent | 0.078(0.143) | -0.131(0.143) |
| DA | -0.470(0.366) | -0.231(0.364) |
| Afrikaaner Cllr | -0.156(0.279) | -0.155(0.279) |
| English Cllr | 0.134(0.293) | -0.147(0.294) |
| Zulu Cllr | -0.032(0.184) | -0.498(0.184) |
| Turnout | -0.199(0.1211) | -1.337(1.207) |
| Shadow | -0.187(0.250) | -0.174(0.249) |
| Log-Likelihood (unconstrained) | -579.85 | -578.93 |
| Log-Likelihood(constrained) | -587.45 | -587.79 |
| LR chi2(7) | 15.20 | 17.71 |
| Prob > chi2 | 0.295 | 0.169 |

**Table A-4b. Same-Race Treatment Assignment: T-tests for Balance on Covariates, Sample of Non-Bounced Emails**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Same-Race** | **Other-Race** | **Difference** |
| Female | 0.368N=604 | 0.381N=625 | 0.013(p=0.632) |
| ANC | 0.559N=604 | 0.595N=625 | 0.036(p=0.207) |
| Ward | 0.533N=604 | 0.499N=625 | 0.034(p=0.235) |
| Pop. Computer Access | 0.213N=412 | 0.208N=436 | 0.005(p=0.499) |
| Pop. Race Fractionalization | 0.345N=604 | 0.360N=625 | 0.015(p=0.229) |
| Pop. Access Piped Water  | 0.624N=604 | 0.618N=625 | 0.008(p=0.455) |
| Incumbent | 0.457N=604 | 0.469N=625 | 0.012(p=0.677) |
| DA | 0.361N=604 | 0.354N=625 | 0.007(p=0.789 |
| Other Party | 0.079N=604 | 0.051N=625 | 0.028(p=0.045) |
| Afrikaaner Cllr | 0.182N=604 | 0.178N=625 | 0.004(p=0.837) |
| English Cllr | 0.134N=604 | 0.130N=625 | 0.004(p=0.816) |
| Zulu Cllr | 0.454N=604 | 0.474N=625 | 0.020(p=0.483) |
| Xhosa Cllr | 0.230N=604 | 0.219N=625 | 0.011(p=0.647) |
| Turnout (2011) | 0.593N=604 | 0.594N=625 | 0.001(p=0.749) |
| Vote Margin (ward cllrs, 2011) | 0.610N=322 | 0.604N=312 | 0.006(p=0.778) |
| Same Race in Majority | 0.702N=322 | 0.689N=312 | 0.013(p=0.728) |
| Shadow Cllr | 0.154N=604 | 0.163N=625 | 0.009(p=0.659) |

Note: P-values are from two-sided t-tests allowing unequal variance.

**Table A-4c. Co-Partisan Treatment Assignment: T-tests for Balance on Covariates, Sample of Non-Bounced Emails**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | No Partisanship | Co-Partisan | Difference |
| Female | 0.369N=602 | 0.380N=627 | 0.011(p=0.696) |
| ANC | 0.580N=602 | 0.576N=627 | 0.004(p=0.888) |
| Ward | 0.510N=602 | 0.522N=627 | 0.012(p=0.685) |
| Pop. Computer Access | 0.217N=425 | 0.204N=423 | 0.013(p=0.068) |
| Pop. Race Fractionalization | 0.350N=602 | 0.355N=627 | 0.005(p=0.639) |
| Pop. Access Piped Water | 0.629N=602 | 0.613N=627 | 0.016(p=0.115) |
| Incumbent | 0.450N=602 | 0.475N=627 | 0.025(p=0.378) |
| DA | 0.354N=602 | 0.360N=627 | 0.006(p=0.809) |
| Other Party | 0.066N=602 | 0.064N=627 | 0.002(p=0.851) |
| Afrikaaner Cllr | 0.178N=602 | 0.182N=627 | 0.004(p=0.853) |
| English Cllr | 0.130N=602 | 0.134N=627 | 0.004(p=0.820) |
| Zulu Cllr | 0.440N=602 | 0.486N=627 | 0.046(p=0.104) |
| Xhosa Cllr | 0.252N=602 | 0.198N=627 | 0.054(p=0.022) |
| Turnout (2011) | 0.593N=602 | 0.594N=627 | 0.001(p=0.892) |
| Vote Margin (ward cllrs, 2011) | 0.622N=307 | 0.594N=327 | 0.028(p=0.177) |
| Same Race in Majority (ward cllrs) | 0.674N=307 | 0.716N=327 | 0.041(p=0.260) |
| Shadow Cllr | 0.166N=602 | 0.152N=627 | 0.014(p=0.485) |

**Table A-5a. Racial Bias in Responsiveness and Answer Rates: Driven by Wards with Smaller Percentages of Other-Race Groups? No.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Other Race Greater than 10% | Other Race Less than 10% | Other Race Greater than 5% | Other Race Less than 5% |
| Same-Race *Response Rate* | 37.5%N=135 | 15.5%N=187 | 33.9%N=183 | 13.0%N=139 |
| Other-Race *Response Rate* | 24.1%N=145 | 10.2%N=167 | 22.2%N=185 | 8.7%N=127 |
| Difference | **+13.6**(p=0.015) | +5.3(p=0.137) | **+11.7**(p=0.012) | +4.3(p=0.264) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Other Race Greater than 10% | Other Race Less than 10% | Other Race Greater than 5% | Other Race Less than 5% |
| Same-Race *Answer Rate* | 27.4%N=135 | 8.1%N=187 | 21.9%N=183 | 8.7%N=139 |
| Other-Race *Answer Rate* | 13.8%N=145 | 6.1%N=167 | 13.0%N=185 | 4.7%N=127 |
| Difference | **+13.6**(p=0.005) | +2.0(p=0.454) | **+8.9**(p=0.025) | +3.9(p=0.206) |

**Table A-5b. Racial Bias in Responsiveness: Higher Where Ward Councillors Enjoy a Majority or Super-Majority of Constituents that are His Same-Race? No.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Same Race Greater than 80% | Same Race Less than 80% | Same Race Greater than 50% | Same Race Less than 50% |
| Same-RaceResponse Rate | 11.8%N=161 | 37.9%N=161 | 18.1%N=226 | 40.6%N=96 |
| Other-RaceResponse Rate | 5.5%N=145 | 26.3%N=167 | 11.6%N=215 | 27.8%N=97 |
| Difference | **+6.3**(p=0.053) | **+11.5**(p=0.025) | **+6.5**(p=0.056) | **+12.8**(p=0.062) |

**Table A-6. Regression Results, DV=Responded**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Logit | Logit | Logit |
| Same-Race | 0.446\*\*(0.198) | 0.620\*\*\*(0.212) | 0.454\*\*(0.207) |
| Roads | 0.365\*\*(0.143) | 0.426\*\*\*(0.151) | 0.461\*\*(0.214) |
| Copartisan | -0.127(0.216) | 0.026(0.227) | -0.229(0.185) |
| Same-Race\*Copartisan | 0.134(0.286) | -0.169(0.305) | 0.224(0.238) |
| ANC Cllr | -- | -0.757\*\*\*(0.211) | -0.439(0.389) |
| Ward Cllr | -- | -0.004(0.156) | -0.011(0.156) |
| Incumbent Cllr | -- | -0.102(0.151) | -0.291(0.188) |
| Female Cllr | -- | 0.166(0.157) | 0.094(0.151) |
| English Cllr | -- | 0.320(0.216) | 0.507(0.354) |
| Xhosa Cllr | -- | -0.670\*\*(0.269) | -0.424(0.271) |
| Zulu Cllr | -- | -0.923\*\*\*(0.249) | -0.421(0.416) |
| % District w/ Home Internet | -- | -- | 1.319(2.73) |
| % District Black | -- | -- | -1.343\*\*\*(0.379) |
| % District w/ Piped Water | -- | -- | 1.151(1.482) |
| ErrorsNWald χ2 Prob > χ2 | Robust122918.110.001 | Robust1229126.140.000 | Clustered848302.960.000 |

Note: \* p<0.1, \*\* p<0.05, \*\*\*p<0.01. In Models 2 and 3 white Afrikaaner is the omitted ethnic category. Model 3 clusters errors by municipality because % of the population with internet in the home is available for municipalities and not wards.

**Table A-7. Regression Results with Interaction Terms, DV=Responded**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | LogitCredible Subsample | LogitAll | LogitAll | LogitWard Cllrs | LogitAll |
| Same-Race | 1.002\*\*\*(0.354) | 0.624\*\*\*(0.167) | 0.493(0.222) | 0.303(0.552) | 0.589(1.39) |
| Roads | 0.634\*\*(0.251) | 0.436\*\*\*(0.152) | 0.426(0.151) | 0.439\*\*(0.221) | 0.428\*\*\*(0.151) |
| Copartisan | 0.466(0.398) | -0.053(0.150) | -0.067(0.150) | -0.172(0.220) | -0.065(0.150) |
| Same Race\*Co-partisan | -0.931\*(0.511) | -- | -- | -- | -- |
| Shadow | -- | -0.073(0.278) | -- | -- | -- |
| Same Race\*Shadow | -- | -0.481(0.392) | -- | -- | -- |
| Same Race\* Ward Cllr | -- | -- | 0.091(0.303) | -- | -- |
| Vote Margin | -- | -- | -- | -0.254(0.592) | -- |
| Same Race\* Vote Margin | -- | -- | -- | 0.545(0.834) | -- |
| Turnout | -- | -- | -- | -- | 1.485(1.624) |
| Same Race\* Turnout | -- | -- | -- | -- | -0.073(2.26) |
| Ward Cllr | -0.049(0.251) | -- | -0.052(0.228) | -- | -0.029(0.158) |
| ANC Cllr | -0.387(0.344) | -0.874\*\*\*(0.214) | -0.754\*\*\*(0.211) | -0.937\*(0.561) | -0.728(0.212) |
| Incumbent | -0.161(0.246) | -0.098(0.151) | -0.098(0.150) | -0.217(0.217) | -0.115(0.151) |
| Female | -0.065(0.266) | 0.164(0.157) | 0.168(0.157) | 0.339(0.227) | 0.173(0.157) |
| English | 0.196(0.370) | 0.361\*(0.215) | 0.319(0.216) | 0.842\*\*\*(0.296) | 0.321(0.215) |
| Xhosa | -1.142\*\*(0.516) | -0.609\*\*(0.262) | -0.663\*\*(0.267) | -0.690(0.630) | -0.671\*\*(0.268) |
| Zulu | -0.668(0.378) | -0.862\*\*\*(0.246) | -0.921(0.248) | -0.870(0.584) | -0.852(0.251) |
| NWald χ2Prob > χ2 | 49831.350.001 | 1229125.880.000 | 1229126.040.000 | 63499.170.000 | 1229125.460.000 |

**Note on Table A-7:** \* p<0.1, \*\* p<0.05, \*\*\*p<0.01. The “credible subsample” in the first column is the set of councillors in whose municipalities either the 2011 vote share of the DA exceeded the share of the non-Black population or the 2011 vote share of the ANC exceeded the share of the Black population (i.e. where there was likely some cross-racial voting). Here the co-partisan signal appears to reduce racial bias (perhaps because it is more “credible” in these places but this result is unfortunately not robust to different specifications of the credible subsample.

**Table A-8. Corrections for Multiple Hypothesis Testing on Responsiveness**

**Benjamini and Hochberg’s (1995) sequential correction, 26 tests**

|  |  |  |  |
| --- | --- | --- | --- |
| Hypothesis | p-value | Sig at 95% Level? | At 90%? |
| Same Race, All | 0.000 | Y | Y |
| Same Race, ANC Cllrs | 0.000 | Y | Y |
| Same Race Among Copartisans, All | 0.003 | Y | Y |
| Same Race Among Non-Shadow, PR | 0.003 | Y | Y |
| Same Race, PR Cllrs | 0.005 | Y | Y |
| Same Race, Ward Cllrs | 0.006 | Y | Y |
| Same Race, No Partisanship, Credible | 0.007 | Y | Y |
| Same Race No Partisanship, All | 0.010 | Y | Y |
| Same Race in District with Same Race <80%, Ward | 0.025 | N | Y |
| Same Race, Xhosas | 0.025 | N | Y |
| Same Race, Zulus | 0.030 | N | Y |
| Same Race, English | 0.040 | N | Y |
| Same Race, Afrikaaners | 0.041 | N | Y |
| Same Race, DA Cllrs | 0.046 | N | Y |
| Same Race in Districts with Same Race > 80%, Ward | 0.053 | N | Y |
| Same Race in Districts with Same Race > 50%, Ward | 0.056 | N | Y |
| Same Race in Districts with Same Race < 50%, Ward | 0.062 | N | Y |
| Same Race\*Copartisan, Credible | 0.068 | N | Y |
| Same Race\*Shadow | 0.219 | N | N |
| Same Race\*ANC | 0.233 | N | N |
| Same Race Among Co-partisans, Credible | 0.342 | N | N |
| Same Race\*Vote Margin | 0.668 | N | N |
| Same Race\*Copartisan, All | 0.579 | N | N |
| Same Race\*Ward | 0.763 | N | N |
| Same Race Among Shadow, PR | 0.804 | N | N |
| Same Race\*Turnout | 0.974 | N | N |

**CONSORT DIAGRAM**

