

511 **Appendix A Difference in Means****Table A1** Table 1: Difference in Means: Action Treatments Compared to Placebo

Country	Treatment	Effect	Std. Error	p-value in t-test	Cohen's D
Brazil	Germany	0.0000642	0.000023	0.016	0.004
Brazil	Risk	0.0000714	0.000023	0.008	0.004
Brazil	US	0.0000154	0.000021	0.535	0.001
Brazil	Scientist	0.0000335	0.000021	0.188	0.002
Russia	Germany	-0.0000205	0.000037	0.654	-0.001
Russia	Risk	0.0000494	0.000042	0.322	0.002
Russia	US	-0.0000688	0.000033	0.106	-0.004
Russia	Scientist	0.0000102	0.000039	0.829	0.0005
South Africa	Germany	0.0000348	0.000092	0.756	0.0009
South Africa	Risk	-0.0000171	0.000091	0.877	-0.0004
South Africa	US	-0.0001270	0.000088	0.242	-0.003
South Africa	Scientist	0.0000199	0.000092	0.859	-0.0005
Taiwan	Germany	0.0001903	0.000092	0.079	0.005
Taiwan	Risk	0.0007834	0.000107	0.000	0.020
Taiwan	US	0.0002517	0.000094	0.023	0.007
Taiwan	Scientist	-0.000188	0.000074	0.045	-0.005
Turkey	Germany	0.0000565	0.000049	0.344	0.002
Turkey	Risk	0.0000975	0.000051	0.111	0.003
Turkey	US	0.0000196	0.000049	0.742	0.0007
Turkey	Scientist	0.0000082	0.000048	0.887	0.0003
United States	Germany	-0.000004065	0.000053	0.949	-0.0001
United States	Risk	-0.0001060	0.000044	0.066	-0.004
United States	US	0.0000470	0.000055	0.478	0.002
United States	Scientist	-0.0002097	0.000039	0.000	-0.009

Table A2 Table 1: Difference in Means: Motivation Treatments Compared to Placebo

Country	Treatment	Effect	Std. Error	p-value in t-test	Cohen's D
Brazil	Community	0.0000556	0.000023	0.036	0.003
Brazil	Family	0.0000809	0.000024	0.003	0.005
Brazil	Norm	0.0000339	0.000022	0.186	0.002
Brazil	Self	0.0000540	0.000022	0.04	0.003
Russia	Community	0.00000095	0.000038	0.983	0.00005
Russia	Family	-0.0000369	0.000036	0.41	-0.002
Russia	Norm	0.0000185	0.000039	0.698	0.001
Russia	Self	0.0000322	0.000041	0.51	0.001
South Africa	Community	-0.0001528	0.000086	0.153	-0.004
South Africa	Family	0.000161	0.000096	0.161	0.004
South Africa	Norm	-0.000176	0.000086	0.099	-0.004
South Africa	Self	0.0000108	0.000092	0.923	0.0002
Taiwan	Community	-0.0001413	0.000077	0.142	-0.004
Taiwan	Family	0.0005147	0.000097	0.000	0.014
Taiwan	Norm	-0.0004431	0.000067	0.000	-0.014
Taiwan	Self	-0.0000248	0.000079	0.8	-0.0007
Turkey	Community	-0.0000315	0.000047	0.583	-0.001
Turkey	Family	-0.00000150	0.000048	0.979	-0.00005
Turkey	Norm	-0.0000187	0.000047	0.747	-0.0007
Turkey	Self	-0.0000370	0.000047	0.525	-0.001
United States	Community	0.0000130	0.000053	0.841	0.0005
United States	Family	0.0000578	0.000055	0.383	0.002
United States	Norm	0.0000114	0.000053	0.859	0.0004
United States	Self	-0.000254	0.000036	0.000	-0.012

Table A3 Difference in Means: Positive Reactions

Treatment	Effect	Std. Error	t-test with Placebo
Germany	0.000003	0.000005	0.6124
Risk	0.000000	0.000005	0.9919
US	0.000008	0.000006	0.5592
Scientist	(0.000002)	0.000005	0.7982
Community	0.000013	0.000006	0.07563
Family	0.000012	0.000006	0.0838
Norm	0.000011	0.000006	0.1321
Self	0.000022	0.000006	0.003197

Table A4 Difference in Means: Negative Reactions

Treatment	Effect	Std. Error	t-test with Placebo
Germany	0.000002	0.000002	0.3175
Risk	0.000000	0.000001	0.8231
US	(0.000002)	-	0.02535
Scientist	0.000000	0.000001	0.832
Community	(0.000001)	0.000001	0.3147
Family	(0.000002)	-	0.02535
Norm	0.000002	0.000002	0.1904
Self	(0.000001)	0.000001	0.3099

Appendix B Randomization Inference

B.1 Brazil

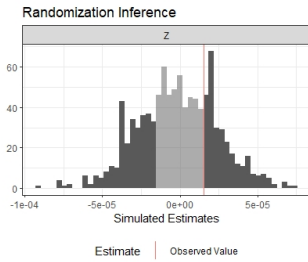


Figure B1 US Treatment

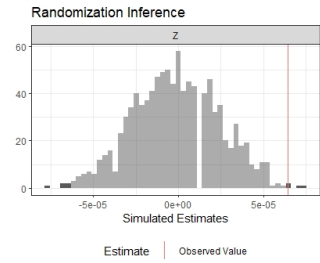


Figure B2 Germany Treatment

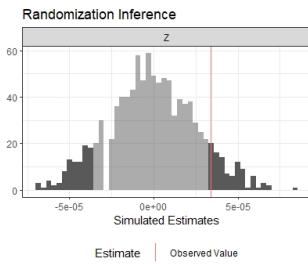


Figure B3 Norms Treatment

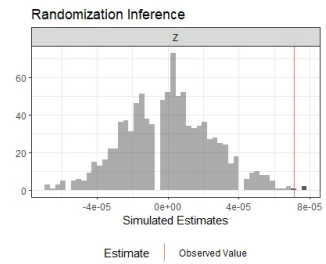


Figure B4 Risk Treatment

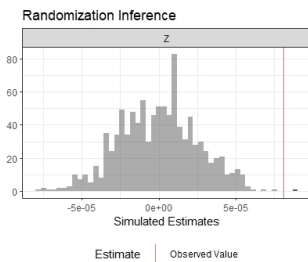


Figure B5 Family Treatment

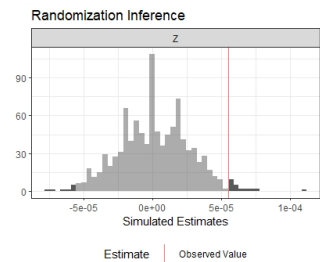


Figure B6 Community Treatment

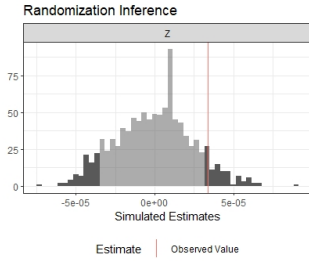


Figure B7 Scientist Treatment

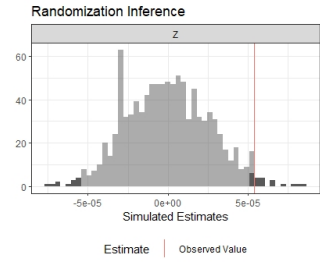


Figure B8 Self Treatment

514 B.2 Russia

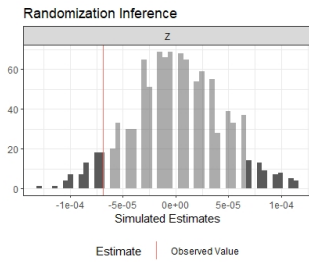


Figure B9 US Treatment

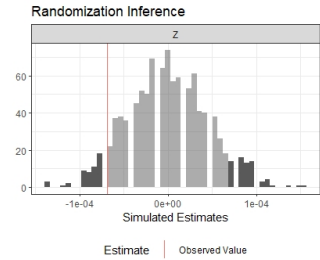


Figure B10 Germany Treatment

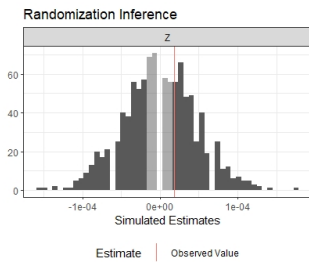


Figure B11 Norms Treatment

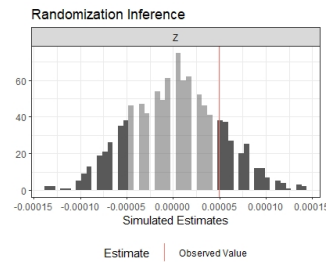


Figure B12 Risk Treatment

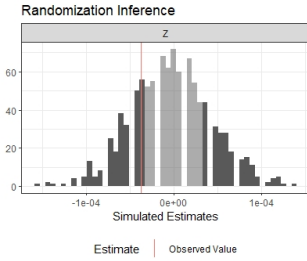


Figure B13 Family Treatment

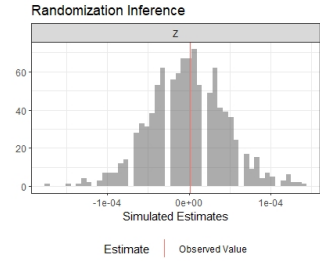


Figure B14 Community Treatment

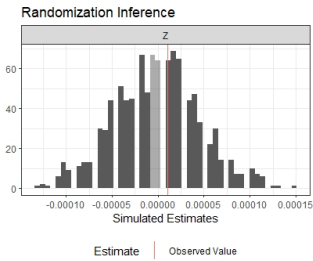


Figure B15 Scientist Treatment

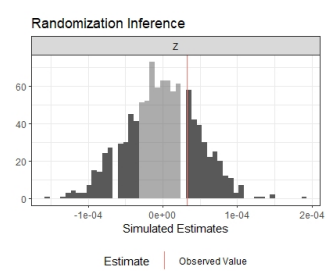


Figure B16 Self Treatment

B.3 South Africa

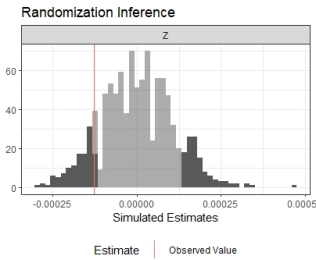


Figure B17 US Treatment

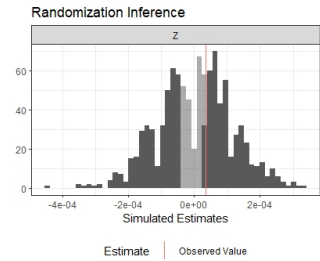
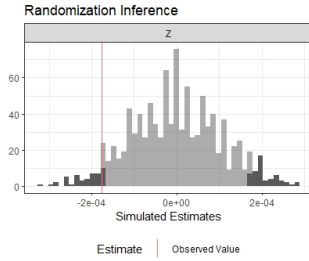
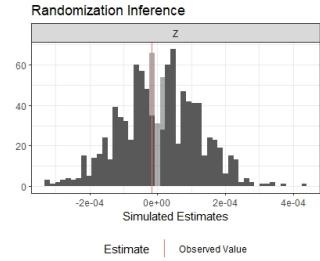
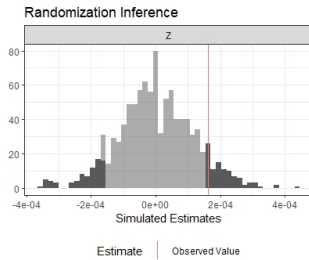
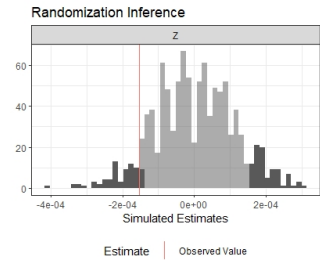
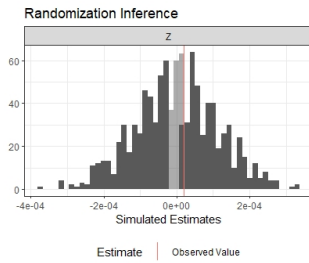
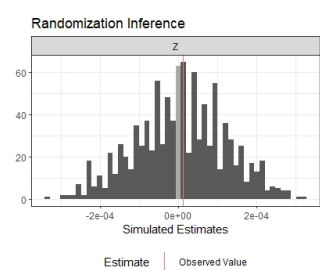
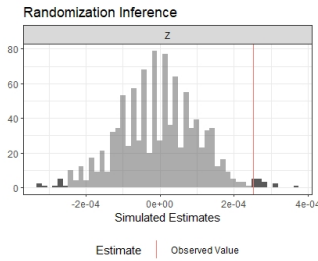
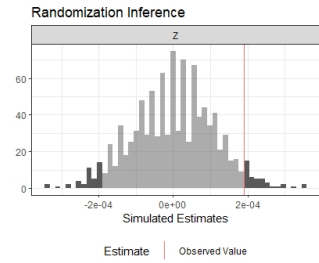
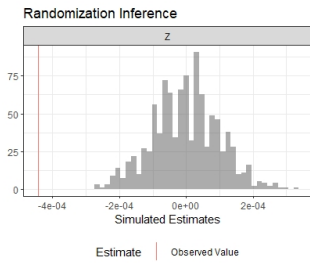
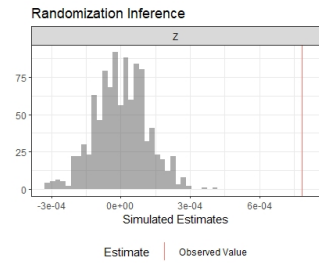
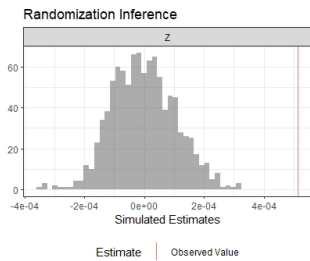
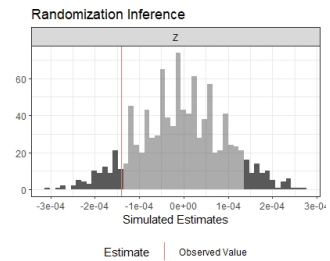


Figure B18 Germany Treatment

**Figure B19** Norms Treatment**Figure B20** Risk Treatment**Figure B21** Family Treatment**Figure B22** Community Treatment**Figure B23** Scientist Treatment**Figure B24** Self Treatment

516 **B.4 Taiwan****Figure B25** US Treatment**Figure B26** Germany Treatment**Figure B27** Norms Treatment**Figure B28** Risk Treatment**Figure B29** Family Treatment**Figure B30** Community Treatment

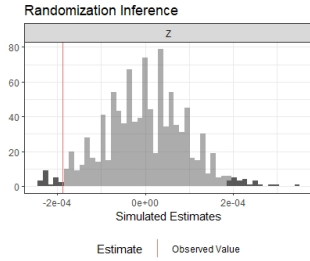


Figure B31 Scientist Treatment

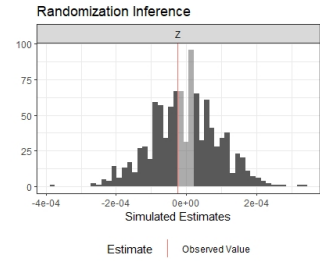


Figure B32 Self Treatment

517 B.5 Turkey

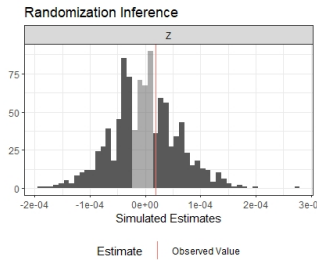


Figure B33 US Treatment

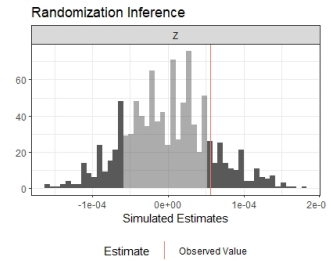


Figure B34 Germany Treatment

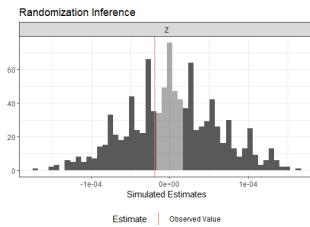


Figure B35 Norms Treatment

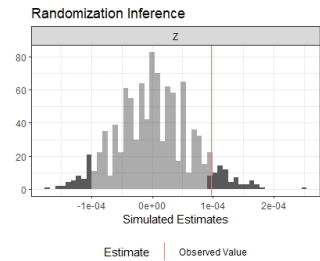


Figure B36 Risk Treatment

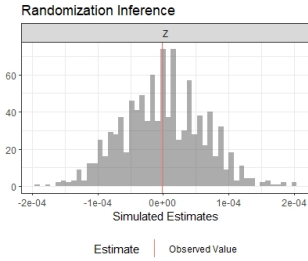


Figure B37 Family Treatment

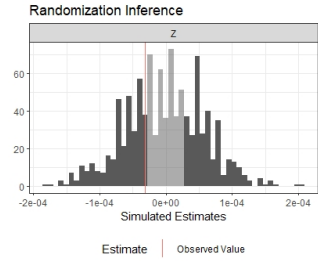


Figure B38 Community Treatment

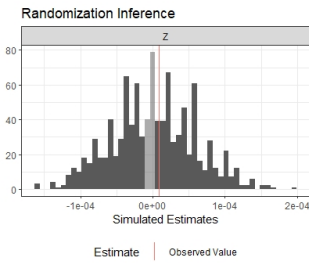


Figure B39 Scientist Treatment

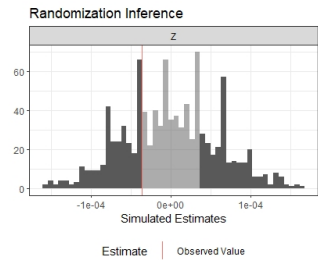


Figure B40 Self Treatment

518 B.6 United States

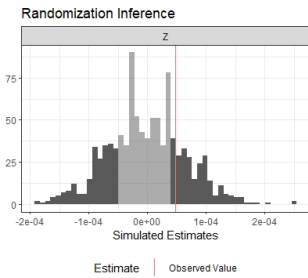


Figure B41 US Treatment

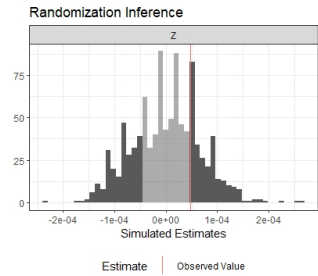
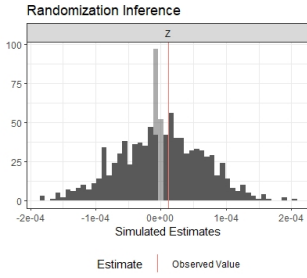
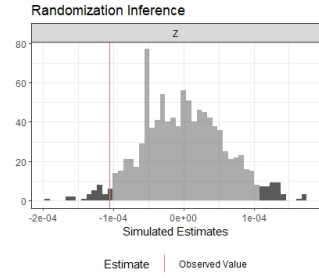
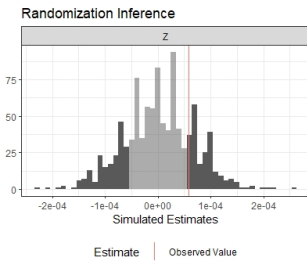
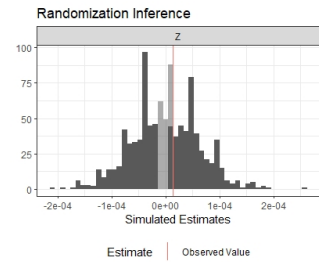
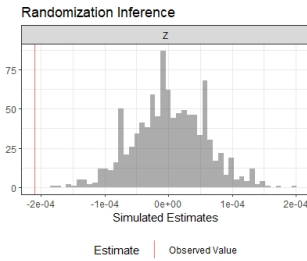
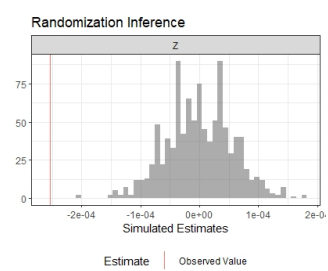


Figure B42 Germany Treatment

**Figure B43** Norms Treatment**Figure B44** Risk Treatment**Figure B45** Family Treatment**Figure B46** Community Treatment**Figure B47** Scientist Treatment**Figure B48** Self Treatment

519 Appendix C Experiment Details

Table C5 Link Clicks and Reach by Treatment/Country: Brazil (São Paulo), Russia, and South Africa

	Brazil (São Paulo)		Russia		South Africa	
	Link Clicks	Reach	Link Clicks	Reach	Link Clicks	Reach
Placebo1	94	471749	54	197850	266	172859
Placebo2	82	478666	62	199375	239	175744
Family	127	477277	51	199916	283	175758
Self	114	476621	63	194275	252	172668
Community	114	473457	59	201380	229	176722
Scientists	105	480037	60	198488	252	171595
US	94	468511	46	206126	227	171769
Germany	119	477067	54	198900	260	175262
Norms	103	470036	62	199638	221	173686
Efficacy	122	475402	66	193261	245	171153
Total	1074	4748823	577	1989209	2474	1737216

Table C6 Link Clicks and Reach by Treatment/Country: Taiwan, Turkey, and the United States

	Taiwan		Turkey		United States	
	Link Clicks	Reach	Link Clicks	Reach	Link Clicks	Reach
Placebo1	201	176521	165	275942	113	192186
Placebo2	179	156991	189	279538	92	193018
Family	291	175922	178	279970	115	194915
Self	197	176756	160	266544	61	219318
Community	169	169327	169	279013	105	192588
Scientists	166	174524	184	285034	68	210909
US	218	156704	179	272493	111	191637
Germany	210	157922	198	285355	101	191244
Norms	109	156545	172	278060	106	194978
Efficacy	322	167461	207	281710	93	218215
Total	2062	1668673	1801	2783659	965	1999008

Table C7 Brazil (São Paulo): A/B Test Results by Round and Treatment

Round	Start	End	Treatment	Reach	Link Clicks	Click per 10,000 Reach
1	Dec. 4, 2021	Dec. 7, 2021	Placebo	208858	29	1.389
1	Dec. 4, 2021	Dec. 7, 2021	Family	106522	23	2.159
1	Dec. 4, 2021	Dec. 7, 2021	Self	105944	29	2.737
1	Dec. 4, 2021	Dec. 7, 2021	Community	107455	15	1.396
1	Dec. 4, 2021	Dec. 7, 2021	Scientists	107204	22	2.052
1	Dec. 4, 2021	Dec. 7, 2021	US	105197	18	1.711
1	Dec. 4, 2021	Dec. 7, 2021	Germany	104649	29	2.771
1	Dec. 4, 2021	Dec. 7, 2021	Norm	105067	23	2.189
1	Dec. 4, 2021	Dec. 7, 2021	Efficacy	105220	31	2.946
Round 1				1056116	219	2.074
2	Dec. 10, 2021	Dec. 14, 2021	Placebo	381397	77	2.019
2	Dec. 10, 2021	Dec. 14, 2021	Family	193668	55	2.840
2	Dec. 10, 2021	Dec. 14, 2021	Self	190741	47	2.464
2	Dec. 10, 2021	Dec. 14, 2021	Community	188659	56	2.968
2	Dec. 10, 2021	Dec. 14, 2021	Scientists	192388	53	2.755
2	Dec. 10, 2021	Dec. 14, 2021	US	188309	40	2.124
2	Dec. 10, 2021	Dec. 14, 2021	Germany	191673	54	2.817
2	Dec. 10, 2021	Dec. 14, 2021	Norm	189611	40	2.110
2	Dec. 10, 2021	Dec. 14, 2021	Efficacy	190284	44	2.312
Round 2				1906730	466	2.444
3	Dec. 18, 2021	Dec. 21, 2021	Placebo	360160	70	1.944
3	Dec. 18, 2021	Dec. 21, 2021	Family	177087	49	2.767
3	Dec. 18, 2021	Dec. 21, 2021	Self	179936	38	2.112
3	Dec. 18, 2021	Dec. 21, 2021	Community	177343	43	2.425
3	Dec. 18, 2021	Dec. 21, 2021	Scientists	180445	30	1.663
3	Dec. 18, 2021	Dec. 21, 2021	US	175005	36	2.057
3	Dec. 18, 2021	Dec. 21, 2021	Germany	180745	36	1.992
3	Dec. 18, 2021	Dec. 21, 2021	Norm	175358	40	2.281
3	Dec. 18, 2021	Dec. 21, 2021	Efficacy	179898	47	2.613
Round 3				1785977	389	2.178
Total				4748823	1074	2.262

Table C8 Russia: A/B Test Results by Round and Treatment

Round	Start	End	Treatment	Reach	Link Clicks	Click per 10,000 Reach
1	Dec. 3, 2021	Dec. 6, 2021	Placebo	85637	28	3.270
1	Dec. 3, 2021	Dec. 6, 2021	Family	42919	5	1.165
1	Dec. 3, 2021	Dec. 6, 2021	Self	42342	13	3.070
1	Dec. 3, 2021	Dec. 6, 2021	Community	41142	11	2.674
1	Dec. 3, 2021	Dec. 6, 2021	Specialists	41796	13	3.110
1	Dec. 3, 2021	Dec. 6, 2021	US	43832	9	2.053
1	Dec. 3, 2021	Dec. 6, 2021	Germany	41923	7	1.670
1	Dec. 3, 2021	Dec. 6, 2021	Norm	42753	11	2.573
1	Dec. 3, 2021	Dec. 6, 2021	Efficacy	40340	13	3.223
Round 1				422684	110	2.602
2	Dec. 10, 2021	Dec. 14, 2021	Placebo	311588	88	2.824
2	Dec. 10, 2021	Dec. 14, 2021	Family	156997	46	2.930
2	Dec. 10, 2021	Dec. 14, 2021	Self	151933	50	3.291
2	Dec. 10, 2021	Dec. 14, 2021	Community	160238	48	2.996
2	Dec. 10, 2021	Dec. 14, 2021	Specialists	156692	47	3.000
2	Dec. 10, 2021	Dec. 14, 2021	US	162294	37	2.280
2	Dec. 10, 2021	Dec. 14, 2021	Germany	156977	47	2.994
2	Dec. 10, 2021	Dec. 14, 2021	Norm	156885	51	3.251
2	Dec. 10, 2021	Dec. 14, 2021	Efficacy	152921	53	3.466
Round 2				1566525	467	2.981
Total				1989209	577	2.901

Table C9 South Africa: A/B Test Results by Round and Treatment

Round	Start	End	Treatment	Reach	Link Clicks	Click per 10,000 Reach
1	Nov. 4, 2021	Nov. 6, 2021	Placebo	53356	79	14.806
1	Nov. 4, 2021	Nov. 6, 2021	Family	26168	41	15.668
1	Nov. 4, 2021	Nov. 6, 2021	Self	26223	27	10.296
1	Nov. 4, 2021	Nov. 6, 2021	Community	26701	26	9.737
1	Nov. 4, 2021	Nov. 6, 2021	Scientists	26440	28	10.590
1	Nov. 4, 2021	Nov. 6, 2021	US	26744	37	13.835
1	Nov. 4, 2021	Nov. 6, 2021	Germany	26488	48	18.121
1	Nov. 4, 2021	Nov. 6, 2021	Norm	26548	27	10.170
1	Nov. 4, 2021	Nov. 6, 2021	Efficacy	26120	33	12.634
Round 1				264788	346	13.067
2	Nov. 18, 2021	Nov. 21, 2021	Placebo	102021	142	13.919
2	Nov. 18, 2021	Nov. 21, 2021	Family	52137	80	15.344
2	Nov. 18, 2021	Nov. 21, 2021	Self	52041	70	13.451
2	Nov. 18, 2021	Nov. 21, 2021	Community	52313	72	13.763
2	Nov. 18, 2021	Nov. 21, 2021	Scientists	50130	84	16.756
2	Nov. 18, 2021	Nov. 21, 2021	US	51728	68	13.146
2	Nov. 18, 2021	Nov. 21, 2021	Germany	51145	74	14.469
2	Nov. 18, 2021	Nov. 21, 2021	Norm	51008	84	16.468
2	Nov. 18, 2021	Nov. 21, 2021	Efficacy	51170	70	13.680
Round 2				513693	744	14.483
3	Dec. 6, 2021	Dec. 10, 2021	Placebo	193226	284	14.698
3	Dec. 6, 2021	Dec. 10, 2021	Family	97453	162	16.623
3	Dec. 6, 2021	Dec. 10, 2021	Self	94404	155	16.419
3	Dec. 6, 2021	Dec. 10, 2021	Community	97708	131	13.407
3	Dec. 6, 2021	Dec. 10, 2021	Scientists	95025	140	14.733
3	Dec. 6, 2021	Dec. 10, 2021	US	93297	122	13.077
3	Dec. 6, 2021	Dec. 10, 2021	Germany	97629	138	14.135
3	Dec. 6, 2021	Dec. 10, 2021	Norm	96130	110	11.443
3	Dec. 6, 2021	Dec. 10, 2021	Efficacy	93863	142	15.128
Round 3				958735	1384	14.436
Total				1737216	2474	14.241

Table C10 Taiwan: A/B Test Results by Round and Treatment

Round	Start	End	Treatment	Reach	Link Clicks	Click per 10,000 Reach
1	Nov. 1, 2021	Nov. 3, 2021	Placebo	111979	138	12.324
1	Nov. 1, 2021	Nov. 4, 2021	Family	63283	79	12.484
1	Nov. 1, 2021	Nov. 4, 2021	Self	66136	85	12.852
1	Nov. 1, 2021	Nov. 4, 2021	Community	62783	71	11.309
1	Nov. 1, 2021	Nov. 4, 2021	Scientists	64199	55	8.567
1	Nov. 1, 2021	Nov. 3, 2021	US	47509	74	15.576
1	Nov. 1, 2021	Nov. 3, 2021	Germany	47196	79	16.739
1	Nov. 1, 2021	Nov. 3, 2021	Norm	46558	29	6.229
1	Nov. 1, 2021	Nov. 3, 2021	Efficacy	47646	73	15.321
Round 1				557289	683	12.256
2	Nov. 18, 2021	Nov. 24, 2021	Placebo	221533	242	10.924
2	Nov. 18, 2021	Nov. 24, 2021	Family	112639	212	18.821
2	Nov. 18, 2021	Nov. 24, 2021	Self	110620	112	10.125
2	Nov. 18, 2021	Nov. 24, 2021	Community	106544	98	9.198
2	Nov. 18, 2021	Nov. 24, 2021	Scientists	110325	111	10.061
2	Nov. 18, 2021	Nov. 24, 2021	US	109195	144	13.187
2	Nov. 18, 2021	Nov. 24, 2021	Germany	110726	131	11.831
2	Nov. 18, 2021	Nov. 24, 2021	Norm	109987	80	7.274
2	Nov. 18, 2021	Nov. 24, 2021	Efficacy	119815	249	20.782
Round 2				1111384	1379	12.408
Total				1668673	2062	12.357

Table C11 Turkey: A/B Test Results by Round and Treatment

Round	Start	End	Treatment	Reach	Link Clicks	Click per 10,000 Reach
1	Oct. 26, 2021	Nov. 4, 2021	Placebo	319448	215	6.730
1	Oct. 26, 2021	Nov. 4, 2021	Family	157094	98	6.238
1	Oct. 26, 2021	Nov. 4, 2021	Self	156271	84	5.375
1	Oct. 26, 2021	Nov. 4, 2021	Community	159589	96	6.015
1	Oct. 26, 2021	Nov. 4, 2021	Scientists	158602	89	5.612
1	Oct. 26, 2021	Nov. 4, 2021	US	153358	106	6.912
1	Oct. 26, 2021	Nov. 4, 2021	Germany	163244	111	6.800
1	Oct. 26, 2021	Nov. 4, 2021	Norm	157514	107	6.793
1	Oct. 26, 2021	Nov. 4, 2021	Efficacy	157935	114	7.218
Round 1				1583055	1020	6.443
2	Nov. 6, 2021	Nov. 9, 2021	Placebo	254398	139	5.464
2	Nov. 6, 2021	Nov. 9, 2021	Family	127740	80	6.263
2	Nov. 6, 2021	Nov. 9, 2021	Self	125536	76	6.054
2	Nov. 6, 2021	Nov. 9, 2021	Community	131678	73	5.544
2	Nov. 6, 2021	Nov. 9, 2021	Scientists	132127	95	7.190
2	Nov. 6, 2021	Nov. 9, 2021	US	130719	73	5.584
2	Nov. 6, 2021	Nov. 9, 2021	Germany	131390	87	6.622
2	Nov. 6, 2021	Nov. 9, 2021	Norm	131138	65	4.957
2	Nov. 6, 2021	Nov. 9, 2021	Efficacy	131262	93	7.085
Round 2				1295988	781	6.026
Total				2879043	1801	6.256

Table C12 United States: A/B Test Results by Round and Treatment

Round	Start	End	Treatment	Reach	Link Clicks	Click per 10,000 Reach
1	Oct. 14, 2021	Oct. 17, 2021	Placebo	113514	58	5.110
1	Oct. 14, 2021	Oct. 17, 2021	Family	57337	23	4.011
1	Oct. 14, 2021	Oct. 17, 2021	Self	58991	26	4.407
1	Oct. 14, 2021	Oct. 17, 2021	Community	57310	40	6.980
1	Oct. 14, 2021	Oct. 17, 2021	Scientists	56015	29	5.177
1	Oct. 14, 2021	Oct. 17, 2021	US	57325	29	5.059
1	Oct. 14, 2021	Oct. 17, 2021	Germany	55679	23	4.131
1	Oct. 14, 2021	Oct. 17, 2021	Norm	56315	26	4.617
1	Oct. 14, 2021	Oct. 17, 2021	Efficacy	55809	39	6.988
Round 1				568295	293	5.156
2	Dec. 7, 2021	Dec. 15, 2021	Placebo	79469	67	8.431
2	Dec. 7, 2021	Dec. 15, 2021	Family	39212	32	8.161
2	Dec. 7, 2021	Dec. 15, 2021	Self	40169	15	3.734
2	Dec. 7, 2021	Dec. 15, 2021	Community	39775	25	6.285
2	Dec. 7, 2021	Dec. 15, 2021	Scientists	57650	4	0.694
2	Dec. 7, 2021	Dec. 15, 2021	US	40026	26	6.496
2	Dec. 7, 2021	Dec. 15, 2021	Germany	39182	34	8.677
2	Dec. 7, 2021	Dec. 15, 2021	Norm	40791	37	9.071
2	Dec. 7, 2021	Dec. 15, 2021	Efficacy	40072	31	7.736
Round 2				416346	271	6.509
3	Jan. 13, 2022	Jan. 18, 2022	Placebo	192221	80	4.162
3	Jan. 13, 2022	Jan. 18, 2022	Family	98366	60	6.100
3	Jan. 13, 2022	Jan. 18, 2022	Self	120158	20	1.664
3	Jan. 13, 2022	Jan. 18, 2022	Community	95503	40	4.188
3	Jan. 13, 2022	Jan. 18, 2022	Scientists	97244	35	3.599
3	Jan. 13, 2022	Jan. 18, 2022	US	94286	56	5.939
3	Jan. 13, 2022	Jan. 18, 2022	Germany	96383	44	4.565
3	Jan. 13, 2022	Jan. 18, 2022	Norm	97872	43	4.393
3	Jan. 13, 2022	Jan. 18, 2022	Efficacy	122334	23	1.880
Round 3				1014367	401	3.953
Total				1999008	965	4.827

520 **Appendix D Vaccination Rate by Country****Table D13** Vaccination Rate by Country

Country	Date	Vaccinated (%)	Fully Vaccinated (%)
Brazil	Dec. 4, 2021	76.89%	63.94%
Brazil	Dec. 7, 2021	76.97%	64.44%
Brazil	Dec. 10, 2021	77.07%	65.11%
Brazil	Dec. 14, 2021	77.07%	65.49%
Brazil	Dec. 18, 2021	77.30%	66.11%
Brazil	Dec. 21, 2021	77.36%	66.32%
Russia	Dec. 3, 2021	46.24%	39.66%
Russia	Dec. 6, 2021	46.68%	40.30%
Russia	Dec. 10, 2021	47.37%	41.23%
Russia	Dec. 14, 2021	48.33%	42.38%
South Africa	Nov. 4, 2021	26.07%	21.21%
South Africa	Nov. 6, 2021	26.27%	21.32%
South Africa	Nov. 18, 2021	27.56%	22.92%
South Africa	Nov. 21, 2021	27.73%	23.11%
South Africa	Dec. 6, 2021	29.89%	25.02%
South Africa	Dec. 10, 2021	30.55%	25.53%
Taiwan	Nov. 1, 2021	72.46%	33.10%
Taiwan	Nov. 4, 2021	72.94%	35.43%
Taiwan	Nov. 18, 2021	75.38%	44.84%
Taiwan	Nov. 24, 2021	75.91%	49.56%
Turkey	Oct. 26, 2021	64.98%	56.82%
Turkey	Nov. 4, 2021	65.32%	57.63%
Turkey	Nov. 6, 2021	65.39%	57.80%
Turkey	Nov. 9, 2021	65.49%	58.02%
United States	Oct. 14, 2021	65.52%	58.20%
United States	Oct. 17, 2021	65.66%	58.36%
United States	Dec. 7, 2021	70.97%	61.40%
United States	Dec. 15, 2021	71.79%	62.12%
United States	Jan. 13, 2022	74.45%	63.60%
United States	Jan. 18, 2022	74.80%	63.79%

Source: The Our World in Data COVID vaccination data

¹People vaccinated was calculated using "people vaccinated/population" and Fully vaccinated (%) was calculated using "people fully vaccinated/population".

²As Brazil for Dec. 10, 2021 is missing "Vaccinated (%)", we interpolate it at 77.07 percent from the other two adjacent numbers.

521 Appendix E Facebook Ads Example



Figure E49 Facebook Ad: Brazil

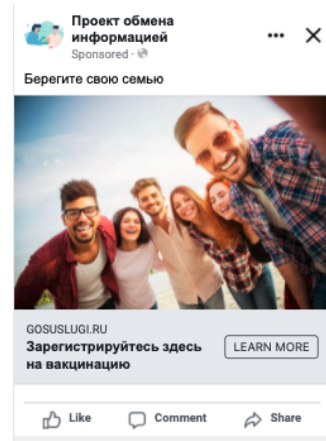


Figure E50 Facebook Ad: Russia



Figure E51 Facebook Ad: South Africa



Figure E52 Facebook Ad: Taiwan



Figure E53 Facebook Ad: Turkey

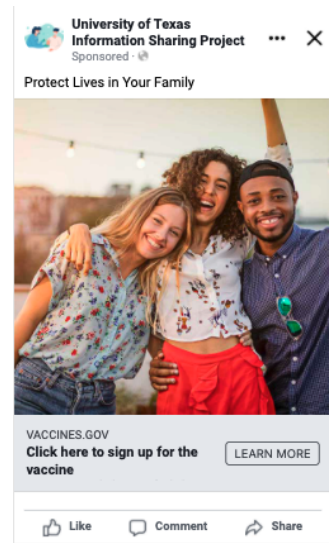


Figure E54 Facebook Ad: US

Appendix F Adjustments for Multiple Comparisons

Table F14 Adjustments at Country and Facebook-Ad Group Level

Country	Treatment	Group	Raw p-value	Bonferroni	BH	Holm
Brazil	Community	Motivation	0.036000	0.144000	0.053330	0.108000
Russia	Community	Motivation	0.983000	1.000000	0.983000	1.000000
South Africa	Community	Motivation	0.153000	0.612000	0.214700	0.459000
Taiwan	Community	Motivation	0.142000	0.568000	0.189300	0.284000
Turkey	Community	Motivation	0.583000	1.000000	0.979000	1.000000
USA	Community	Motivation	0.841000	1.000000	0.859000	1.000000
Brazil	Family	Motivation	0.003000	0.012000	0.012000	0.012000
Russia	Family	Motivation	0.410000	1.000000	0.930700	1.000000
South Africa	Family	Motivation	0.161000	0.644000	0.214700	0.459000
Taiwan	Family	Motivation	0.000005	0.000021	0.000011	0.000016
Turkey	Family	Motivation	0.979000	1.000000	0.979000	1.000000
USA	Family	Motivation	0.383000	1.000000	0.766000	1.000000
Brazil	Germany	Efficacy	0.016000	0.064000	0.032000	0.048000
Russia	Germany	Efficacy	0.654000	1.000000	0.829000	1.000000
South Africa	Germany	Efficacy	0.756000	1.000000	0.877000	1.000000
Taiwan	Germany	Efficacy	0.079000	0.316000	0.079000	0.090000
Turkey	Germany	Efficacy	0.344000	1.000000	0.688000	1.000000
USA	Germany	Efficacy	0.949000	1.000000	0.949000	0.956000
Brazil	Norm	Motivation	0.186000	0.744000	0.186000	0.186000
Russia	Norm	Motivation	0.698000	1.000000	0.930700	1.000000
South Africa	Norm	Motivation	0.099000	0.396000	0.214700	0.396000
Taiwan	Norm	Motivation	0.000001	0.000002	0.000002	0.000002
Turkey	Norm	Motivation	0.747000	1.000000	0.979000	1.000000
USA	Norm	Motivation	0.859000	1.000000	0.859000	1.000000
Brazil	Risk	Efficacy	0.008000	0.032000	0.032000	0.032000
Russia	Risk	Efficacy	0.322000	1.000000	0.644000	0.966000
South Africa	Risk	Efficacy	0.877000	1.000000	0.877000	1.000000
Taiwan	Risk	Efficacy	0.000000	0.000000	0.000000	0.000000
Turkey	Risk	Efficacy	0.111000	0.444000	0.444000	0.444000
USA	Risk	Efficacy	0.066000	0.264000	0.132000	0.198000
Brazil	Scientist	Efficacy	0.188000	0.752000	0.250700	0.376000
Russia	Scientist	Efficacy	0.829000	1.000000	0.829000	1.000000
South Africa	Scientist	Efficacy	0.859000	1.000000	0.877000	1.000000
Taiwan	Scientist	Efficacy	0.045000	0.180000	0.060000	0.090000
Turkey	Scientist	Efficacy	0.887000	1.000000	0.887000	1.000000
USA	Scientist	Efficacy	0.000101	0.000402	0.000402	0.000402
Brazil	Self	Motivation	0.040000	0.160000	0.053330	0.108000
Russia	Self	Motivation	0.510000	1.000000	0.930700	1.000000
South Africa	Self	Motivation	0.923000	1.000000	0.923000	0.923000
Taiwan	Self	Motivation	0.800000	1.000000	0.800000	0.800000
Turkey	Self	Motivation	0.525000	1.000000	0.979000	1.000000
USA	Self	Motivation	0.000001	0.000003	0.000003	0.000003
Brazil	USA	Efficacy	0.535000	1.000000	0.535000	0.535000
Russia	USA	Efficacy	0.106000	0.424000	0.424000	0.424000
South Africa	USA	Efficacy	0.242000	0.968000	0.877000	0.968000
Taiwan	USA	Efficacy	0.023000	0.092000	0.046000	0.069000
Turkey	USA	Efficacy	0.742000	1.000000	0.887000	1.000000
USA	USA	Efficacy	0.478000	1.000000	0.637300	0.956000

Table F15 Adjustments at Country Level

Country	Treatment	Group	Raw p-value	Bonferroni	BH	Holm
Brazil	Community	Motivation	0.036000	0.288000	0.064000	0.180000
Russia	Community	Motivation	0.983000	1.000000	0.983000	1.000000
South Africa	Community	Motivation	0.153000	1.000000	0.429300	1.000000
Taiwan	Community	Motivation	0.142000	1.000000	0.162300	0.284000
Turkey	Community	Motivation	0.583000	1.000000	0.979000	1.000000
USA	Community	Motivation	0.841000	1.000000	0.949000	1.000000
Brazil	Family	Motivation	0.003000	0.024000	0.024000	0.024000
Russia	Family	Motivation	0.410000	1.000000	0.930700	1.000000
South Africa	Family	Motivation	0.161000	1.000000	0.429300	1.000000
Taiwan	Family	Motivation	0.000005	0.000043	0.000014	0.000032
Turkey	Family	Motivation	0.979000	1.000000	0.979000	1.000000
USA	Family	Motivation	0.383000	1.000000	0.764800	1.000000
Brazil	Germany	Efficacy	0.016000	0.128000	0.042670	0.096000
Russia	Germany	Efficacy	0.654000	1.000000	0.930700	1.000000
South Africa	Germany	Efficacy	0.756000	1.000000	0.923000	1.000000
Taiwan	Germany	Efficacy	0.079000	0.632000	0.105300	0.237000
Turkey	Germany	Efficacy	0.344000	1.000000	0.979000	1.000000
USA	Germany	Efficacy	0.949000	1.000000	0.949000	1.000000
Brazil	Norm	Motivation	0.186000	1.000000	0.214900	0.558000
Russia	Norm	Motivation	0.698000	1.000000	0.930700	1.000000
South Africa	Norm	Motivation	0.099000	0.792000	0.429300	0.792000
Taiwan	Norm	Motivation	0.000001	0.000005	0.000002	0.000004
Turkey	Norm	Motivation	0.747000	1.000000	0.979000	1.000000
USA	Norm	Motivation	0.859000	1.000000	0.949000	1.000000
Brazil	Risk	Efficacy	0.008000	0.064000	0.032000	0.056000
Russia	Risk	Efficacy	0.322000	1.000000	0.930700	1.000000
South Africa	Risk	Efficacy	0.877000	1.000000	0.923000	1.000000
Taiwan	Risk	Efficacy	0.000000	0.000000	0.000000	0.000000
Turkey	Risk	Efficacy	0.111000	0.888000	0.888000	0.888000
USA	Risk	Efficacy	0.066000	0.528000	0.176000	0.396000
Brazil	Scientist	Efficacy	0.188000	1.000000	0.214900	0.558000
Russia	Scientist	Efficacy	0.829000	1.000000	0.947400	1.000000
South Africa	Scientist	Efficacy	0.859000	1.000000	0.923000	1.000000
Taiwan	Scientist	Efficacy	0.045000	0.360000	0.072000	0.180000
Turkey	Scientist	Efficacy	0.887000	1.000000	0.979000	1.000000
USA	Scientist	Efficacy	0.000101	0.000804	0.000402	0.000704
Brazil	Self	Motivation	0.040000	0.320000	0.064000	0.180000
Russia	Self	Motivation	0.510000	1.000000	0.930700	1.000000
South Africa	Self	Motivation	0.923000	1.000000	0.923000	1.000000
Taiwan	Self	Motivation	0.800000	1.000000	0.800000	0.800000
Turkey	Self	Motivation	0.525000	1.000000	0.979000	1.000000
USA	Self	Motivation	0.000001	0.000006	0.000006	0.000006
Brazil	USA	Efficacy	0.535000	1.000000	0.535000	0.558000
Russia	USA	Efficacy	0.106000	0.848000	0.848000	0.848000
South Africa	USA	Efficacy	0.242000	1.000000	0.484000	1.000000
Taiwan	USA	Efficacy	0.023000	0.184000	0.046000	0.115000
Turkey	USA	Efficacy	0.742000	1.000000	0.979000	1.000000
USA	USA	Efficacy	0.478000	1.000000	0.764800	1.000000

Appendix G Language Translation of Treatment Message

G.1 Portuguese

Country Treatment Ad Content:

- Germany: Uma vacina amplamente usada foi desenvolvida na Alemanha
- US: Uma vacina amplamente utilizada foi desenvolvida nos Estados Unidos

Motivation Treatment Ad Content:

- Norm: 87% das pessoas foram vacinadas ou planejam ser vacinadas (de acordo com pesquisas da Morning Consult)
- Efficacy: A vacinação é 96% eficaz contra a hospitalização (incluindo da variante delta, de acordo com um estudo da Public Health England)

Action Treatment Ad Content:

- Family: Proteja vidas em sua família
- Community: Proteja vidas em sua comunidadeec
- Scientist: Siga os cientistas médicos
- Self: Proteja sua vida

Ad Elements:

- Headline: Clique aqui para se inscrever para a vacina
- Facebook Page Name: Projeto de compartilhamento de informações
- Vaccine signup link:
https://vacinaja.sp.gov.br/?utm_source=portalutm_medium=banner-topoutm_campaign=Cadastro-Vacinaja

G.2 Russian

Country Treatment Ad Content:

- Germany: Одна из широко используемых вакцин была разработана в Германии.
- US: Одна из широко используемых вакцин была разработана в США.

Motivation Treatment Ad Content:

- Norm: 87% людей были вакцинированы или планируют вакцинацию (согласно опросам, проведенным Morning Consultom).
- Efficacy: Вакцинация эффективна на 96%, как профилактика против госпитализации (также включая дельта-вариант, что подтверждается в исследовании Public Health England)

Action Treatment Ad Content:

- Family: берегите свою семью
- Community: берегите жизни в своем общес

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560 - Scientist: послушайте ученых-медиков

561 - Self: берегите свою жизнь

562 **Ad Elements:**

563 - Headline: Нажмите здесь, чтобы зарегистрироваться на вакцинацию

564 - Facebook Page Name: проект обмена информацией цией

565 - Vaccine signup link:

566 <https://www.gosuslugi.ru/landing/vaccination>

567 **G.3 Traditional Chinese**568 **Country Treatment Ad Content:**

569 - Germany: 德國已研製出一種廣泛使用的疫苗

570 - US: 美國已研製出一種廣泛使用的疫苗

571 **Motivation Treatment Ad Content:**

572 - Norm: 87% 的民衆已接種或計劃接種疫苗（根據Morning Consult 的民意調查）

574 - Efficacy: COVID-19疫苗住院的保護力為96%（包括Delta變異株，根據英國公共衛生部的一項研究）

576 **Action Treatment Ad Content:**

577 - Family: 保護家人的生命

578 - Community: 保護社區中的生命

579 - Scientist: 信任醫學專家

580 - Self: 保護你的生命

581 **Ad Elements:**

582 - Headline: COVID-19疫苗接種院所

583 - Facebook Page Name: 信息共享平台

584 - Vaccine signup link:

585 <https://www.cdc.gov.tw/Category/List/hlrN4cZsF2Pe4C6DFhggqQ>

586 **G.4 Turkish**587 **Country Treatment Ad Content:**

588 - Germany: Oldukça yaygın kullanılan aşılarından biri Almanya'da üretiliyor.

589 - US: Oldukça yaygın kullanılan aşılarından biri Amerika Birleşik Devletleri'nde üretiliyor.

591 **Motivation Treatment Ad Content:**

592 - Norm: İnsanların 87%'si aşı oldu veya olmayı düşünüyor.

593 - Efficacy: Aşılar hastaneye yatma riskini 96% oranında azaltıyor (delta varyantı dahil).

595 **Action Treatment Ad Content:**

- 596 - Family: Aileni koru
- 597 - Community: Toplumu koru
- 598 - Scientist: Bilim insanlarına kulak ver
- 599 - Self: Virüsten korun

600 **Ad Elements:**

- 601 - Headline: Aşı olmak için şimdi kaydol
- 602 - Facebook Page Name: Doğru Bilgi Edinme Platformu
- 603 - Vaccine signup link: <https://www.mhrs.gov.tr/>