Appendices

A Covariate Balance

A.1 Descriptives of Covariates and Covariate Balance

Variable	Levels	n	Min	$\tilde{x}$	$\bar{x}$	s	Max	#NA
Age	Control	656	18	34	37.06	12.96	83	19
	Public Policy	666	18	34	38.22	14.31	87	19
	Social Sanctioning	633	18	34	37.99	14.17	90	20
	Legal	661	18	34	37.40	13.38	84	14
	all	2616	18	34	37.67	13.71	90	72
Ballot not Secret	Control	662	0	0	0.07	0.25	1	13
	Public Policy	670	0	0	0.07	0.26	1	15
	Social Sanctioning	640	0	0	0.07	0.26	1	13
	Legal	668	0	0	0.08	0.27	1	7
	all	2640	0	0	0.07	0.26	1	48
Female	Control	674	0	1	0.54	0.50	1	1
	Public Policy	685	0	1	0.54	0.50	1	0
	Social Sanctioning	653	0	0	0.49	0.50	1	0
	Legal	675	0	1	0.55	0.50	1	0
	all	2687	0	1	0.53	0.50	1	1
High School	Control	664	0	0	0.45	0.50	1	11
	Public Policy	680	0	0	0.45	0.50	1	5
	Social Sanctioning	649	0	0	0.41	0.49	1	4
	Legal	670	0	0	0.40	0.49	1	5
	all	2663	0	0	0.43	0.49	1	25
Muslim	Control	668	0	0	0.15	0.36	1	7
	Public Policy	684	0	0	0.15	0.36	1	1
	Social Sanctioning	651	0	0	0.15	0.36	1	2
	Legal	671	0	0	0.14	0.35	1	4
	all	2674	0	0	0.15	0.36	1	14
Rural	Control	675	0	1	0.67	0.47	1	0
	Public Policy	685	0	1	0.65	0.48	1	0
	Social Sanctioning	653	0	1	0.66	0.47	1	0
	Legal	675	0	1	0.66	0.47	1	0
	all	2688	0	1	0.66	0.47	1	0
Food deprived	Control	672	0	0	0.09	0.28	1	3
	Public Policy	684	0	0	0.10	0.30	1	1
	Social Sanctioning	651	0	0	0.09	0.29	1	2
	Legal	674	0	0	0.11	0.32	1	1
	all	2681	0	0	0.10	0.30	1	7
Econ. Index	Control	663	1	4	3.60	1.31	7	12
	Public Policy	676	1	4	3.65	1.30	7	9
	Social Sanctioning	644	1	4	3.62	1.24	7	9
	Legal	669	1	4	3.60	1.29	7	6
	all	2652	1	4	3.62	1.28	7	36

Table 1: A balance table of continuous descriptive statistics

Variable	**Levels**	$\mathbf{n}_{\text{Control}}$	$\%_{\text{Control}}$	$\mathbf{n}_{\text{PublicPolicy}}$	$\%_{\text{PublicPolicy}}$	$\mathbf{n}_{\text{SocialSanctioning}}$	$\%_{\text{SocialSanctioning}}$	$\mathbf{n}_{\text{Legal}}$	$\%_{\text{Legal}}$	$\mathbf{n}_{\text{all}}$	$\%_{\text{all}}$
Ethnic Group	Kikuyu	140	20.7	147	21.5	140	21.4	148	21.9	575	21.4
	Luo	88	13.0	102	14.9	99	15.2	84	12.4	373	13.9
	Luhya	83	12.3	83	12.1	72	11.0	96	14.2	334	12.4
	Kamba	55	8.2	54	7.9	53	8.1	40	5.9	202	7.5
	Kalenjin	70	10.4	65	9.5	70	10.7	71	10.5	276	10.3
	Somali	61	9.0	60	8.8	59	9.0	56	8.3	236	8.8
	Mijikenda	41	6.1	43	6.3	42	6.4	40	5.9	166	6.2
	Other	95	14.1	83	12.1	81	12.4	93	13.8	352	13.1
	missing	42	6.2	48	7.0	37	5.7	47	7.0	174	6.5
	all	675	100.0	685	100.0	653	100.0	675	100.0	2688	100.0
Vote Buying	Nobody	32	4.7	31	4.5	26	4.0	30	4.4	119	4.4
	A few people	339	50.2	352	51.4	329	50.4	328	48.6	1348	50.1
	Most people	234	34.7	224	32.7	214	32.8	244	36.1	916	34.1
	Everyone	49	7.3	54	7.9	59	9.0	49	7.3	211	7.8
	missing	21	3.1	24	3.5	25	3.8	24	3.6	94	3.5
	all	675	100.0	685	100.0	653	100.0	675	100.0	2688	100.0
Province	Nairobi	69	10.2	70	10.2	70	10.7	71	10.5	280	10.4
	Central	95	14.1	100	14.6	91	13.9	98	14.5	384	14.3
	Eastern	99	14.7	95	13.9	94	14.4	96	14.2	384	14.3
	Rift Valley	146	21.6	139	20.3	136	20.8	139	20.6	560	20.8
	Nyanza	88	13.0	96	14.0	87	13.3	81	12.0	352	13.1
	Western	64	9.5	73	10.7	64	9.8	79	11.7	280	10.4
	North Eastern	61	9.0	60	8.8	59	9.0	60	8.9	240	8.9
	Coast	53	7.8	52	7.6	52	8.0	51	7.6	208	7.7
	all	675	100.0	685	100.0	653	100.0	675	100.0	2688	100.0

Table 2: A balance table of nominal descriptive statistics

	Model 1			Model2		
	$\ln(\frac{\pi PP}{\pi Control})$	$\ln(\frac{\pi SS}{\pi Control})$	$\ln(\frac{\pi Legal}{\pi Control})$	$\ln(\frac{\pi PP}{\pi Control})$	$\ln(\frac{\pi SS}{\pi Control})$	$\ln(\frac{\pi Legal}{\pi Control})$
Constant	−0.23	−0.02	0.31	0.02	−0.02	0.02
	(0.38)	(0.38)	(0.38)	(0.06)	(0.06)	(0.06)
Ballot not Secret	−0.04	−0.04	0.10			
	(0.25)	(0.25)	(0.24)			
Perceived vote-buying (ref none)						
Few People	0.16	0.40	0.27			
	(0.24)	(0.25)	(0.25)			
Most People	0.16	0.09	−0.01			
	(0.19)	(0.20)	(0.20)			
Everyone	0.18	0.16	0.04			
	(0.12)	(0.12)	(0.12)			
Age	0.00	0.01	−0.00			
	(0.00)	(0.00)	(0.00)			
Female	0.04	−0.18	0.15			
	(0.12)	(0.12)	(0.12)			
High Sch.	0.07	−0.12	−0.31*			
	(0.14)	(0.14)	(0.14)			
Muslim	0.20	0.02	−0.14			
	(0.29)	(0.30)	(0.30)			
Rural	−0.15	−0.09	−0.18			
	(0.15)	(0.15)	(0.15)			
Food Deprived	0.34	0.18	0.52*			
	(0.23)	(0.24)	(0.23)			
Econ Index	0.01	0.02	0.01			
	(0.05)	(0.05)	(0.05)			
Ethnic Group (ref Kikuyu)						
Luo	0.29	0.13	−0.19			
	(0.34)	(0.34)	(0.35)			
Luhya	−0.12	−0.29	−0.05			
	(0.31)	(0.32)	(0.31)			
Kamba	−0.02	−0.01	−0.53			
	(0.32)	(0.32)	(0.33)			
Kalenjin	0.02	0.32	0.27			
	(0.29)	(0.30)	(0.29)			
Somali	−0.36	−0.06	−0.05			
	(0.70)	(0.69)	(0.69)			
Mijikenda	0.80	0.03	0.02			
	(0.69)	(0.62)	(0.63)			
Other Ethnic Group	0.00	−0.02	−0.07			
	(0.28)	(0.28)	(0.28)			
Province (ref Nairobi)						
Central	0.10	−0.15	−0.10			
	(0.31)	(0.31)	(0.31)			
Eastern	0.05	−0.08	0.06			
	(0.30)	(0.31)	(0.31)			
Rift Valley	0.07	−0.27	−0.24			
	(0.28)	(0.29)	(0.28)			
Nyanza	−0.07	−0.24	−0.19			
	(0.33)	(0.34)	(0.34)			
Western	0.20	0.14	0.12			
	(0.35)	(0.36)	(0.35)			
North Eastern	0.20	−0.24	−0.17			
	(0.67)	(0.67)	(0.67)			
Coast	−0.74	0.00	−0.17			
	(0.63)	(0.55)	(0.57)			
AIC		6430.15			6337.72	
BIC		6877.38			6354.92	
Log Likelihood		−3137.08			−3165.86	
Deviance		6274.15			6331.72	
Num. obs.		2284			2284	

*$p < 0.05$

Table 3: The results of a multinomial logistic regression to test for covariate balance, where the treatment status is regressed on covariates which may be correlated with assignment in Model 1 and treatment status is only regressed on an intercept in Model 2. The resuls of the likelihood ratio test shows that we can reject the hypothesis that the model including covariates is better than the model with no covaraites chi-squared on 75 d.f. = 57.56712 p-value = 0.9326684. Only observations with no missingness for any covariate are used for the test.

B Graph of Non-Treatment Outcome by OrdinalGroup

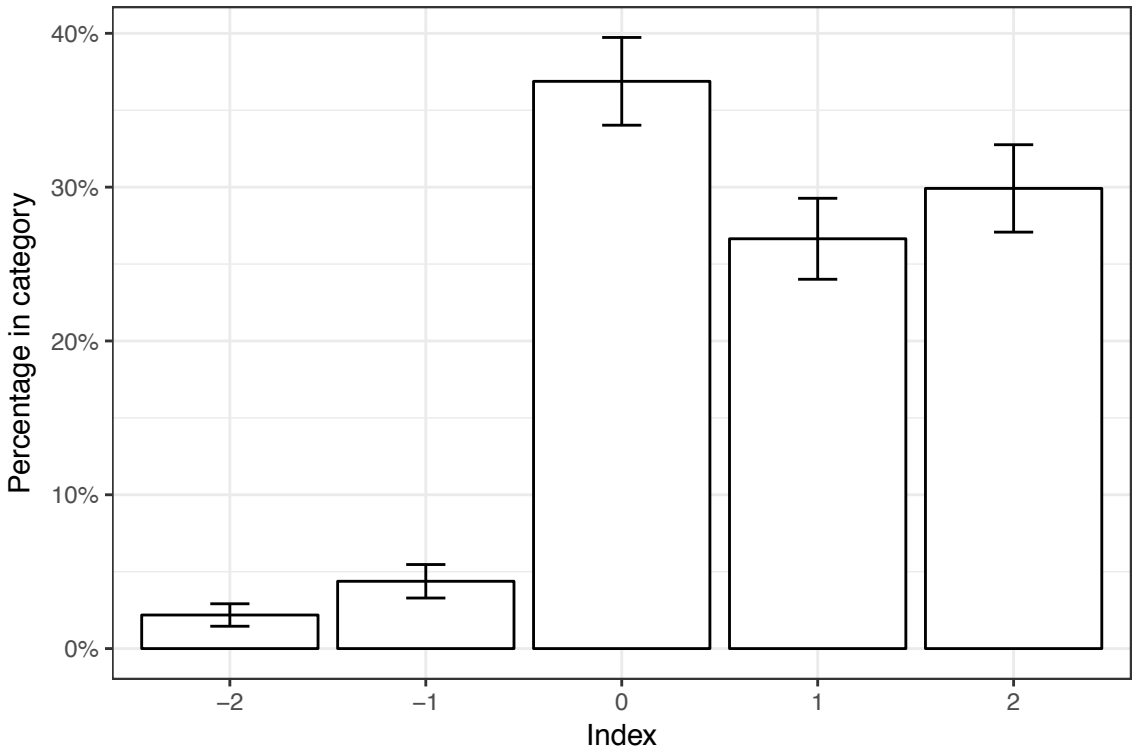

Figure 1: Outcome index of non-treatment group with survey weights and design-based 95% confidence intervals.

C Regression Tables and Robustness Checks

Table 4: All regressions are implemented using the `survey` package (Lumley 2010), using survey design-based weights and estimated via maximum likelihood.

	Dependent variable:								
	Index of Vote-selling preference (z-scores)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Treatments (ref Control)									
Public Service Predation	0.18*	0.18*	0.20*	0.15*	0.07	0.25*	0.16	0.17*	0.16*
	(0.08)	(0.07)	(0.07)	(0.07)	(0.12)	(0.12)	(0.13)	(0.07)	(0.08)
Social Sanctioning	0.20*	0.22*	0.23*	0.22*	0.17	0.33*	0.38*	0.23*	0.24*
	(0.08)	(0.09)	(0.09)	(0.08)	(0.13)	(0.11)	(0.15)	(0.08)	(0.09)
Legal	0.17	0.20*	0.24*	0.23*	0.30*	0.33*	0.24	0.21*	0.18
	(0.09)	(0.09)	(0.09)	(0.09)	(0.13)	(0.14)	(0.15)	(0.09)	(0.10)
Ballot not Secret (0-1)		−0.40*	−0.39*	−0.35	−0.35	−0.34	−0.35	−0.35	−0.40*
		(0.17)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.41)	(0.17)
Vote Buying (ref None)									
Few People		0.70*	0.67*	0.66*	0.66*	0.66*	0.66*	0.65*	0.70*
		(0.26)	(0.26)	(0.23)	(0.23)	(0.23)	(0.23)	(0.22)	(0.26)
Most People		0.65*	0.61*	0.55*	0.55*	0.55*	0.55*	0.53*	0.64*
		(0.25)	(0.25)	(0.23)	(0.22)	(0.22)	(0.23)	(0.22)	(0.25)
Everyone		0.32	0.31	0.21	0.22	0.21	0.19	0.20	0.38
		(0.25)	(0.25)	(0.26)	(0.25)	(0.26)	(0.26)	(0.25)	(0.25)
Age		0.01	0.005	0.01*	0.01*	0.01*	0.01*	0.01*	0.01
		(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Food deprived		−0.18	−0.19	−0.17	−0.18*	−0.17	−0.19*	−0.17	−0.04
		(0.10)	(0.11)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.28)
+High sch.		0.14*	0.13*	0.16*	0.13	0.16*	0.16*	0.16*	0.15*
		(0.06)	(0.06)	(0.06)	(0.15)	(0.06)	(0.06)	(0.06)	(0.06)
Muslim		0.14	0.14	0.18	0.17	0.18	0.19	0.17	
		(0.11)	(0.13)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	
Female		−0.09	−0.07	−0.04	−0.03	0.10	−0.03	−0.03	−0.09
		(0.06)	(0.06)	(0.06)	(0.06)	(0.12)	(0.06)	(0.06)	(0.06)
Rural		−0.01	0.003	−0.01	−0.01	−0.005	0.06	−0.01	−0.02
		(0.08)	(0.09)	(0.08)	(0.07)	(0.08)	(0.14)	(0.08)	(0.08)
Social Sanctioning × +High Sch.					0.17				
					(0.19)				
Public Service Predation × +High Sch.					0.11				
					(0.18)				
Legal × +High Sch.					−0.16				
					(0.16)				
Social Sanctioning × Female						−0.17			
						(0.16)			
Public Service Predation × Female						−0.20			
						(0.16)			
Legal × Female						−0.18			
						(0.17)			
Social Sanctioning × Rural							−0.02		
							(0.16)		
Public Service Predation × Rural							−0.24		
							(0.18)		
Legal × Rural							−0.02		
							(0.18)		
Social Sanctioning × Ballot not Secret								−0.36	
								(0.45)	
Public Service Predation × Ballot not Secret								−0.04	
								(0.48)	
Legal × Ballot not Secret								0.26	
								(0.45)	
Social Sanctioning × Food deprived									0.07
									(0.36)
Public Service Predation × Food deprived									−0.45
									(0.34)
Legal × Food deprived									0.08
									(0.35)
Constant	0.00	−0.81*	−0.92*	−0.95*	−0.92*	−1.03*	−0.98*	−0.93*	−0.81*
	(0.06)	(0.28)	(0.29)	(0.31)	(0.29)	(0.32)	(0.31)	(0.30)	(0.28)
Interviewer Fixed Effects	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Ethnic Group Fixed Effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Province Fixed Effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,501	2,330	2,184	2,184	2,184	2,184	2,184	2,184	2,339
Log Likelihood	−4,404.81	−4,062.48	−3,794.52	−3,449.43	−3,445.61	−3,447.77	−3,447.12	−3,446.98	−4,082.40
Akaike Inf. Crit.	8,817.61	8,152.96	7,645.05	7,164.86	7,163.22	7,167.54	7,166.24	7,165.95	8,196.80

Note: *p<0.05

variable	theta	SE	t	p
Public Policy	0.25	0.11	2.40	0.02
Social Sanctioning	0.27	0.13	2.11	0.03
Legal	0.25	0.13	1.88	0.06
-2|-1	-3.62	0.19		
-1|0	-2.47	0.13		
0|1	-0.07	0.10		
1|2	1.05	0.11		

Table 5: Results of an ordered logistic regression with survey weights, which shows the statistical significance of two of three treatments, based on 2501 observations, mirroring the least squares interpretation in the paper, though the legal treatment is now no longer statistically significant.

D Analysis without 'Ambiguous' Respondents Removed

Comparison	Difference	t	P-value
Control - Public Service Predation	0.13	2.18	0.03/0.045
Control - Social Sanctioning	0.15	2.19	0.03/0.045
Control - Legal	0.11	1.63	0.1/0.1

Table 6: Two-tailed difference in means where differences are in z-score units and the Ambiguous respondents are dropped from the analysis. The tests adjust for the survey design. In the p-value column, both p-values without corrections for multiple comparisons and Benjamini-Hochberg adjusted p-values are shown.

Table 7: All regressions are implemented using the `survey` package (Lumley 2010), using survey design-based weights and estimated via maximum likelihood. In these specifications, those respondents who gave ambiguous response patterns are dropped from the analysis, yielding a sample size with 107 fewer respondents

	Dependent variable:			
	Index of Vote-selling preference (z-scores)			
	(1)	(2)	(3)	(4)
Treatments (ref Control)				
Public Service Predation	0.13*	0.13*	0.14*	0.11
	(0.06)	(0.06)	(0.06)	(0.06)
Social Sanctioning	0.15*	0.15*	0.16*	0.15*
	(0.07)	(0.07)	(0.07)	(0.07)
Legal	0.11	0.13	0.17*	0.17*
	(0.07)	(0.07)	(0.07)	(0.07)
Ballot not Secret (0-1)		−0.33*	−0.31*	−0.28
		(0.14)	(0.14)	(0.15)
Vote Buying (ref None)				
Few People		0.56*	0.53*	0.51*
		(0.21)	(0.21)	(0.19)
Most People		0.53*	0.50*	0.44*
		(0.20)	(0.21)	(0.18)
Everyone		0.27	0.27	0.17
		(0.20)	(0.20)	(0.21)
Age		0.004	0.004	0.004*
		(0.002)	(0.003)	(0.002)
Food deprived		−0.12	−0.11	−0.12
		(0.08)	(0.09)	(0.07)
+High sch.		0.11*	0.10*	0.12*
		(0.05)	(0.05)	(0.04)
Muslim		0.09	0.08	0.11
		(0.09)	(0.10)	(0.09)
Female		−0.08	−0.06	−0.04
		(0.05)	(0.05)	(0.05)
Rural		0.02	0.02	0.02
		(0.06)	(0.07)	(0.06)
Constant	0.00	−0.68*	−0.78*	−0.74*
	(0.05)	(0.22)	(0.24)	(0.24)
Interviewer Fixed Effects	No	No	No	Yes
Ethnic Group Fixed Effects	No	No	Yes	Yes
Province Fixed Effects	No	No	Yes	Yes
Observations	2,376	2,216	2,078	2,078
Log Likelihood	−3,579.76	−3,299.08	−3,081.82	−2,731.79
Akaike Inf. Crit.	7,167.51	6,626.17	6,219.64	5,729.58
Note:				*p<0.05

E Regression on Individual Components of Index

Table 8: All regressions are implemented using the `survey` package (Lumley 2010), using survey design-based weights and estimated via maximum likelihood. In these models, all three composite binary variables are run as separate linear probability models and all the dependent variables are scaled so that one (1) is associated with an anti-vote-selling attitude.

	Dependent variable:											
	Refuse Bribe					Comply Bribe				Defect Bribe		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treatments (ref Control)												
Public Service Predation	0.06*	0.06*	0.07*	0.05	0.05	0.05*	0.06*	0.05*	−0.03	−0.02	−0.02	−0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)
Social Sanctioning	0.04	0.04	0.04	0.03	0.06*	0.07*	0.08*	0.08*	0.02	0.02	0.02	0.01
	(0.03)	(0.04)	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)	(0.04)	(0.03)
Legal	0.01	0.02	0.03	0.02	0.07*	0.07*	0.09*	0.09*	0.004	0.02	0.02	0.01
	(0.03)	(0.03)	(0.04)	(0.04)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.04)	(0.04)
Ballot not Secret (0-1)		−0.12*	−0.09	−0.04		−0.08	−0.09	−0.06		−0.02	−0.04	0.0002
		(0.05)	(0.06)	(0.06)		(0.05)	(0.04)	(0.04)		(0.05)	(0.05)	(0.05)
Vote Buying (ref None)												
Few People		0.16*	0.15	0.13		0.19*	0.17*	0.19*		−0.08	−0.07	−0.04
		(0.07)	(0.08)	(0.07)		(0.08)	(0.08)	(0.08)		(0.07)	(0.07)	(0.07)
Most People		0.13	0.11	0.11		0.16*	0.15*	0.17*		−0.02	−0.04	−0.06
		(0.07)	(0.07)	(0.06)		(0.08)	(0.07)	(0.08)		(0.07)	(0.08)	(0.08)
Everyone		0.05	0.05	0.01		0.09	0.07	0.09		−0.08	−0.08	−0.10
		(0.08)	(0.08)	(0.07)		(0.09)	(0.09)	(0.09)		(0.08)	(0.09)	(0.09)
Age		0.002	0.001	0.001		0.001	0.001	0.001		0.003*	0.003*	0.003*
		(0.001)	(0.001)	(0.001)		(0.001)	(0.001)	(0.001)		(0.001)	(0.001)	(0.001)
Food deprived		−0.04	−0.01	−0.01		−0.04	−0.05	−0.06		−0.07	−0.08	−0.06
		(0.05)	(0.05)	(0.04)		(0.04)	(0.04)	(0.03)		(0.04)	(0.04)	(0.04)
+High sch.		0.005	0.003	0.01		0.03*	0.03	0.04*		0.06*	0.08*	0.06*
		(0.02)	(0.02)	(0.02)		(0.02)	(0.02)	(0.02)		(0.03)	(0.03)	(0.02)
Muslim		−0.003	0.02	0.03		0.04*	0.03	0.03		0.07	0.05	0.10
		(0.05)	(0.06)	(0.05)		(0.02)	(0.02)	(0.02)		(0.04)	(0.06)	(0.06)
Female		−0.01	−0.003	0.01		0.01	0.01	0.02		−0.10*	−0.10*	−0.09*
		(0.02)	(0.03)	(0.02)		(0.02)	(0.02)	(0.02)		(0.03)	(0.03)	(0.03)
Rural		0.03	0.02	0.02		−0.05*	−0.04*	−0.06*		0.07*	0.08*	0.07*
		(0.04)	(0.04)	(0.04)		(0.02)	(0.02)	(0.03)		(0.03)	(0.04)	(0.04)
Constant	0.59*	0.38*	0.30*	0.38*	0.84*	0.66*	0.69*	0.60*	0.41*	0.34*	0.31*	0.18
	(0.02)	(0.09)	(0.10)	(0.14)	(0.02)	(0.08)	(0.09)	(0.13)	(0.03)	(0.09)	(0.13)	(0.10)
Interviewer Fixed Effects	No	No	No	Yes	No	No	No	Yes	No	No	No	Yes
Ethnic Group Fixed Effects	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes
Province Fixed Effects	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes
Observations	2,627	2,424	2,271	2,271	2,591	2,394	2,241	2,241	2,549	2,367	2,221	2,221
Log Likelihood	−2,239.89	−2,045.09	−1,886.91	−1,515.54	−1,101.94	−953.79	−874.40	−689.19	−2,184.54	−1,990.14	−1,841.86	−1,541.16
Akaike Inf. Crit.	4,487.77	4,118.18	3,829.83	3,297.07	2,211.88	1,935.58	1,804.81	1,644.38	4,377.08	4,008.28	3,739.73	3,348.32

Note: *p<0.05

F Survey Design

The survey was part of large nationally representative survey about Kenyan political opinion carried out by a non-governmental organization. All of the enumerators were trained in person in Nairobi and 10% of all questionnaires were back-checked in person to assure quality control. The survey employed a multi-stage cluster sample design, where the polling stations from the 2010 constitutional referendum were used as the primary sampling units (PSUs). Given that polling stations are of unequal size, polling stations are selected within strata using probability proportional to size (pps) sampling. Within each PSU, the version of the survey the respondents received was randomized. Since the experiment was attached to an already extant survey deployed to obtain a national representative sample of voters, I am unable to implement a random block design or a matched pair design, both of which are seen as more efficient methods (Iacus et al. 2012). While these methods are valuable, they are prohibitively expensive when carrying out national surveys because no sampling frame of the population exists and interviews need to be face-to-face. In practice, there is little difference in outcomes between my method and random block or matched paired methods with samples of over 300 or more Bruhn and McKenzie (2008).

Appendix References

1. Bruhn, Miriam and David J. McKenzie (2008). In Pursuit of Balance: Randomization in Practice in Development Field Experiments. Policy Research Working Paper 4752, World Bank.

2. Iacus, Stefano M., Gary King, and Giuseppe Porro (2012). Causal Inference without Balance Checking: Coarsened Exact Matching. *Political Analysis 20*(1), 1–24.