Supplementary Materials for "Responses to Foreign Shaming over Climate Policy among Nationalist"

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A   Analysis Wave One

A.1   Descriptive Statistics

In the wave 1 dataset (`wave1` R object), we have the following variables:

1. **`nquest`**: 9-digit DataFolha Respondent Code.

2. **`female`**: Dummy for Female Respondent.

3. **`age`**: Age.

4. **`religion`**: 4-brackets religion levels.

5. **`evang`**: Dummy for Evangelical respondent.

6. **`income`**: Income levels.

7. **`more5mw`**: Respondent More than five minimum wage salaries.

8. **`hsmore`**: Dummy for High School or more of education.

9. **`outcbin`**: Dummy for support for governmental environmental decision.

10. **`trsource`**: Treatment status denoting the source of the criticism.

11. **`trgovresp`**: Treatment status denoting government response to the criticism.

12. **`trstatus`**: Treatment status as appeared in the survey instrument.

13. **`natscale`**: National attachment scale.

14. **`region`**: Brazilian region.

15. **`wts`**: Weights computed by the DataFolha Institute.

Our analysis comes from a sample of 2001 Brazilian administered in XXXX by the Datafolha Institute as part of a larger, unrelated omnibus survey. We provide a detailed explanation about the sampling methodology in the subsection XXXX of the APSA Experimental Report section of this appendix. Table 1 shows the demographic characteristics of our sample.

Table 1: Sample Characteristics – Wave 1

	[ALL] N=2001	N
Age	42.96 (16.15)	2001
Female:		2001
No	951 (47.53%)	
Yes	1050 (52.47%)	
Income:		1899
BRL 0.00 to BRL 998.00	397 (20.91%)	
BRL 999.00 to BRL 1,996.00	426 (22.43%)	
BRL 1,997.00 to BRL 2,994.00	380 (20.01%)	
BRL 2,995.00 to BRL 4,990.00	345 (18.17%)	
BRL 4,991.00 or more	351 (18.48%)	
Region:		2001
Southeast	853 (42.63%)	
South	299 (14.94%)	
Northeast	521 (26.04%)	
Center-West	163 (8.15%)	
North	165 (8.25%)	
High School or more:		2001
No	844 (42.18%)	
Yes	1157 (57.82%)	
Religion:		2001
Catholic	1015 (50.72%)	
Evangelical Traditional	274 (13.69%)	
Evangelical Pentecostal	370 (18.49%)	
Others/No Relig.	342 (17.09%)	
National Attachment Scale	0.74 (0.27)	1918

A.2 Pre-treatment Balance

The pre-treatment variables in this wave were:

1. Age

2. Gender

3. Education

4. Region

5. Income

6. Religion

To check whether we have a well-balanced sample across the experiment, with demographic groups evenly distributed across them, we perform two types of balancing tests. For the continuous variables, we perform an F-test, and for the categorical variables, we run a Chi-Square test. Table 2 shows that the results of these tests are insignificant (p-value above 0.10), meaning that we have a well-balanced sample across all treatment levels.

Table 2: Pre-Treatment Balance Tests – Wave 1

Variable	Statistic	Value	P-Value
Age	F	0.821	0.569
Gender	Chi-Sq	5.058	0.653
Education	Chi-Sq	2.388	0.935
Region	Chi-Sq	1.927	1.000
Income	Chi-Sq	29.604	0.382
Religion	Chi-Sq	26.822	0.177

A.3 Treatment Effect

We begin our analysis by run a linear regression to examine the main effects of our treatment conditions on public responses to foreign shaming. The results follow in the Table 3.

Table 3: Responses to Shaming from Ally and Adversary – Wave 1

	(1)	(2)	(3)
Ally Shaming	0.005		−0.035
	(0.023)		(0.043)
Recognize Mistakes		0.506***	0.481***
		(0.018)	(0.011)
Abandon Treaties		−0.109***	−0.143***
		(0.017)	(0.014)
Reject Shaming		0.182***	0.155***
		(0.028)	(0.023)
Ally Shaming x Recognize Mistakes			0.050*
			(0.028)
Ally Shaming x Abandon Treaties			0.068
			(0.063)
Ally Shaming x Reject Shaming			0.053**
			(0.023)
Constant	0.538***	0.394***	0.411***
	(0.018)	(0.009)	(0.019)
N	1,955	1,955	1,955

Cluster-robust SEs in parenthesis, clustered at the Brazilian region level.

Reference category: (1) Adversary shaming; (2) Remain Silent; (3) Silence upon Adversary shaming.

All estimates should be interpreted relative to its baseline category.

Significance levels: *p < .1; **p < .05; ***p < .01

A.4 Heterogeneous Effects – National Attachment Scale

Table 4 shows how our treatments interact with individuals based on their national attachment scale scores. We outline and specify the expected interactions between national attachment and main treatments in the APSA Experimental Report section of this appendix.

Table 4: Nationalism Scale Heterogeneous Effects – Wave 1

	(1)	(2)	(3)
Ally	0.023		−0.090
	(0.046)		(0.097)
Recognize Mistakes		0.521***	0.522***
		(0.036)	(0.017)
Abandon Treaties		−0.187**	−0.262***
		(0.085)	(0.062)
Reject Criticism		−0.047	−0.136**
		(0.073)	(0.057)
Nat. Scale	0.196**	0.058	0.023
	(0.085)	(0.136)	(0.103)
Ally x Recognize Mistakes			0.011
			(0.074)
Ally x Abandon Treaties			0.157
			(0.172)
Ally x Reject Criticism			0.176
			(0.250)
Nat. Scale x Ally	−0.036		0.075
	(0.065)		(0.168)
Nat. Scale x Recognize Mistakes		−0.017	−0.046*
		(0.063)	(0.024)
Nat. Scale x Abandon Treaties		0.124	0.194**
		(0.136)	(0.092)
Nat. Scale x Reject Criticism		0.313***	0.395***
		(0.106)	(0.078)
Nat. Scale x Ally x Recognize Mistakes			0.046
			(0.128)
Nat. Scale x Ally x Abandon Treaties			−0.148
			(0.307)
Nat. Scale x Ally x Reject Criticism			−0.160
			(0.342)
Constant	0.394***	0.345***	0.387***
	(0.064)	(0.096)	(0.077)
N	1,890	1,890	1,890

Cluster-robust SEs in parenthesis, clustered at the Brazilian region level.
Reference category: (1) Adversary shaming; (2) Remain Silent; (3) Silence upon Adversary shaming.
All estimates should be interpreted relative to its baseline category.
Significance levels: *$p < .1$; **$p < .05$; ***$p < .01$

A.5 ANOVA for testing the Factorial Design effects

We run an analysis of variation (ANOVA) to check which treatment variables in the factorial design had more influence over the Brazilian governmental climate action preferences.

Table 5: ANOVA – Wave 1

Variables	DF	SumSq	MeanSq	F-Val	P-Val
Source of Criticism	1	0.013	0.013	0.066	0.797
Govt. Response	3	107.645	35.882	185.265	0.000
Source x Govt. Response	3	0.318	0.106	0.547	0.650
Residuals	1947	377.089	0.194	NA	NA

Using robust standard errors, we have the following ANOVA table with corrected p-values, that show largely the same output: the preference is solely determined by the type response by the Brazilian government.

```
## Coefficient covariances computed by hccm()
```

Table 6: ANOVA (Robust Covariance Matrix) – Wave 1

Variables	DF	F-Val	P-Val
Source of Criticism	1	0.325	0.569
Govt. Response	3	258.112	0.000
Source x Govt. Response	3	0.447	0.719
Residuals	1947	NA	NA

Both tests lead to the same result: the governmental response is the most important variable in determine the preferences for the governmental respose. The source of the criticism against the Brazilian climate mistakes has no influence on the popular preferences.

We also tested whether the National Attachment Scale has an heterogeneous effect over the governmental response toward the criticism. Theoretically, we would expect that nationalist respondents would dislike more the criticism coming from an advarsary while they could be at ease with a criticism from an ally. The tests show that this does not hold empirically, with the National Attachment only mediating the governmental respose.

```
## Coefficient covariances computed by hccm()
```

Table 7: ANOVA: Full Model plus National Attachment Scale – Wave 1

Variables	DF	SumSq	MeanSq	F-Val	P-Val
Source of Criticism	1	0.016	0.016	0.083	0.774
Govt. Response	3	101.982	33.994	176.279	0.000
National Attachment Scale (NAS)	1	3.396	3.396	17.610	0.000
Source x Govt. Response	3	0.221	0.074	0.381	0.766
Source x NAS	1	0.005	0.005	0.027	0.870
Govt. Response x NAS	3	2.250	0.750	3.889	0.009
Source x Govt. Response x NAS	3	0.272	0.091	0.470	0.704
Residuals	1874	361.386	0.193	NA	NA

Table 8: ANOVA: Full Model plus National Attachment Scale (Robust Covariance Matrix) – Wave 1

Variables	DF	F-Val	P-Val
Source of Criticism	1	0.164	0.686
Govt. Response	3	241.154	0.000
National Attachment Scale (NAS)	1	14.701	0.000
Source x Govt. Response	3	0.341	0.795
Source x NAS	1	0.228	0.633
Govt. Response x NAS	3	4.232	0.005
Source x Govt. Response x NAS	3	0.585	0.625
Residuals	1874	NA	NA

The National Attachment Scale seems to mediate the effects. However, the National Attachment only interacts with the response type. The source of the criticism has no significant influence, even when controlling for the National Attachment Level of the respondent.

A.6 Robustness Checks

We supplement our main analysis by running robustness checks. We add pre-treatment demographic characteristics that could change attitudes toward foreign shaming. We add controls for education, income, gender, age, and religion. Importantly, all the results remain similar to the ones presented in the main models.

Table 9: Responses to Shaming (pre-treatment as controls) – Wave 1

	(1)	(2)	(3)
Ally Shaming	0.010		−0.040
	(0.020)		(0.045)
Recognize Mistakes		0.503***	0.475***
		(0.017)	(0.012)
Abandon Treaties		−0.118***	−0.154***
		(0.017)	(0.020)
Reject Shaming		0.180***	0.144***
		(0.027)	(0.026)
Ally Shaming x Recognize Mistakes			0.056**
			(0.027)
Ally Shaming x Abandon Treaties			0.073
			(0.066)
Ally Shaming x Reject Shaming			0.074***
			(0.025)
Constant	0.496***	0.361***	0.380***
	(0.046)	(0.034)	(0.027)
N	1,863	1,863	1,863

Cluster-robust SEs in parenthesis, clustered at the Brazilian region level.

Reference category: (1) Adversary shaming; (2) Remain Silent; (3) Silence upon Adversary shaming.

All estimates should be interpreted relative to its baseline category.

Significance levels: *$p < .1$; **$p < .05$; ***$p < .01$

Control variables: Female, Age, Evangelical, More than 5 Min. Wage, and Schooling.

Table 10: Nationalism Scale Heterogeneous Effects (pre-treatment as controls) – Wave 1

	(1)	(2)	(3)
Ally	0.012		−0.144
	(0.050)		(0.093)
Recognize Mistakes		0.530***	0.527***
		(0.038)	(0.029)
Abandon Treaties		−0.165**	−0.263***
		(0.080)	(0.060)
Reject Criticism		−0.058	−0.191**
		(0.069)	(0.081)
Nat. Scale	0.187**	0.069	0.002
	(0.093)	(0.136)	(0.098)
Ally x Recognize Mistakes			0.026
			(0.091)
Ally x Abandon Treaties			0.206
			(0.158)
Ally x Reject Criticism			0.262
			(0.266)
Nat. Scale x Ally	−0.013		0.142
	(0.062)		(0.164)
Nat. Scale x Recognize Mistakes		−0.032	−0.058
		(0.066)	(0.041)
Nat. Scale x Abandon Treaties		0.082	0.180*
		(0.128)	(0.095)
Nat. Scale x Reject Criticism		0.323***	0.448***
		(0.104)	(0.109)
Nat. Scale x Ally x Recognize Mistakes			0.032
			(0.148)
Nat. Scale x Ally x Abandon Treaties			−0.207
			(0.298)
Nat. Scale x Ally x Reject Criticism			−0.242
			(0.372)
Constant	0.370***	0.313***	0.377***
	(0.053)	(0.086)	(0.061)
N	1,806	1,806	1,806

Cluster-robust SEs in parenthesis, clustered at the Brazilian region level.

Reference category: (1) Adversary shaming; (2) Remain Silent; (3) Silence upon Adversary shaming.

All estimates should be interpreted relative to its baseline category.

Significance levels: *$p < .1$; **$p < .05$; ***$p < .01$

Control variables: Female, Age, Evangelical, More than 5 Min. Wage, and Schooling.

A.7 Paper Contents

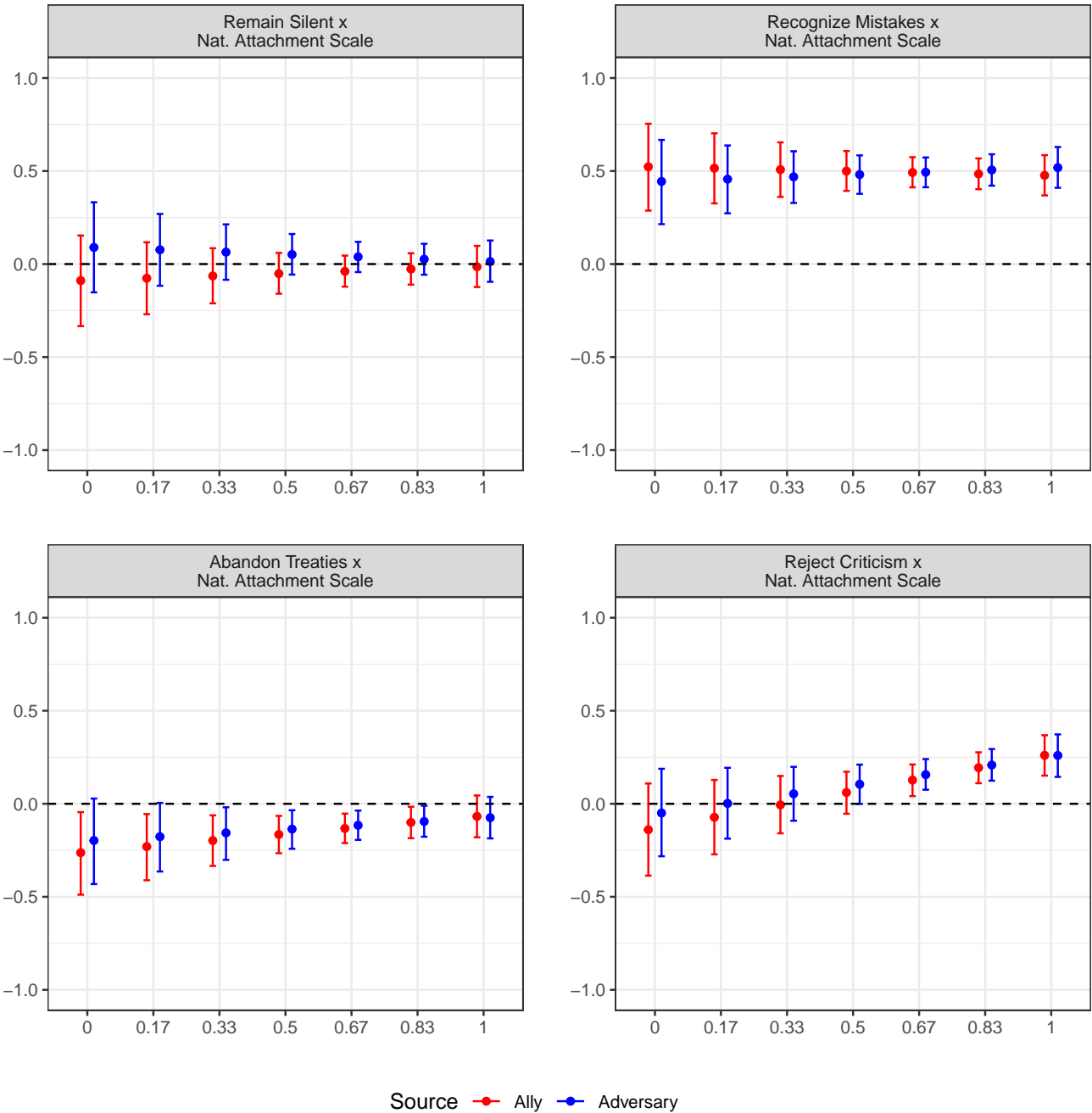

Figure 1: Source versus National Attachment Scale Heterogeneous Effects

B Analysis Wave Two

B.1 Descriptive Statistics

In the wave 2 dataset (`wave2` R object), we have the following variables:

1. `nquest`: 9-digit DataFolha Respondent Code.

2. `female`: Dummy for Female Respondent.

3. `age`: Age.

4. `religion`: 4-brackets religion levels.

5. `evang`: Dummy for Evangelical respondent.

6. `income`: Income levels.

7. `more5mw`: Respondent More than five minimum wage salaries.

8. `hsmore`: Dummy for High School or more of education.

9. `outcbin`: Dummy for support for governmental environmental decision.

10. `trcontent`: Treatment status that contrasted a control (no message) versus a liberal message stating the Amazon as a belonging to the humankind.

11. `trgovresp`: Treatment status denoting government response to the criticism.

12. `trstatus`: Treatment status as appeared in the survey instrument.

13. `natscale`: National attachment scale.

14. `region`: Brazilian region.

15. `wts`: Weights computed by the DataFolha Institute.

Our analysis comes from a sample of 2126 Brazilian administered in XXXX by the Datafolha Institute as part of a larger, unrelated omnibus survey. We provide a detailed explanation about the sampling methodology in the subsection XXXX of the APSA Experimental Report section of this appendix. Table 11 shows the demographic characteristics of our sample.

Table 11: Sample Characteristics – Wave 2

	[ALL] N=2126	N
Age	42.76 (16.28)	2126
Female:		2126
No	1011 (47.55%)	
Yes	1115 (52.45%)	
Income:		2033
BRL 0.00 to BRL 998.00	411 (20.22%)	
BRL 999.00 to BRL 1,996.00	527 (25.92%)	
BRL 1,997.00 to BRL 2,994.00	451 (22.18%)	
BRL 2,995.00 to BRL 4,990.00	353 (17.36%)	
BRL 4,991.00 or more	291 (14.31%)	
Region:		2126
Southeast	900 (42.33%)	
South	330 (15.52%)	
Northeast	546 (25.68%)	
Center-West	177 (8.33%)	
North	173 (8.14%)	
High School or more:		2126
No	920 (43.27%)	
Yes	1206 (56.73%)	
Religion:		2076
Catholic	1081 (52.07%)	
Evangelical Traditional	294 (14.16%)	
Evangelical Pentecostal	396 (19.08%)	
Others/No Relig.	305 (14.69%)	
National Attachment Scale	0.73 (0.27)	2032

B.2 Pre-treatment Balance

The pre-treatment variables in this wave were:

1. Age

2. Gender

3. Education

4. Region

5. Income

6. Religion

To check whether we have a well-balanced sample across the experiment, with demographic groups evenly distributed across them, we perform two types of balancing tests. For the continuous variables, we perform an F-test, and for the categorical variables, we run a Chi-Square test. Table 12 shows that the results of these tests are insignificant (p-value above 0.10), meaning that we have a well-balanced sample across all treatment levels.

Table 12: Pre-Treatment Balance Tests – Wave 2

Variable	Statistic	Value	P-Value
Age	F	1.501	0.162
Gender	Chi-Sq	3.742	0.809
Education	Chi-Sq	5.012	0.658
Region	Chi-Sq	4.644	1.000
Income	Chi-Sq	18.088	0.924
Religion	Chi-Sq	33.482	0.041

As we can see, the results are insignificant (p-value above 0.10) for all variables but religion. We show in the robustness checks that adding religion as a control variable does not alter our results. Under (p-value < 0.1) we still have a 10% chance of a spurious correlation between the treatment and one pre-treatment variable. For instance, in six comparison tests, under a p-value of 0.1, we have $1 - (1 - 0.1)^6 = 0.469$, or 46.9% chance of at least one test be significant at random.

Using Benjamini–Hochberg correction (Benjamini and Hochberg 1995), let p_k the k-th ordered p-value, m the number of tests, and α the significance threshold. We have to adjust the p-values using the following formula:

$$p_k < \frac{k}{m}\alpha$$

When we adjust the p-values for multiple comparisons, all coefficients are insignificant.

Table 13: Pre-Treatment Balance Tests (with Multiple Comparison's Correction) – Wave 2

Variable	Statistic	Value	P-Value	Adj. P-Value
Age	F	1.501	0.162	0.486
Gender	Chi-Sq	3.742	0.809	1.000
Education	Chi-Sq	5.012	0.658	1.000
Region	Chi-Sq	4.644	1.000	1.000
Income	Chi-Sq	18.088	0.924	1.000
Religion	Chi-Sq	33.482	0.041	0.246

B.3 Treatment Effect

We begin our analysis by run a linear regression to examine the main effects of our treatment conditions on public responses to foreign shaming. The results follow in the Table 14.

Table 14: Responses to Shaming plus Liberal Message – Wave 2

	(1)	(2)	(3)
Liberal Message	0.005		0.029
	(0.014)		(0.037)
Recognize Mistakes		0.526***	0.539***
		(0.018)	(0.030)
Abandon Treaties		−0.093***	−0.083***
		(0.030)	(0.029)
Reject Shaming		0.133***	0.148***
		(0.019)	(0.038)
Liberal Message x Recognize Mistakes			−0.026
			(0.044)
Liberal Message x Abandon Treaties			−0.020
			(0.033)
Liberal Message x Reject Shaming			−0.030
			(0.090)
Constant	0.537***	0.398***	0.384***
	(0.008)	(0.016)	(0.022)
N	2,093	2,093	2,093

Cluster-robust SEs in parenthesis, clustered at the Brazilian region level.

Reference category: (1) No liberal message (control); (2) Remain Silent; (3) Silence upon no liberal message.

All estimates should be interpreted relative to its baseline category.

Significance levels: $^{*}p < .1$; $^{**}p < .05$; $^{***}p < .01$

B.4 Heterogeneous Effects – National Attachment Scale

Table 15 shows how our treatments interact with individuals based on their national attachment scale scores. We outline and specify the expected interactions between national attachment and main treatments in the APSA Experimental Report section of this appendix.

Table 15: Nationalism Scale Heterogeneous Effects – Wave 2

	(1)	(2)	(3)
Liberal Message	0.137***		0.142
	(0.040)		(0.105)
Recognize Mistakes		0.692***	0.746***
		(0.023)	(0.055)
Abandon Treaties		−0.075*	−0.094**
		(0.043)	(0.047)
Reject Criticism		0.0003	−0.044
		(0.068)	(0.075)
Nat. Scale	0.254***	0.186***	0.268***
	(0.028)	(0.035)	(0.064)
Liberal Message x Recognize Mistakes			−0.109
			(0.104)
Liberal Message Message x Abandon Treaties			0.022
			(0.060)
Liberal Message x Reject Criticism			0.120
			(0.172)
Nat. Scale x Liberal Message	−0.185***		−0.168
	(0.056)		(0.142)
Nat. Scale x Recognize Mistakes		−0.217***	−0.277***
		(0.031)	(0.086)
Nat. Scale x Abandon Treaties		−0.012	0.014
		(0.071)	(0.076)
Nat. Scale x Reject Criticism		0.199**	0.278***
		(0.079)	(0.099)
Nat. Scale x Liberal Message x Recognize Mistakes			0.118
			(0.153)
Nat. Scale x Liberal Message x Abandon Treaties			−0.035
			(0.101)
Nat. Scale x Liberal Message x Reject Criticism			−0.198
			(0.152)
Constant	0.354***	0.255***	0.187***
	(0.022)	(0.024)	(0.046)
N	2,012	2,012	2,012

Cluster-robust SEs in parenthesis, clustered at the Brazilian region level.

Reference category: (1) No Liberal Message (control); (2) Remain Silent; (3) Silence upon No Liberal Message.

All estimates should be interpreted relative to its baseline category.

Significance levels: $^*p < .1$; $^{**}p < .05$; $^{***}p < .01$

B.5 ANOVA for testing the Factorial Design effects

We run an analysis of variation (ANOVA) to check which treatment variables in the factorial design had more influence over the Brazilian governmental climate action preferences.

Table 16: ANOVA – Wave 2

Variables	DF	SumSq	MeanSq	F-Val	P-Val
Liberal Content	1	0.015	0.015	0.076	0.783
Govt. Response	3	116.861	38.954	201.722	0.000
Liberal Content x Govt. Response	3	0.068	0.023	0.118	0.950
Residuals	2085	402.623	0.193	NA	NA

Using robust standard errors, we have the following ANOVA table with corrected p-values, that show largely the same output: the preference is solely determined by the type response by the Brazilian government.

```
## Coefficient covariances computed by hccm()
```

Table 17: ANOVA (Robust Covariance Matrix) – Wave 2

Variables	DF	F-Val	P-Val
Liberal Content	1	0.195	0.659
Govt. Response	3	296.670	0.000
Liberal Content x Govt. Response	3	0.099	0.961
Residuals	2085	NA	NA

Both tests lead to the same result: the message content, either neutral or liberal, has no influence over the responses. The response type is the most important variable in determine the preferences for the governmental respose.

We also tested whether the National Attachment Scale has an heterogeneous effect over the governmental response toward the criticism. Theoretically, we would expect that nationalist respondents would dislike liberal messages claiming that the Amazon basin is a humankind good. The tests show a small interaction between national attachment and the content of the criticism, but overall no three-way interaction between message content, the governmental response, and the national attachment. National attachment, as in the first wave, remains the most powerful variable to explain the governmental response.

```
## Coefficient covariances computed by hccm()
```

Table 18: ANOVA: Full Model plus National Attachment Scale – Wave 2

Variables	DF	SumSq	MeanSq	F-Val	P-Val
Liberal Content	1	0.007	0.007	0.035	0.852
Govt. Response	3	112.468	37.489	198.084	0.000
National Attachment Scale (NAS)	1	4.636	4.636	24.495	0.000
Liberal Content x Govt. Response	3	0.047	0.016	0.083	0.969
Liberal Content x NAS	1	1.359	1.359	7.181	0.007
Govt. Response x NAS	3	3.302	1.101	5.816	0.001
Liberal Content x Govt. Response x NAS	3	0.472	0.157	0.831	0.477
Residuals	1996	377.763	0.189	NA	NA

Table 19: ANOVA: Full Model plus National Attachment Scale (Robust Covariance Matrix) – Wave 2

Variables	DF	F-Val	P-Val
Liberal Content	1	0.114	0.736
Govt. Response	3	294.944	0.000
National Attachment Scale (NAS)	1	8.572	0.003
Liberal Content x Govt. Response	3	0.144	0.934
Liberal Content x NAS	1	4.567	0.033
Govt. Response x NAS	3	7.335	0.000
Liberal Content x Govt. Response x NAS	3	0.987	0.398
Residuals	1996	NA	NA

B.6 Robustness Checks

We supplement our main analysis by running robustness checks. We add pre-treatment demographic characteristics that could change attitudes toward foreign shaming. We add controls for education, income, gender, age, and religion. Importantly, all the results remain similar to the ones presented in the main models.

Table 20: Responses to Shaming plus Liberal Message (pre-treatment as controls) – Wave 2

	(1)	(2)	(3)
Liberal Message	0.001		0.013
	(0.015)		(0.030)
Recognize Mistakes		0.521***	0.522***
		(0.021)	(0.031)
Abandon Treaties		−0.096***	−0.095**
		(0.034)	(0.046)
Reject Shaming		0.126***	0.143***
		(0.023)	(0.043)
Liberal Message x Recognize Mistakes			−0.002
			(0.035)
Liberal Message x Abandon Treaties			−0.003
			(0.045)
Liberal Message x Reject Shaming			−0.033
			(0.090)
Constant	0.547***	0.416***	0.409***
	(0.034)	(0.015)	(0.021)
N	1,956	1,956	1,956

Cluster-robust SEs in parenthesis, clustered at the Brazilian region level.

Reference category: (1) No liberal message (control); (2) Remain Silent; (3) Silence upon no liberal message.

All estimates should be interpreted relative to its baseline category.

Significance levels: *$p < .1$; **$p < .05$; ***$p < .01$

Control variables: Female, Age, Evangelical, More than 5 Min. Wage, and Schooling.

Table 21: Nationalism Scale Heterogeneous Effects (pre-treatment as controls) – Wave 2

	(1)	(2)	(3)
Liberal Message	0.131***		0.145
	(0.043)		(0.104)
Recognize Mistakes		0.704***	0.749***
		(0.054)	(0.086)
Abandon Treaties		−0.038	−0.047
		(0.057)	(0.067)
Reject Criticism		0.016	0.009
		(0.103)	(0.103)
Nat. Scale	0.238***	0.193***	0.296***
	(0.034)	(0.055)	(0.081)
Liberal Message x Recognize Mistakes			−0.081
			(0.113)
Liberal Message Message x Abandon Treaties			0.010
			(0.074)
Liberal Message x Reject Criticism			0.038
			(0.156)
Nat. Scale x Liberal Message	−0.180***		−0.199
	(0.058)		(0.138)
Nat. Scale x Recognize Mistakes		−0.243***	−0.311**
		(0.064)	(0.123)
Nat. Scale x Abandon Treaties		−0.071	−0.075
		(0.092)	(0.103)
Nat. Scale x Reject Criticism		0.164	0.182
		(0.124)	(0.150)
Nat. Scale x Liberal Message x Recognize Mistakes			0.119
			(0.168)
Nat. Scale x Liberal Message x Abandon Treaties			0.011
			(0.106)
Nat. Scale x Liberal Message x Reject Criticism			−0.074
			(0.136)
Constant	0.377***	0.272***	0.196***
	(0.034)	(0.035)	(0.034)
N	1,886	1,886	1,886

Cluster-robust SEs in parenthesis, clustered at the Brazilian region level.

Reference category: (1) No Liberal Message (control); (2) Remain Silent; (3) Silence upon No Liberal Message.

All estimates should be interpreted relative to its baseline category.

Significance levels: $^*p < .1$; $^{**}p < .05$; $^{***}p < .01$

Control variables: Female, Age, Evangelical, More than 5 Min. Wage, and Schooling.

B.7 Paper Contents
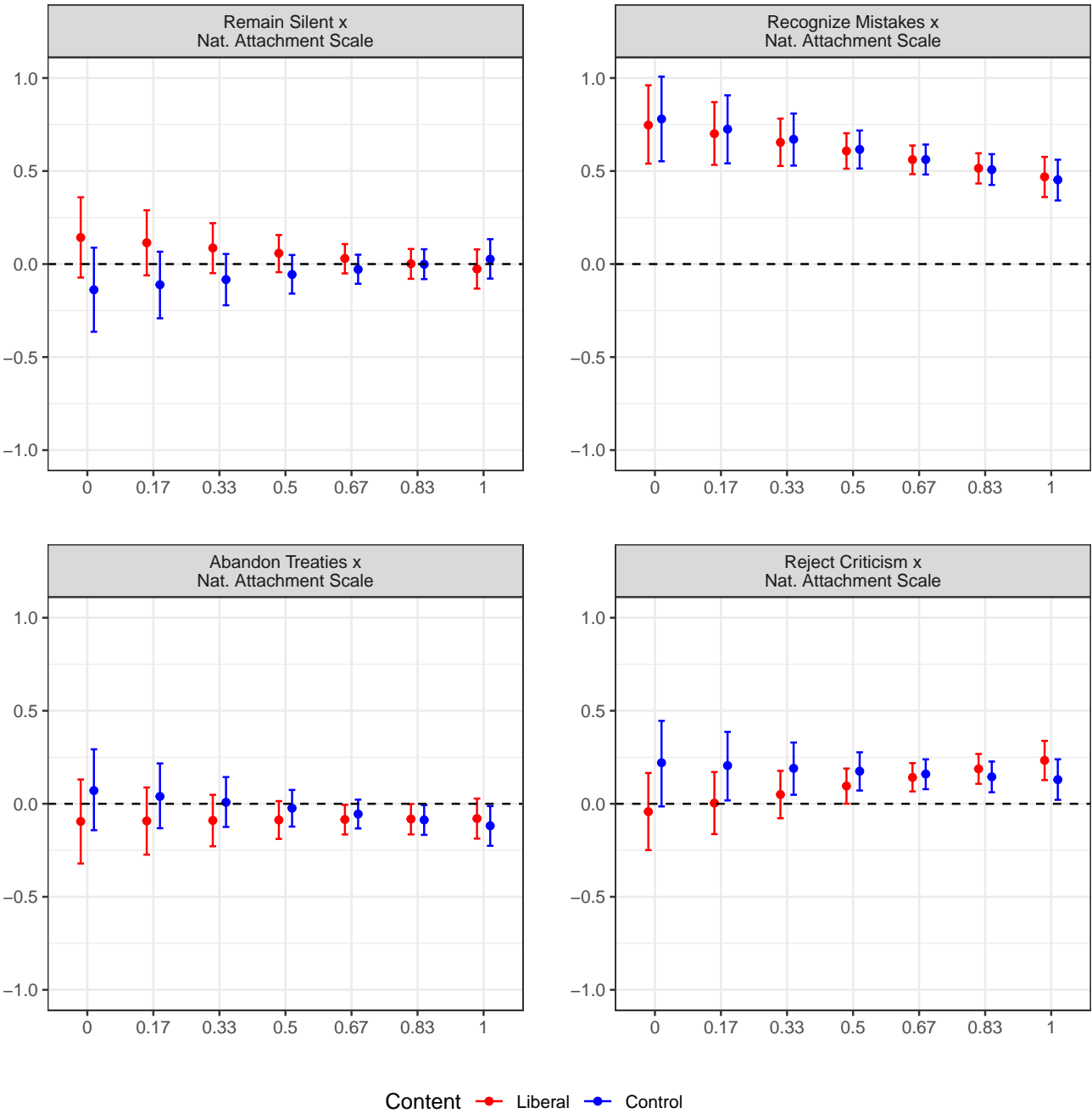

Figure 2: Content versus National Attachment Scale Heterogeneous Effects

C   APSA Experimental Section Report

C.1   Hypothesis

- What are the questions the experiment was designed to address?

  - In these two-wave survey, we studied the XXXX.

- What are the specific hypotheses to be tested?

- We are testing whether respondents in a XXXX.

C.2   Subjects and Context

- Who was eligible to participate in the study?

- The target population is comprised of Brazilian citizens over 18 years of age.

- Who was eligible to participate in the study?

  - Being non-Brazilian or under 18 years of age.

- What would result in the exclusion of a participant?

  - Being a foreigner, or younger than 18 years old.

- Procedures used to recruit and select participants

  - * The survey company sampled municipalities to match the demographic composition laid out by the national census alongside age, income, education, gender, and region. We used the 2018 quota published by the Brazilian Institute of Geography and Statistics (IBGE) as a reference. Moreover, the survey company allocated enumerators in strategic places with a large influx of people. Around 30 percent of responses were double-checked for consistency.

- Recruitment dates defining the periods of recruitment and when the experiments were conducted.

- - * The first and second wave of the experiment occurred between January 13 and January 17, 2020. As this was a face-to-face survey experiment, enumerators recruited respondents at the street level.

- Dates of any repeated

  - Not applicable.

- Settings and locations where the data were collected

  - * Enumerators were distributed in approximately 120 municipalities which were randomly selected by a stratum of the region, nature of the municipality (state capital, other metropolitan or interior regions), federal state, and municipality population size. The DataFolha Institute selected municipalities on the basis of the 2018 Brazilian Demographic Census and the population projections issued that year by the Brazilian Institute of Geography and Statistics (IBGE). Enumerators collected the data face-to-face.

- Where? Field? Lab? Etc.

  - Face-to-face survey.

- Survey: Response rate and how it was calculated

  - The first survey wave had 2001 respondents, and the second wave had a response rate of 2126. The company did not supply data on attrition levels during the survey.

C.3   Allocation Methods

- Details of the procedure used to generate the assignment sequence (randomization procedure)

  - We use cluster random assignment, randomizing the vignette of the experiment within each survey quota.
  - There were 8 treatment arms in the first wave. The answers ranged from 242 to 256 participants in each treatment status. In the second wave, there were 8 treatment arms. The answers ranged from 256 to 270 participants in each treatment status.

- Random assignment

  - Simple random assignment within the region quota.

- Units of randomization

  - The randomization was performed within region quota at the respondent's level.

- Cluster random assignment

  - Region. We use cluster-robust standard error, with Region as the cluster.

- Evidence for random assignment

  - We checked pre-treatment imbalance between control and the treatments in all the following variables: age, gender, education, region, income, and religion.

- Pre-treatment variables

  - We have six pre-treatment variables:

    * Age
    * Gender
    * Education
    * Region
    * Income
    * Religion

- Characteristics of the population

  - The groups of respondents are representative of the entire Brazilian population based on the 2010 national census including age, income, education, gender, and region issued by the Brazilian Institute of Geography and Statistics (IBGE).

- Block randomization

  - We did not use block randomization.

- Blinding: Were participants unaware of the treatment assignment?

  - Yes. The randomization had an equal chance of drawing any of the vignettes for any given respondent. Respondents could not foresee which vignette would be drawn nor could

they see there was more than one vignette for each question. Moreover, the enumerators administering the survey did not inform the experimental nature of the research before the application of the instrument.

- Were those administering the intervention unaware of the random assignment?

  – No. The enumerators were informed about the random nature of the study and trained to read each of the vignette questions that showed up on their tablets without revealing the experimental nature of the research.

- Checked whether blind was successful?

  – Not applicable.

C.4 Treatments

- Descriptions of the intervention:

  – The intervention will consist of XXXX steps.

    * Step 1: Collecting information on the extent to which the respondents agree or disagree with two statements that tap into a national attachment scale (Hermann 2017).
    * Step 2: Applying the survey experiment.
    * Step 3: Collecting standard demographic characteristics.

- Describe the treatment and control groups

  – In the first wave of the survey experiment we assigned each respondent to one of the eight treatments. All respondents heard a hypothetical situation in which Brazil suffered shaming accusations by a foreign actor for poorly managing fires and deforestation in the Amazon forest. We then randomized the source of criticism – ally and friend and adversary. Finally, we randomized all four possible reactions to shaming: silence, regret, rejection, and defiance. All the treatment conditions are outlined below.

    * Treatment 1: Ally shaming, Remain silent.
    * Treatment 2: Ally shaming, Express regret.
    * Treatment 3: Ally shaming, Reject shaming.

* Treatment 4: Ally shaming, Defy shaming.

* Treatment 5: Adversary shaming, Remain silent

* Treatment 6: Adversary shaming, Express regret.

* Treatment 7: Adversary shaming, Reject shaming.

* Treatment 8: Adversary shaming, Defy shaming.

- In the second wave of the experiment we assigned each respondent to either the control condition or one of the treatment conditions. All respondents continued to hear about a hypothetical situation in which Brazil suffered shaming accusations by a foreign actor for poorly managing fires and deforestation in the Amazon forest. While we mentioned that shaming came from a foreign country, we did not specify whether it is an ally or an adversary. However, we varied whether criticism was couched in *liberal internationalist* language or no information about the nature of criticism was provided. The range of possible responses to shaming continued to vary in terms of silence, regret, rejection, and defiance.

  * Treatment 1: Foreign country shaming, Remain silent.

  * Treatment 2: : Foreign country shaming, Express regret.

  * Treatment 3: Foreign country shaming, Reject shaming.

  * Treatment 4: Foreign country shaming, Defy shaming.

  * Treatment 5: Foreign country shaming, Liberal internationalist language, Remain silent.

  * Treatment 6: Foreign country shaming, Liberal internationalist language, Express regret.

  * Treatment 7: Foreign country shaming, Liberal internationalist language, Reject shaming.

  * Treatment 8: Foreign country shaming, Liberal internationalist language, Defy shaming.

• Experimental instructions

  - To introduce the experimental question, the enumerator reads the following instructions: "*Everyone talks about wildfires and deforestation in the Amazon forest. We will read some imaginary scenarios and ask what you think of each*". Then the enumerator asks the

27

questions.

- How and when manipulations were administered

  -    * The manipulation will be applied after the measurement of step one (see above), but before the measurement of the demographic variables.

- Method of delivery

  - The delivery was made by the enumerator reading the randomly-selected experimental vignette to the respondent.

- Software used to administer the treatment

  - DataFolha Institute uses the SurveyToGo software on their tablets. Respondents also read cards with the description of the control or one of the treatment conditions.

C.5 Results

C.5.1 Outcome measures and covariates

- Outcome measures

  - The outcome measured in both waves is the level of support for different responses to foreign shaming.

- Covariates

  - We use the variables age, income, education, gender, religion, race, and religion as **pre-treatment covariates**.

- Survey Questionnaires

  - First Wave: Original Brazilian Portuguese version and English translation.
  - Second Wave: Original Brazilian Portuguese version and English translation.

- Which outcomes and subgroup analysis were specified prior to the experiment?

  - In the paper, we use a **national attachment scale** to measure heterogeneous effects at the individual level. Items are drawn from previous work on national attachment (Herrmann, 2017; Powers et al., 2019; Bayram, 2017). In particular, we test how individuals scoring

differently in national attachment on a values scale interact with our treatment conditions. The national attachment scale consists of a combination of the following two questions.

* *"When someone says something bad about Brazil, you feel it is as if they say something bad about you."*

* *"Brazil should stand for national honor, even if it compromises its image in the world."*

* The response options for each item are "agree totally," "agree partially," "neither agree or disagree," "disagree partially," and "disagree totally."

- Exploratory analysis? What find?

  - No exploratory analysis has been run.

C.5.2   CONSORT

1. Number of subjects initially accessed for eligibility:

- We fielded a sample of 2001 and 2126 respondents in survey experiment 1 and survey experiment 2, respectively.

2. Exclusions prior to random assignment

- There were no exclusions.

3. Subjects initially assigned to each experimental group

- In the first wave:

  - Treatment 1 (Ally shaming, Remain silent): 249 respondents.
  - Treatment 2 (Ally shaming, Express regret): 251 respondents.
  - Treatment 3 (Ally shaming, Reject shaming): 248 respondents.
  - Treatment 4 (Ally shaming, Defy shaming): 256 respondents.
  - Treatment 5 (Adversary shaming, Remain silent): 253 respondents.
  - Treatment 6 (Adversary shaming, Express regret): 255 respondents.
  - Treatment 7 (Adversary shaming, Reject shaming): 242 respondents.
  - Treatment 8 (Adversary shaming, Defy shaming): 247 respondents.

- In the second wave:

- Treatment 1 (Foreign country shaming, Remain silent): 263 respondents.

- Treatment 2 (Foreign country shaming, Express regret): 270 respondents.

- Treatment 3 (Foreign country shaming, Reject shaming): 265 respondents.

- Treatment 4 (Foreign country shaming, Defy shaming): 268 respondents.

- Treatment 5 (Foreign country shaming, Liberal internationalist language, Remain silent): 269 respondents.

- Treatment 6 (Foreign country shaming, Liberal internationalist language, Express regret): 256 respondents.

- Treatment 7 (Foreign country shaming, Liberal internationalist language, Reject shaming): 265 respondents.

- Treatment 8 (Foreign country shaming, Liberal internationalist language, Defy shaming): 270 respondents.

4. Proportion received x not received intervention:

- In the first wave:

  - Treatment 1 (Ally shaming, Remain silent): 12.44 percent.

  - Treatment 2 (Ally shaming, Express regret): 12.54 percent.

  - Treatment 3 (Ally shaming, Reject shaming): 12.39 percent.

  - Treatment 4 (Ally shaming, Defy shaming): 12.79 percent.

  - Treatment 5 (Adversary shaming, Remain silent): 12.64 percent.

  - Treatment 6 (Adversary shaming, Express regret): 12.74 percent.

  - Treatment 7 (Adversary shaming, Reject shaming): 12.09 percent.

  - Treatment 8 (Adversary shaming, Defy shaming): 12.34 percent.

- In the second wave:

  - Treatment 1 (Foreign country shaming, Remain silent): 12.37 percent.

  - Treatment 2 (Foreign country shaming, Express regret): 12.7 percent.

  - Treatment 3 (Foreign country shaming, Reject shaming): 12.46 percent.

  - Treatment 4 (Foreign country shaming, Defy shaming): 12.61 percent.

  - Treatment 5 (Foreign country shaming, Liberal internationalist language, Remain silent): 12.65 percent.

- Treatment 6 (Foreign country shaming, Liberal internationalist language, Express regret): 12.04 percent.

- Treatment 7 (Foreign country shaming, Liberal internationalist language, Reject shaming): 12.46 percent.

- Treatment 8 (Foreign country shaming, Liberal internationalist language, Defy shaming): 12.7 percent.

5. Why did not receive intervention?

- The study is a case-control study.

6. Number subjects each group dropped experiment

- No respondent was dropped.

7. Number included and any reason for exclusion

- Not applicable.

C.5.3 Statistical analysis

- Describe statistical analysis

  - Linear regression analysis (OLS) with cluster-robust standard errors. We used the function `felm` from the package `lfe` in R. The package provides a straightforward way to estimate cluster-robust standard errors.

- Means and standard deviations

  - For the first wave:

- For the second wave:

- ITT

  - Not apply

- If use block randomization, ITT by block or overall means using IPW

Table 22: Wave 1 – Means and Std. Deviations

trstatus	Mean.Support	SD.Suppor	SE.Support
Ally criticizes, Remain Silent	0.372	0.484	0.031
Ally criticizes, Recognize Mistakes	0.911	0.285	0.018
Ally criticizes, Reject Criticisms	0.577	0.495	0.031
Ally criticizes, Abandon International Treaties	0.301	0.460	0.029
Adversary criticizes, Remain Silent	0.389	0.488	0.031
Adversary criticizes, Recognize Mistakes	0.894	0.309	0.019
Adversary criticizes, Reject Criticisms	0.556	0.498	0.032
Adversary criticizes, Abandon International Treaties	0.267	0.444	0.028

Table 23: Wave 2 – Means and Std. Deviations

trstatus	Mean.Support	SD.Support	SE.Support
Remain Silent	0.383	0.487	0.030
Recognize Mistakes	0.933	0.250	0.015
Reject Criticisms	0.559	0.497	0.031
Abandon International Treaties	0.292	0.455	0.028
Amazon belongs to all humankind, Remain Silent	0.408	0.492	0.030
Amazon belongs to all humankind, Recognize Mistakes	0.921	0.270	0.017
Amazon belongs to all humankind, Reject Criticisms	0.535	0.500	0.031
Amazon belongs to all humankind, Abandon International Treaties	0.318	0.467	0.028

- – Not applicable.

- Standard errors:

  – Cluster-robust standard errors, clustering at the Region level.

- Attrition:

  – Not applicable.

- Analyze pre-treatment variables to check reasons

  – See the pre-treatment balance section.

- Missing data

  – There no missing data in the treatment assignments. Most of the missing is generated by the `Don't know` answer in the primary outcomes. This was a voluntary answer that affected 46 out of 2001 responses in the first wave, and 33 out of 2126 responses in the second wave.

- Frequency and percentage missing by group

- See the descriptive statistics section for each of the waves.

- Method for addressing missing data

  - Not applicable.

- Summary missing data by subgroup

 - For the first wave:

Table 24: Wave 1 – Missing Values

|	Valid	Missing
Ally criticizes, Remain Silent	242	7
Ally criticizes, Recognize Mistakes	247	4
Ally criticizes, Reject Criticisms	239	9
Ally criticizes, Abandon International Treaties	249	7
Adversary criticizes, Remain Silent	247	6
Adversary criticizes, Recognize Mistakes	254	1
Adversary criticizes, Reject Criticisms	234	8
Adversary criticizes, Abandon International Treaties	243	4

- For the second wave:

Table 25: Wave 2 – Missing Values

	Valid	Missing
Remain Silent	261	2
Recognize Mistakes	270	0
Reject Criticisms	261	4
Abandon International Treaties	264	4
Amazon belongs to all humankind, Remain Silent	262	7
Amazon belongs to all humankind, Recognize Mistakes	253	3
Amazon belongs to all humankind, Reject Criticisms	258	7
Amazon belongs to all humankind, Abandon International Treaties	264	6

- Survey experiments:

  - A histogram of the weights for the first wave follows below.

Weights Wave 1
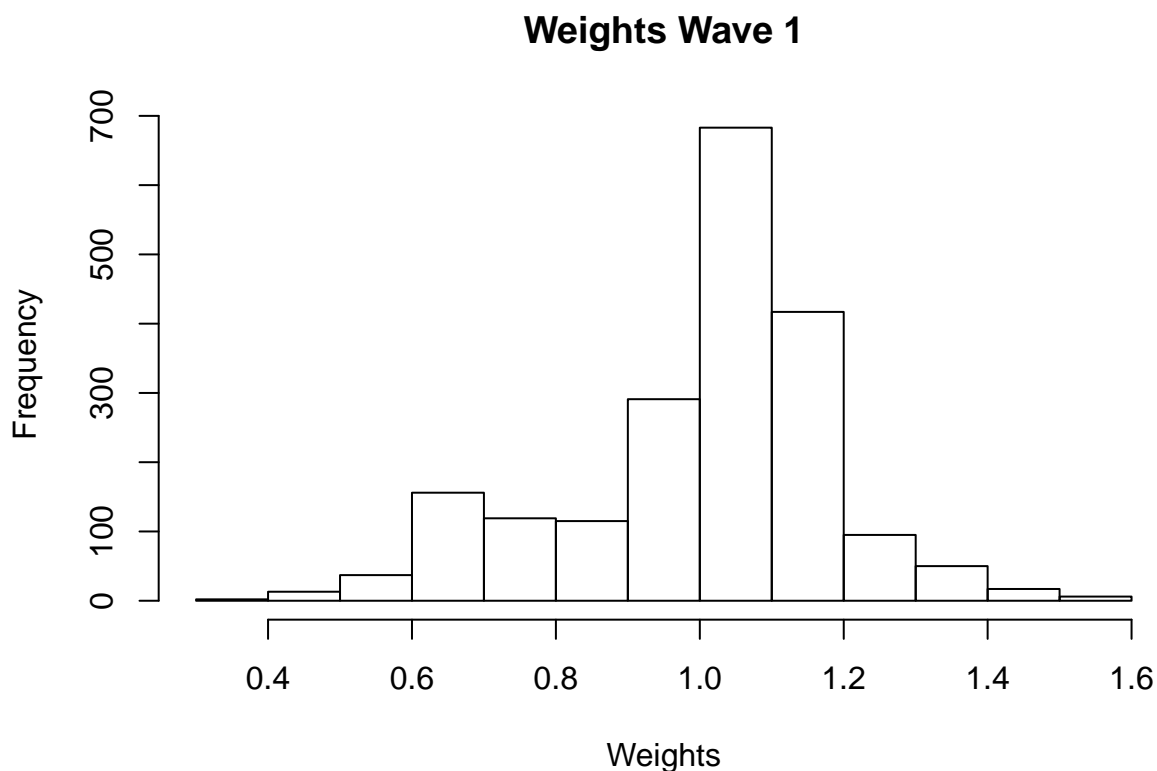
- A histogram of the weights for the second wave follows below.

Weights Wave 2
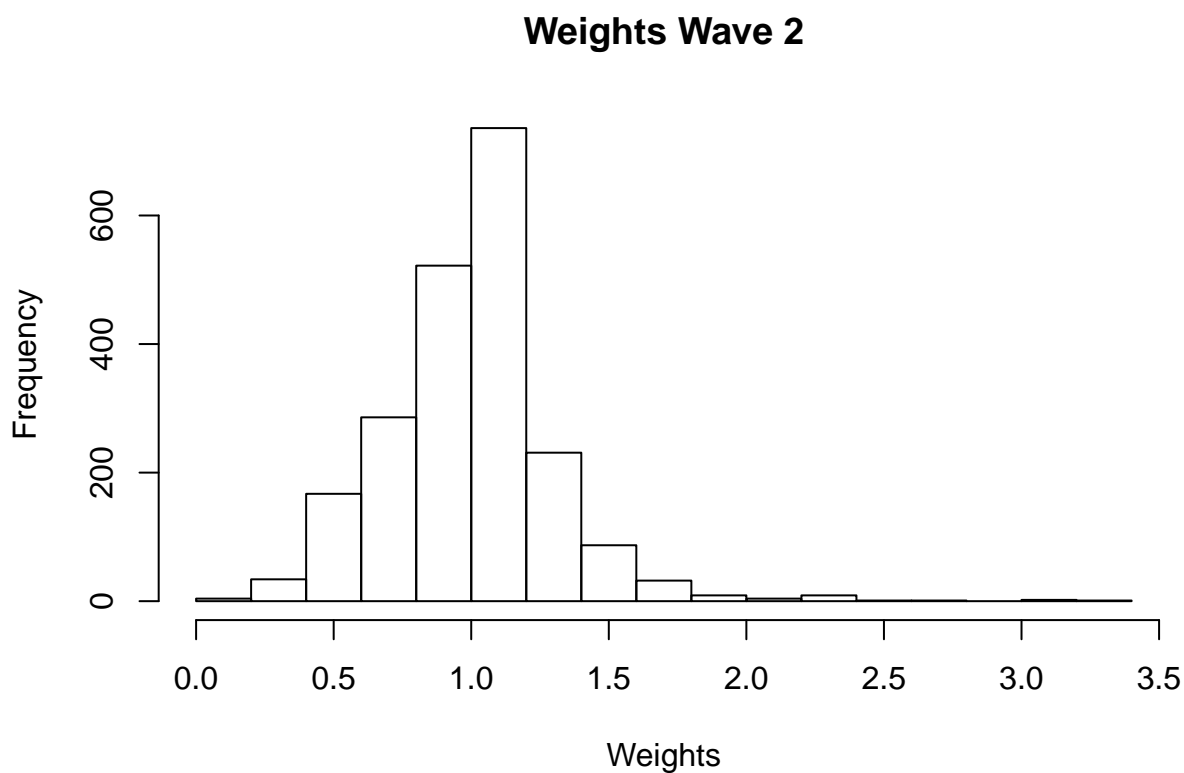
- Reweighing procedures

    - We only use the weights assigned by the DataFolha company. The weights assigned by DataFolha have the purpose of guarantee the representativeness of the Brazilian population. Heloisa Furia supervised the weight computations.

C.6 Other information

- IRB

    - We received IRB from the FGV Human Subjects Research Committee. IRB Number: XXXX/2019.

- Pre-registered? Where?

    - This experiment has not being pre-registered.

- Funding? Role of funders in the experiment?

    - The research has been funded by MacArthur Foundation and by Stanton Foundation. No funder interfered neither in the design nor in the implementation of this experiment.

- Replication dataset? URL?

    - The replication data is in the following GitHub repository: `https://github.com/umbertomig/environmental-politics-survey`.

C.7 Session Information

We use R version 3.6.3 (2020-02-29) to write this appendix. For the regression models estimation, we use the package `lfe`. Everything in this report is fully automated and can be reproduced using R Markdown.

```
## R version 3.6.3 (2020-02-29)
## Platform: x86_64-apple-darwin15.6.0 (64-bit)
## Running under: macOS Catalina 10.15.7
##
## Matrix products: default
## BLAS:   /Library/Frameworks/R.framework/Versions/3.6/Resources/lib/libRblas.0.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/3.6/Resources/lib/libRlapack.dylib
##
## locale:
## [1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8
```

```
## 
## attached base packages:
## [1] parallel  grid      stats     graphics  grDevices utils     datasets
## [8] methods   base
## 
## other attached packages:
##  [1] car_3.0-8          carData_3.0-4    ggpubr_0.3.0
##  [4] miceadds_3.10-28   gridExtra_2.3    interplot_0.2.2
##  [7] arm_1.11-1         lme4_1.1-23      MASS_7.3-51.6
## [10] abind_1.4-5        kableExtra_1.1.0 lfe_2.8-5
## [13] compareGroups_4.4.1 SNPassoc_1.9-2  mvtnorm_1.1-1
## [16] haplo.stats_1.7.9  huxtable_4.7.1   gtools_3.8.2
## [19] broom_0.5.6        knitr_1.28       weights_1.0.1
## [22] mice_3.9.0         gdata_2.18.0     Hmisc_4.4-0
## [25] Formula_1.2-3      lattice_0.20-41  GDAtools_1.5
## [28] survey_4.0         survival_3.1-12  Matrix_1.2-18
## [31] haven_2.3.1        stargazer_5.2.2  sandwich_2.5-1
## [34] lmtest_0.9-37      zoo_1.8-8        readxl_1.3.1
## [37] forcats_0.5.0      stringr_1.4.0    dplyr_0.8.5
## [40] purrr_0.3.4        readr_1.3.1      tidyr_1.1.0
## [43] tibble_3.0.1       ggplot2_3.3.1    tidyverse_1.3.0
## 
## loaded via a namespace (and not attached):
##  [1] uuid_0.1-4         backports_1.1.7  systemfonts_0.2.3
##  [4] splines_3.6.3      TH.data_1.0-10   digest_0.6.25
##  [7] htmltools_0.4.0    fansi_0.4.1      magrittr_1.5
## [10] Rsolnp_1.16        checkmate_2.0.0  interactionTest_1.2
## [13] cluster_2.1.0      openxlsx_4.1.5   modelr_0.1.8
## [16] officer_0.3.11     jpeg_0.1-8.1     colorspace_1.4-1
## [19] blob_1.2.1         rvest_0.3.5      ggrepel_0.8.2
```

```
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##  [25] jsonlite_1.6.1       glue_1.4.1           gtable_0.3.0
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##  [34] rstatix_0.5.0        Rcpp_1.0.4.6         viridisLite_0.3.0
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##  [85] writexl_1.3          codetools_0.2-16     polspline_1.1.19
##  [88] boot_1.3-25          assertthat_0.2.1     chron_2.3-55
##  [91] withr_2.2.0          multcomp_1.4-13      hms_0.5.3
##  [94] rpart_4.1-15         coda_0.19-3          minqa_1.2.4
##  [97] rmarkdown_2.2        scatterplot3d_0.3-41 lubridate_1.7.9
## [100] base64enc_0.1-3      FactoMineR_2.3
```

References

Benjamini, Y. and Hochberg, Y. (1995). Controlling the false discovery rate: a practical and powerful approach to multiple testing. *Journal of the Royal statistical society: series B (Methodological)*, 57(1):289–300. Cited on page 15.