Activist Disconnect:
Social Movements, Public Opinion, and U.S. Military Bases in East Asia

Appendix

May 17, 2019

Contents

1 Interviews

The following interviews (listed chronologically) are cited in the main text:

1. Shin Soo-yun, activist, Seoul, South Korea, June 8, 2016

2. Kim Pan-tei, activist, Gunsan, South Korea, June 15, 2016

3. Bae Jong-jin, former activist, Daegu, South Korea, June 28, 2016

4. Kim Yong-han, former activist, Pyeongtaek, South Korea, July 3, 2016

5. Two anonymous former activists, Dongducheon, South Korea, July 11, 2016

6. Ōkawa Kiyoshi, activist, Iwakuni, Japan, September 30, 2016

7. Nīkura Yasuo, Yokosuka, Japan, October 4, 2016

2 Content Analysis of Anti-Base Rhetoric

To document the types of framing used by anti-base activists in South Korea and Japan, we rely on a separate analysis that codes individual protests at 20 different bases in these countries as employing primarily nationalistic, ideological, or pragmatic appeals, as defined in the main text. Coding was based on activist messages, slogans, speeches, and statements, as reported by either media or activists themselves. Figure 1 shows the proportion of protests at each base employing a given framing strategy. As is clear from the figure, all three strategies are salient features of anti-base activism. While pragmatic framing is the most prevalent, ideological or nationalistic framing dominates at some key bases, such as naval bases in Yokosuka and Chinhae.

Figure 1: Proportion of Protests by Location and Framing

Proportion of Protests by Location and Framing
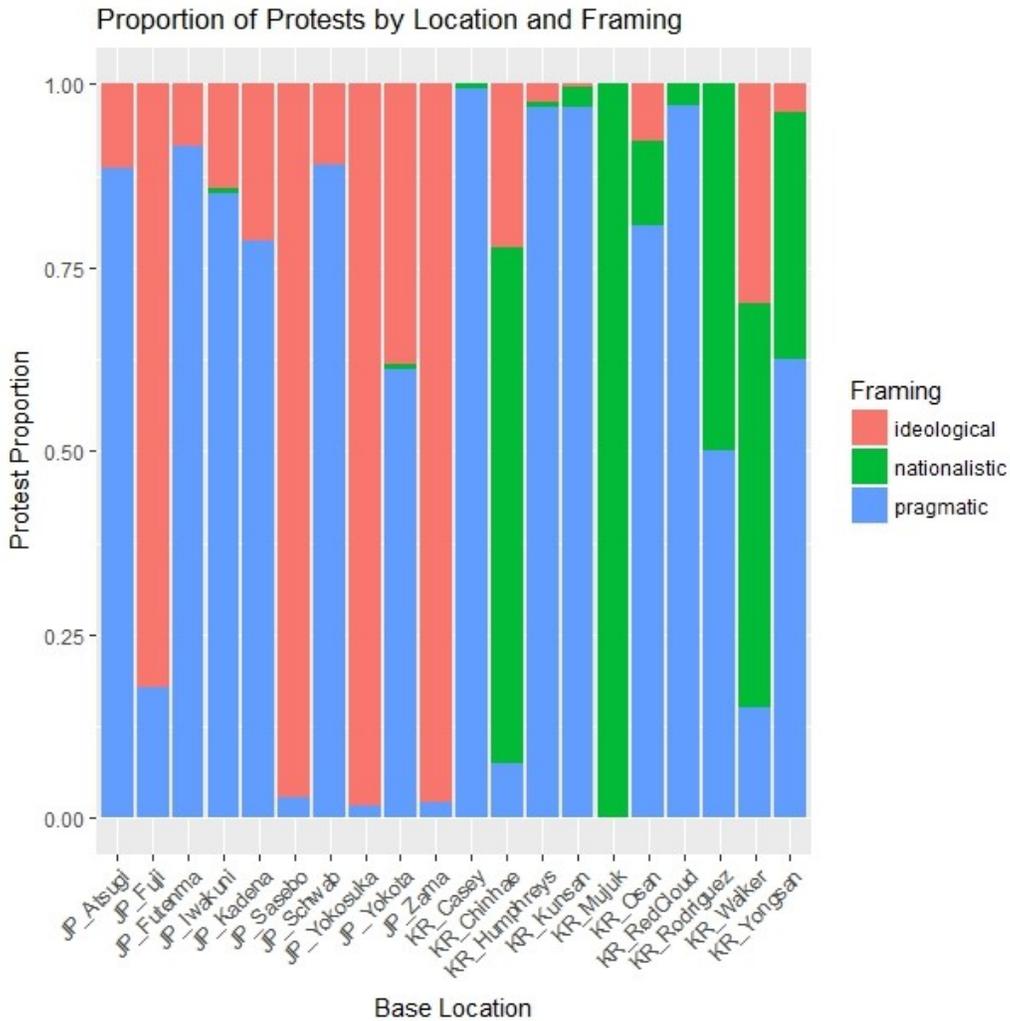
3 Survey Validity

One potential concern with online surveys is that, because one never interacts directly with human respondents, it is possible that some entries correspond to "bots," or computers programmed to respond to online questionnaires, perhaps in an effort to win prizes offered as compensation. However, we consider this an unlikely possibility, for a variety of reasons.

First, a bot programmed to answer randomly would almost always be screened out of our survey. To proceed to the survey, respondents had to answer "yes" to the consent form and questions about South Korean or Japanese residence and nationality, as well as stating an age over 18 and selecting

Daegu or Gyeonggi (out of 17 choices) or Okinawa or Kanagawa (out of 47 choices) as their place of residence. Answering these four questions randomly with equal probability would result in disqualification 99.3% of the time in South Korea and 99.7% of the time in Japan.

Second, the distribution of time spent on the survey (plotted in Figure 2) suggests that human respondents were interacting with it. In testing the survey, we were able to manually run though it in as little as 1 minute 15 seconds by answering without reading the prompts; a computer programmed to randomly choose an answer and press the "next button" could presumably complete it even faster. In contrast, the *minimum* survey duration was 1 minute 50 seconds, the first quartile was 4 minutes 39 seconds, and the median was 6 minutes 4 seconds.

Figure 2: Duration of Online Survey in Minutes
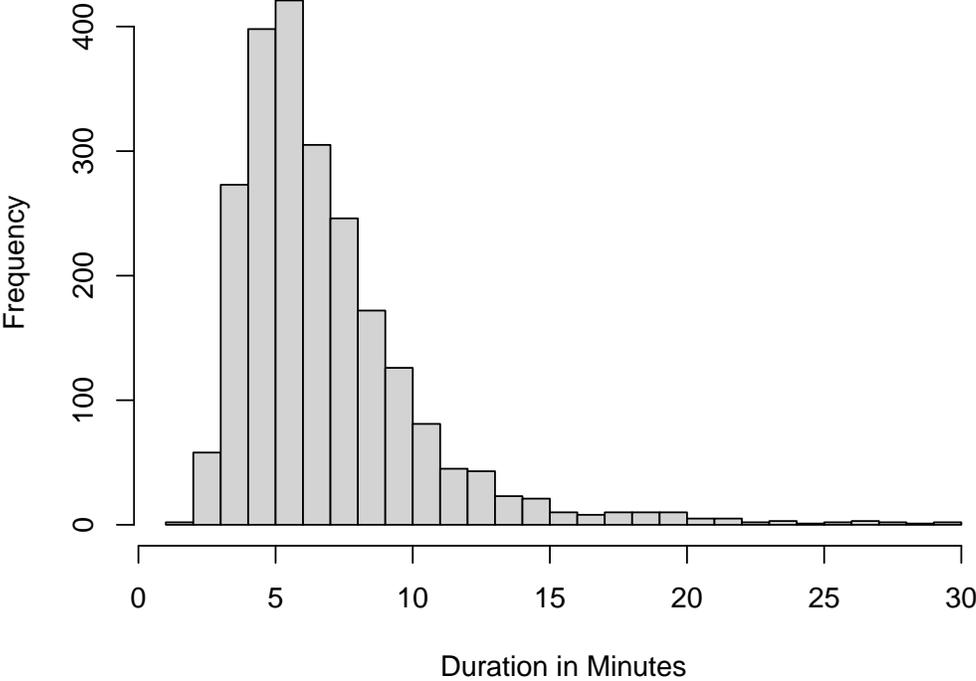
Note: Values greater than 30 minutes (the 97th percentile) removed for readability.

Third, a large number of bots answering randomly would be unlikely to produce a sample that resembles the population on a number of variables. Yet ours does, as discussed in the next section.

Finally, the vast majority of respondents chose to enter the raffle for a cash prize, and they

provided a name and email address in order to do so. Nearly all of these names and emails were unique. Only a small handful in Korea appeared more than once, presumably corresponding to a few respondents who used a separate browser or cleared their cookies in order to enter the raffle a second time. Bots would be very unlikely to generate thousands of unique and seemingly valid names and email addresses.

4   Survey Representativeness

We used Facebook advertisements targeted to strata of age and sex in each region to approximate a stratified sampling procedure. This approach was fairly successful at obtaining a sample that resembles the population on these variables. Table 1 summarizes the percent male and median age in each region in both the adult population and the sample, as well as combined figures that are obtained by weighting each region equally, following our research design. Percent male is nearly identical to that of the population. While our sample is somewhat younger than the adult population of each region, due to difficulty in recruiting the oldest age groups through Facebook advertisements, it does not deviate drastically in terms of age.

Table 1: Online Sample versus Census

	South Korea		Japan		
	Daegu	Gyeonggi	Kanagawa	Okinawa	Combined
N					
Population	2,073,090	10,409,399	7,652,110	1,119,548	21,254,147
Sample	576	582	600	598	2,356
Percent Male					
Population	49	50	50	49	49
Sample	49	50	50	47	49
Median Age					
Population	47	45	49	49	47
Sample	39	42	48	42	42

Census figures are based on the 18-and-older population in each country's 2015 Census. Combined statistics weight each region equally.

We can also examine the representativeness of our sample on political variables. While we inquired about vote in the last election, this variable is potentially subject to severe social desirability bias in South Korea, given the scandal and impeachment of President Park Geun-hye just prior to our survey. Hence, we opt to examine ideological self-placement instead, which, while not immune to such biases, should be less affected. We compare the distribution of ideological self-placement in each region between our survey and the 2010 World Values Survey (WVS), which used the same question wording. For the South Korean WVS, we are able to subset on respondents from Daegu and Gyeonggi. In the Japanese data file, only region is identified, not prefecture. Hence, we compare our Okinawa and Kanagawa respondents to WVS respondents from the encompassing regions, Kyushu and Minami Kanto, respectively.

The distribution of ideology in each region is summarized in Figure 3. For Japan, the distributions from our sample and the WVS are quite similar. For South Korea, our online sample leans to the left. We suspect that at least some of this deviation is attributable to a shift in the distribution of ideology in South Korea between 2010 and 2017, likely influenced by the impeachment of President Park Geun-hye and loss of support for her conservative party.

We also examined the representativeness of our sample with respect to civic activism. As shown in Figures 4, 5, and 6 respondents from each region are more inclined toward activism than those from the 2010 WVS. The difference is somewhat more marked with respect to South Korea. We suspect that at least part of the disparity is attributable to the mass protests against President Park, which mobilized millions of people in 2016–17.

5   Valid N by Treatment Condition and Region

Table 2 summarizes the number of respondents assigned to each treatment condition by region as well as the overall total. We obtained roughly similar numbers per cell, albeit with some variation due to random assignment.

Figure 3: Ideology: Online Sample versus 2010 World Values Survey
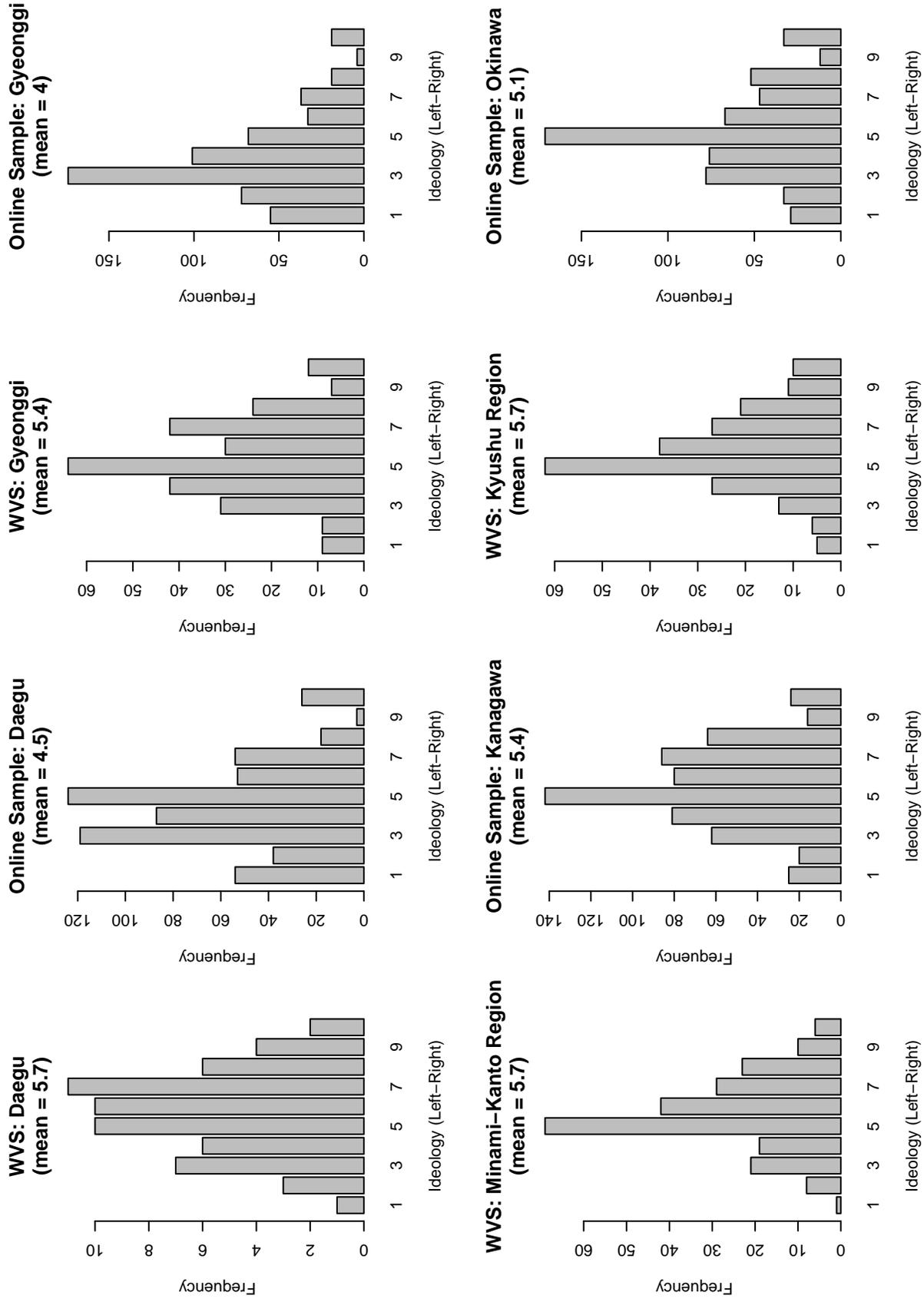
Figure 4: Signing a Petition: Online Sample versus 2010 World Values Survey
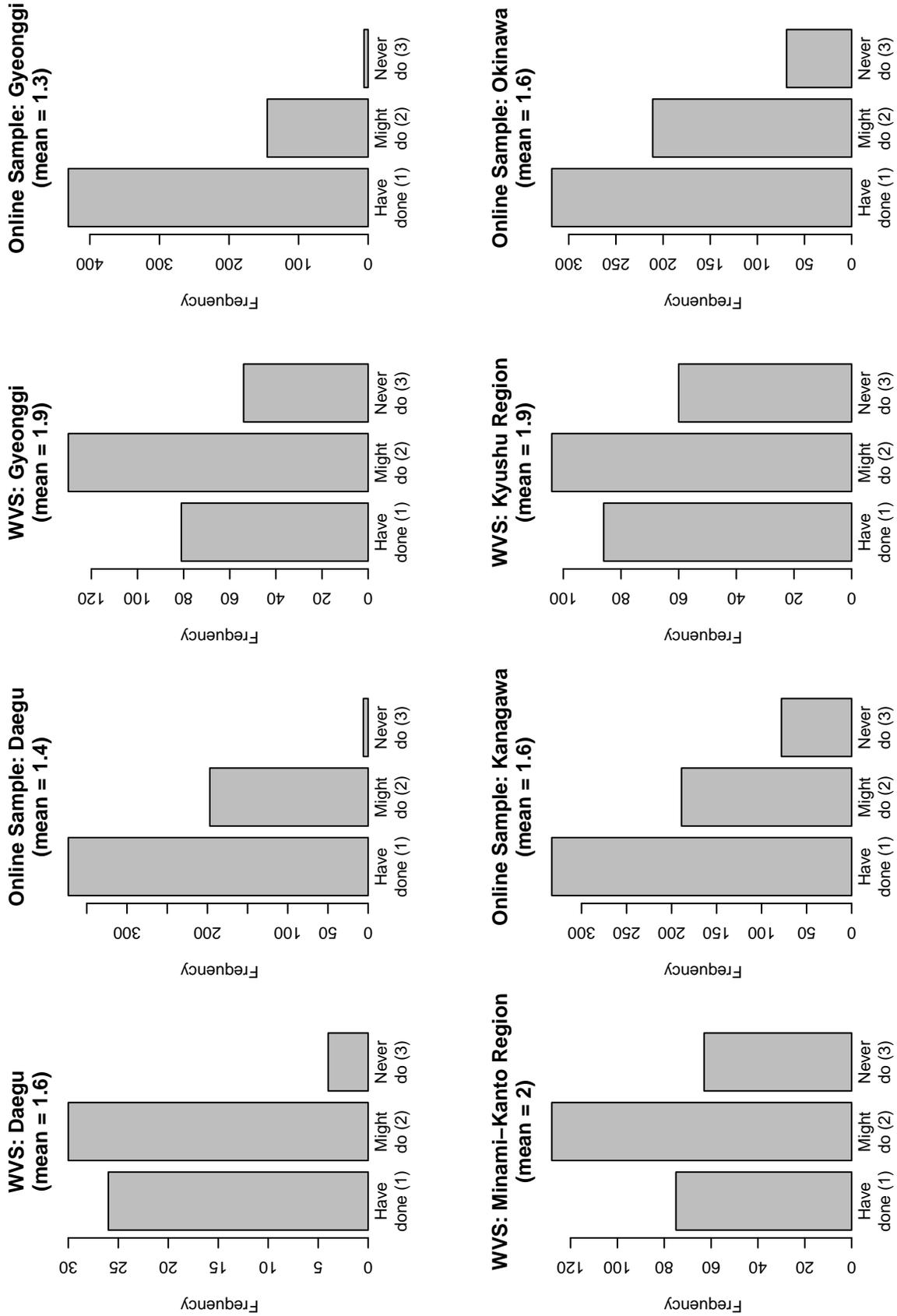
Figure 5: Joining a Boycott: Online Sample versus 2010 World Values Survey
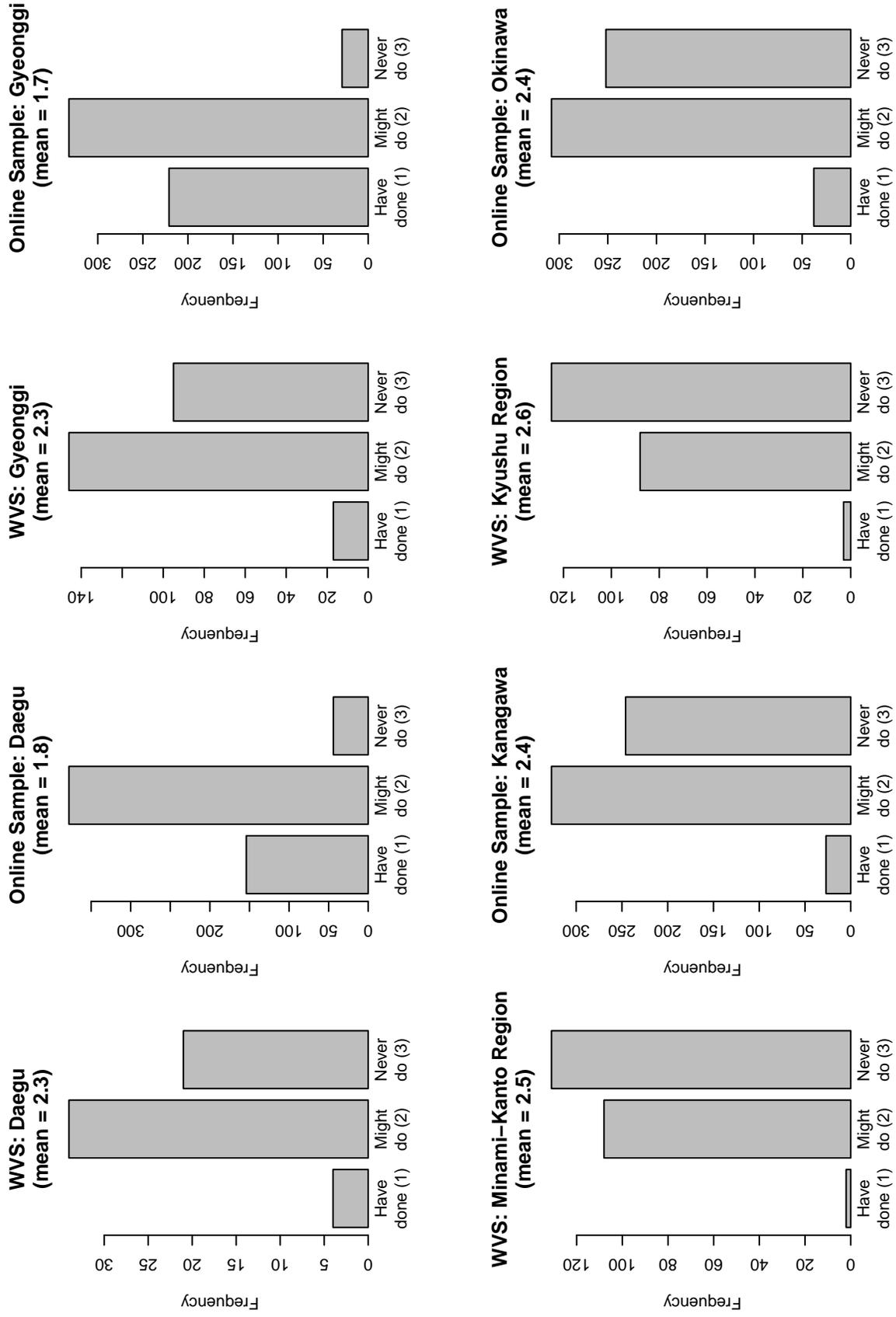
Figure 6: Attending a Demonstration: Online Sample versus 2010 World Values Survey
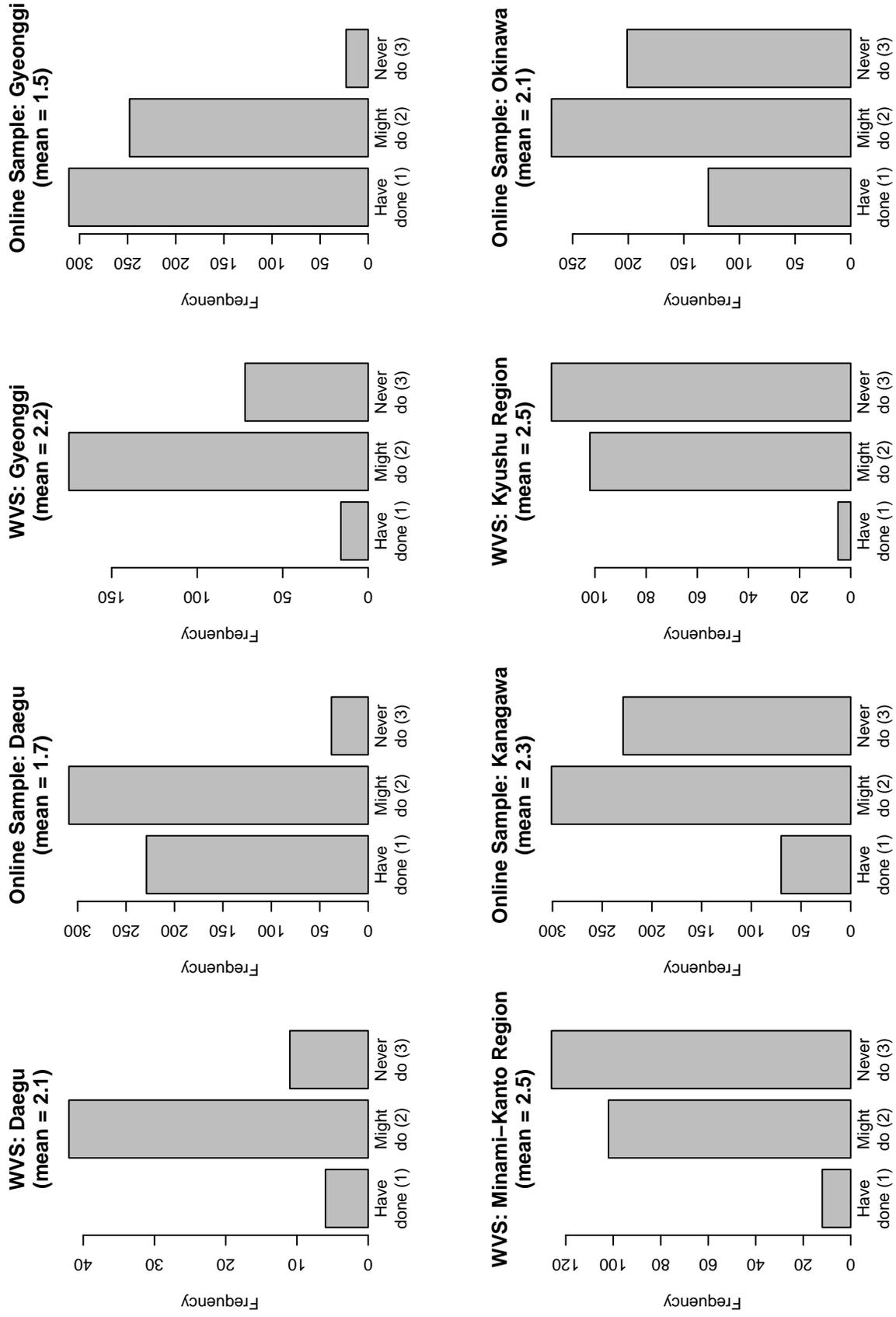
Table 2: Valid N by Treatment Condition and Region

Condition	Daegu	Gyeonggi	Kanagawa	Okinawa	Total
Pure Control	74	68	58	70	270
Regular Control	57	75	85	74	291
Trigger Events	65	76	57	101	299
Status Quo Disruption	86	79	75	55	295
Pragmatic Framing	65	80	80	70	295
Ideological Framing	75	69	87	83	314
Nationalistic Framing	76	74	72	68	290
Local Defiance	78	61	86	77	302
Total	576	582	600	598	2356

6 Regression Specification

Our analysis uses the following pre-registered specification:

$$Y_{ir} = \beta_0 + \beta_1 T_{ir} + \sum_{j=1}^{k} (\mu_j X_{ir}^j + \gamma_j X_{ir}^j \cdot T_{ir}) + \epsilon_{ir} \tag{1}$$

Y_{ir} is the outcome variable for individual i in region r, T_{ir} is the treatment indicator, X_{ir}^j is the jth pre-treatment covariate, and ϵ_{ir} is the disturbance term. X_{ir}^j are demeaned using the sample average and always include regional dummies. Because we demean the covariates and include their interaction with treatment, β_1 is a consistent estimator for the average treatment effect (Lin, 2013).

7 Behavioral Outcome

In addition to the attitudinal outcome—self-reported support or opposition to U.S. military bases—our survey and pre-analysis plan included a behavioral outcome. All respondents had the option of entering a raffle for a 1-in-80 chance of winning a cash prize of 50,000 KRW or 5,000 JPY (each about \$45); 94% did so in South Korea, and 82% did so in Japan. Those who chose to enter the raffle were asked what portion of their prize (in the event of winning) they wished to donate to a South Korean or Japanese organization opposing U.S. military bases in their country: the

National Campaign for Eradication of Crimes by U.S. Troops in Korea, and the Peace Forum in Japan. We provided a brief description of each organization's mission, using language drawn from its website. When asked, pre-treatment, to place each organization on a 1–10 left–right ideological scale, respondents gave similar answers in each country, averaging 3.88 in Korea and 3.75 in Japan ($p = 0.17$ for a two-tailed difference in means t-test). Hence, it appears that respondents perceived each organization similarly, and accurately, in ideological terms.

The proportion of the prize donated to the organization is used as a behavioral measure of opposition to U.S. military bases. The distribution of this variable is summarized in Figure 7. Respondents who chose not to enter the raffle (a decision made prior to any mention of the opportunity to donate) are dropped from analyses using this outcome measure. In the end, our raffle winners donated a total of 385,000 KRW (340 USD) and 5,500 JPY (49 USD) to the anti-base organization in each country. We anonymously transferred this sum, plus any unclaimed individual prize money, to the bank accounts of each group.

On the whole, Japanese respondents were much less willing to donate to the anti-base organization. In each country, the modal proportion donated was zero, but this option was much more commonly chosen in Japan (72% of respondents) than in Korea (40%). There are two potential explanations for these cross-national differences in willingness to donate to the anti-base organization. First, charitable giving is less common overall in Japan. In 2014, total individual donations to charity were 0.2% of GDP;[1] in Korea in 2013, the figure was 0.87%.[2] When asked in our survey about "donating money to a civic group that shares causes I support" (towards the beginning of the survey and prior to any mention of U.S. military bases), 33% of Japanese respondents said that they would never do so, versus 8% of Koreans. Second, as noted above, our Korean sample leaned further to the left than our Japanese sample. Thus, while respondents in both countries were similar in terms of their ideological placement of the anti-base organization, they placed themselves

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[1]http://www.jnpoc.ne.jp/en/reports/selected-translation-of-giving-japan-2015-3/

[2]http://www.yonhapnews.co.kr/bulletin/2016/02/12/0200000000AKR20160212161600002.HTML

Figure 7: Proportion of Raffle Prize Donated to an Anti-Base Organization
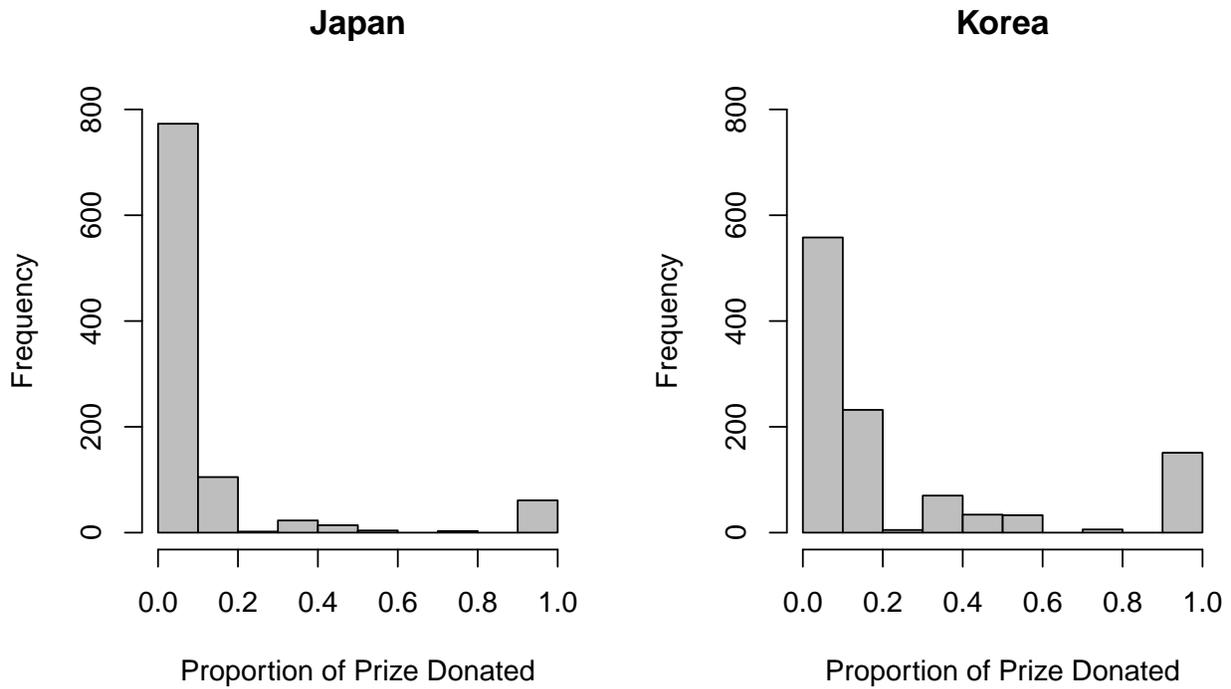
much further from this organization in Japan than in Korea (2.5 versus 1.9 points on the 1–10 scale; $p < 0.001$ for a two-tailed difference in means t-test).

Treatment effects on money donated to the anti-base organization are summarized in Figure 8. In what may come as a shock to the many such organizations that rely on donations, none of our hypotheses is sustained; there is no evidence that any of the tactics commonly employed by the anti-base movement increases material support for the organizations themselves. As with our attitudinal measure, we find some suggestive evidence of a backlash effect for ideological framing; exposure to language about U.S. hegemony, militarism, and imperialism seems to prompt respondents to donate less money to organizations opposing U.S. military bases. The negative average treatment effect is statistically significant at the 0.9 level for a two-sided test in two out of four specifications, though our pre-registered hypothesis was for a one-sided test in the opposite direction.

Figure 8: Treatment Effects on Money Donated to an Anti-Base Organization
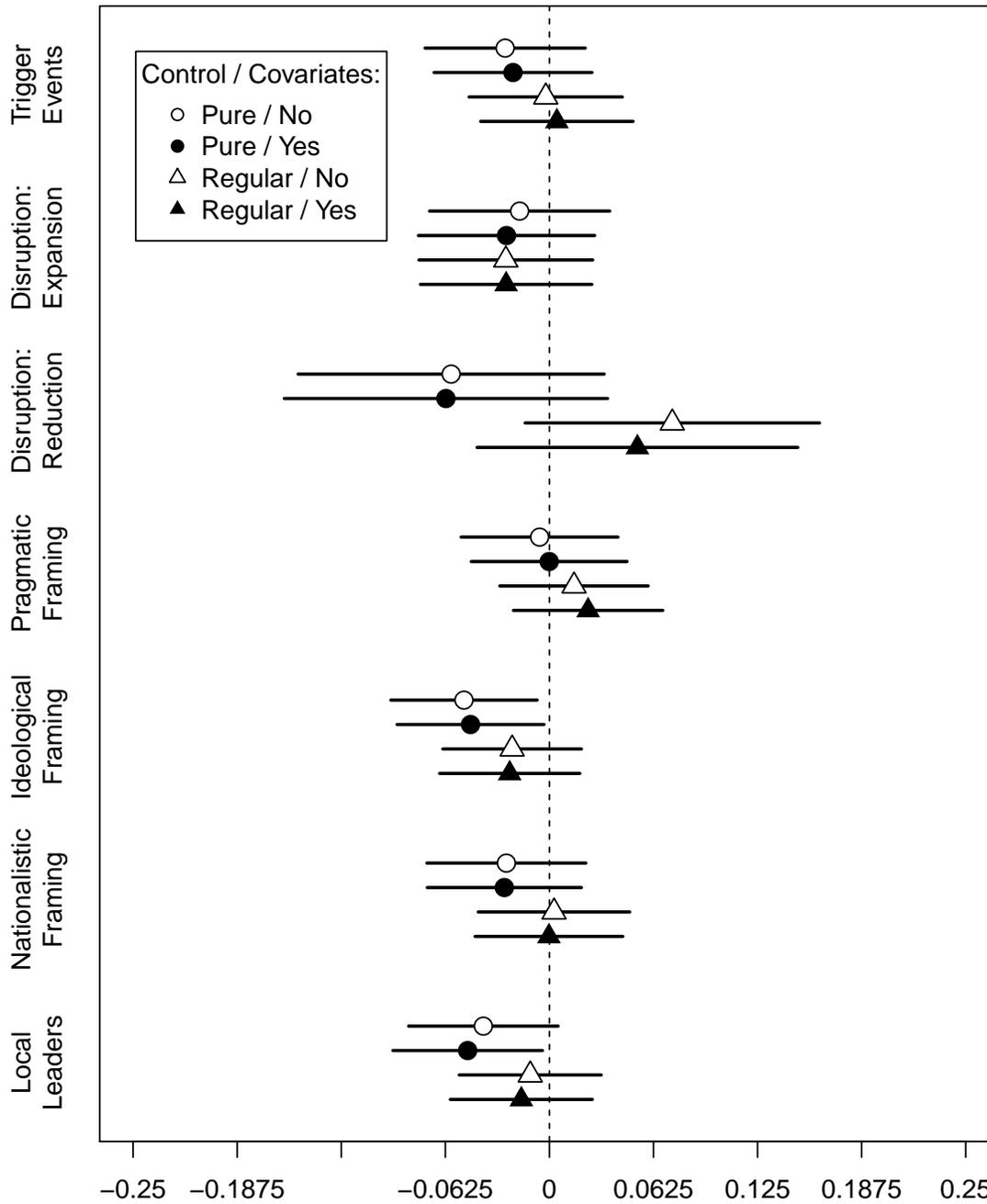
Note: Dependent variable is the proportion of prize money that the respondent agreed to donate to a Korean or Japanese anti-base organization in the event of winning the raffle. Icons give point estimates and lines give two-sided 90 percent confidence intervals.

8 Results in Tabular Form

In the main text we present results in graphical form. Results in tabular form, with coefficients, standard errors, and valid N's for each regression, can be found in Tables 3, 4, 5, and 6.

Table 3: Average Treatment Effects on Attitudinal Outcome Versus Pure Control

	Treatment							Differences	
	Trigger Events	Disruption: Expansion	Disruption: Reduction	Pragmatic Framing	Ideological Framing	Nationalistic Framing	Local Leaders	Pragmatic–Ideological	Pragmatic–Nationalistic
Covariates: No									
Intercept	2.86	2.83	2.81	2.83	2.82	2.83	2.82	2.66	2.85
	(0.08)	(0.09)	(0.16)	(0.07)	(0.07)	(0.08)	(0.08)	(0.07)	(0.07)
Treatment	0.16	0.24	0.08	0.21	-0.16	0.03	0.13	0.37	0.18
	(0.11)	(0.12)	(0.21)	(0.1)	(0.1)	(0.11)	(0.11)	(0.09)	(0.1)
Covariates: Yes									
Intercept	2.9	2.87	2.97	2.88	2.82	2.88	2.88	2.7	2.85
	(0.06)	(0.07)	(0.13)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Treatment	0.1	0.21	-0.21	0.14	-0.13	-0.07	0.03	0.29	0.2
	(0.09)	(0.1)	(0.18)	(0.09)	(0.08)	(0.09)	(0.09)	(0.08)	(0.08)
N	569	405	160	565	584	560	572	609	585

NOTE: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Estimated standard errors in parentheses. Regional fixed effects not shown.

Table 4: Average Treatment Effects on Attitudinal Outcome Versus Regular Control

	Treatment							Differences	
	Trigger Events	Disruption: Expansion	Disruption: Reduction	Pragmatic Framing	Ideological Framing	Nationalistic Framing	Local Leaders	Pragmatic–Ideological	Pragmatic–Nationalistic
Covariates: No									
Intercept	2.9	2.89	2.79	2.87	2.87	2.87	2.86	2.66	2.85
	(0.07)	(0.08)	(0.16)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Treatment	0.1	0.16	0.11	0.16	-0.21	-0.02	0.08	0.37	0.18
	(0.1)	(0.12)	(0.21)	(0.1)	(0.1)	(0.1)	(0.1)	(0.09)	(0.1)
Covariates: Yes									
Intercept	2.88	2.89	2.87	2.87	2.82	2.87	2.86	2.7	2.85
	(0.06)	(0.06)	(0.16)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Treatment	0.14	0.19	-0.07	0.19	-0.12	-0.02	0.1	0.29	0.2
	(0.08)	(0.09)	(0.2)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
N	590	443	143	586	605	581	593	609	585

NOTE: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Estimated standard errors in parentheses. Regional fixed effects not shown.

Table 5: Average Treatment Effects on Behavioral Outcome Versus Pure Control

	Treatment							Differences	
	Trigger Events	Disruption: Expansion	Disruption: Reduction	Pragmatic Framing	Ideological Framing	Nationalistic Framing	Local Leaders	Pragmatic–Ideological	Pragmatic–Nationalistic
Covariates: No									
Intercept	0.21	0.19	0.28	0.21	0.21	0.21	0.21	0.15	0.18
	(0.02)	(0.02)	(0.04)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Treatment	-0.03	-0.02	-0.06	-0.01	-0.05	-0.03	-0.04	0.04	0.02
	(0.03)	(0.03)	(0.06)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)
Covariates: Yes									
Intercept	0.21	0.19	0.26	0.21	0.2	0.21	0.22	0.15	0.18
	(0.02)	(0.02)	(0.04)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Treatment	-0.02	-0.03	-0.06	0	-0.05	-0.03	-0.05	0.05	0.03
	(0.03)	(0.03)	(0.06)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)
N	503	353	154	493	518	491	509	531	504

NOTE: Dependent variable is the proportion of prize money that the respondent agreed to donate to a Korean or Japanese anti-base organization in the event of winning the raffle. Estimated standard errors in parentheses. Regional fixed effects not shown.

Table 6: Average Treatment Effects on Behavioral Outcome Versus Regular Control

	Treatment							Differences	
	Trigger Events	Disruption: Expansion	Disruption: Reduction	Pragmatic Framing	Ideological Framing	Nationalistic Framing	Local Leaders	Pragmatic–Ideological	Pragmatic–Nationalistic
Covariates: No									
Intercept	0.18	0.19	0.15	0.18	0.17	0.18	0.17	0.15	0.18
	(0.02)	(0.02)	(0.04)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Treatment	0	-0.03	0.07	0.01	-0.02	0	-0.01	0.04	0.02
	(0.03)	(0.03)	(0.05)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)
Covariates: Yes									
Intercept	0.18	0.19	0.15	0.18	0.18	0.18	0.18	0.15	0.18
	(0.02)	(0.02)	(0.05)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Treatment	0	-0.03	0.05	0.02	-0.02	0	-0.02	0.05	0.03
	(0.03)	(0.03)	(0.06)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)
N	516	386	134	506	531	504	522	531	504

NOTE: Dependent variable is the proportion of prize money that the respondent agreed to donate to a Korean or Japanese anti-base organization in the event of winning the raffle. Estimated standard errors in parentheses. Regional fixed effects not shown.

9   Results Conditional on Screener Passage

We implemented a screener question to identify respondents who were paying particularly close attention to the survey. Our question asked respondents to choose (from a drop-down menu) the most serious problem facing the country. Buried in the instructions was a sentence telling them to ignore the question and select a blank answer choice at the bottom of the list, which respondents would be unlikely to choose if they were answering randomly or naively. In Japan, 46% of respondents answered this question correctly; in Korea, 22% did so. While these numbers may seem low, they are in line with other countries where this screener—a relatively hard one—has been employed. Boas, Christenson and Glick (2018) obtained passage rates of 40% and 25% when this same screener was tested on Qualtrics Internet panels in the United States and India, respectively. The screener is best thought of as identifying those respondents who are paying particularly close attention to the survey, rather than those who are completely ignoring instructions.

Results for the subset of respondents who passed the screener are summarized in Figures 9 and 10 (due to small sample size, the Base Reduction treatment effect could not be estimated when controlling for covariates). As expected, point estimates are somewhat larger for respondents who are paying very close attention to the survey, though the reduced statistical power means that many of these estimates are insignificant. Overall, the pattern of results is similar to what we obtain for the full sample, so restricting the analysis to respondents who passed the screener would not change our conclusions.

Figure 9: Treatment Effects on Opposition to U.S. Bases (Respondents who Passed Screener)
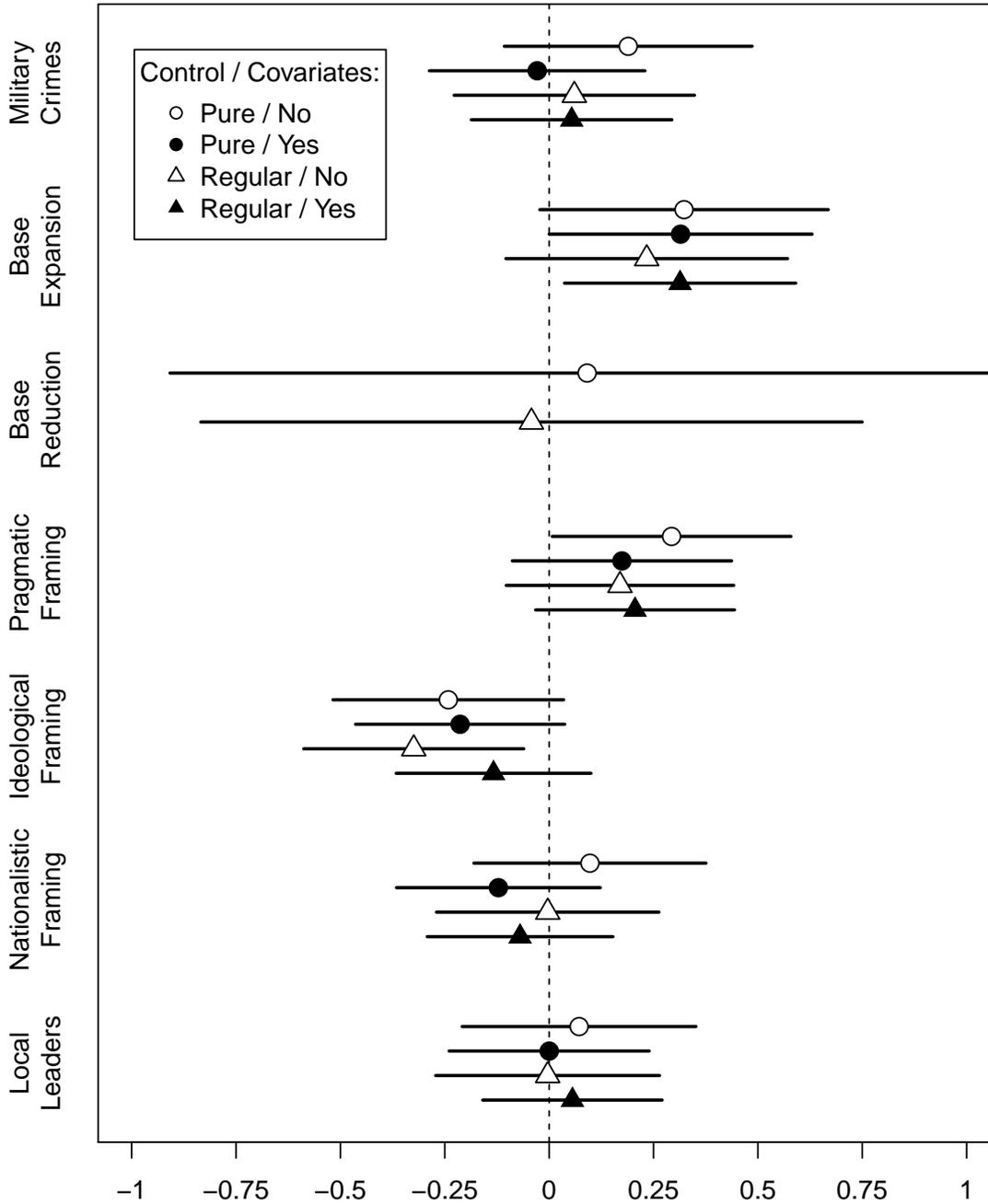
Note: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Icons give point estimates and lines give two-sided 90 percent confidence intervals.

Figure 10: Treatment Effects on Money Donated to an Anti-Base Organization (Respondents who Passed Screener)
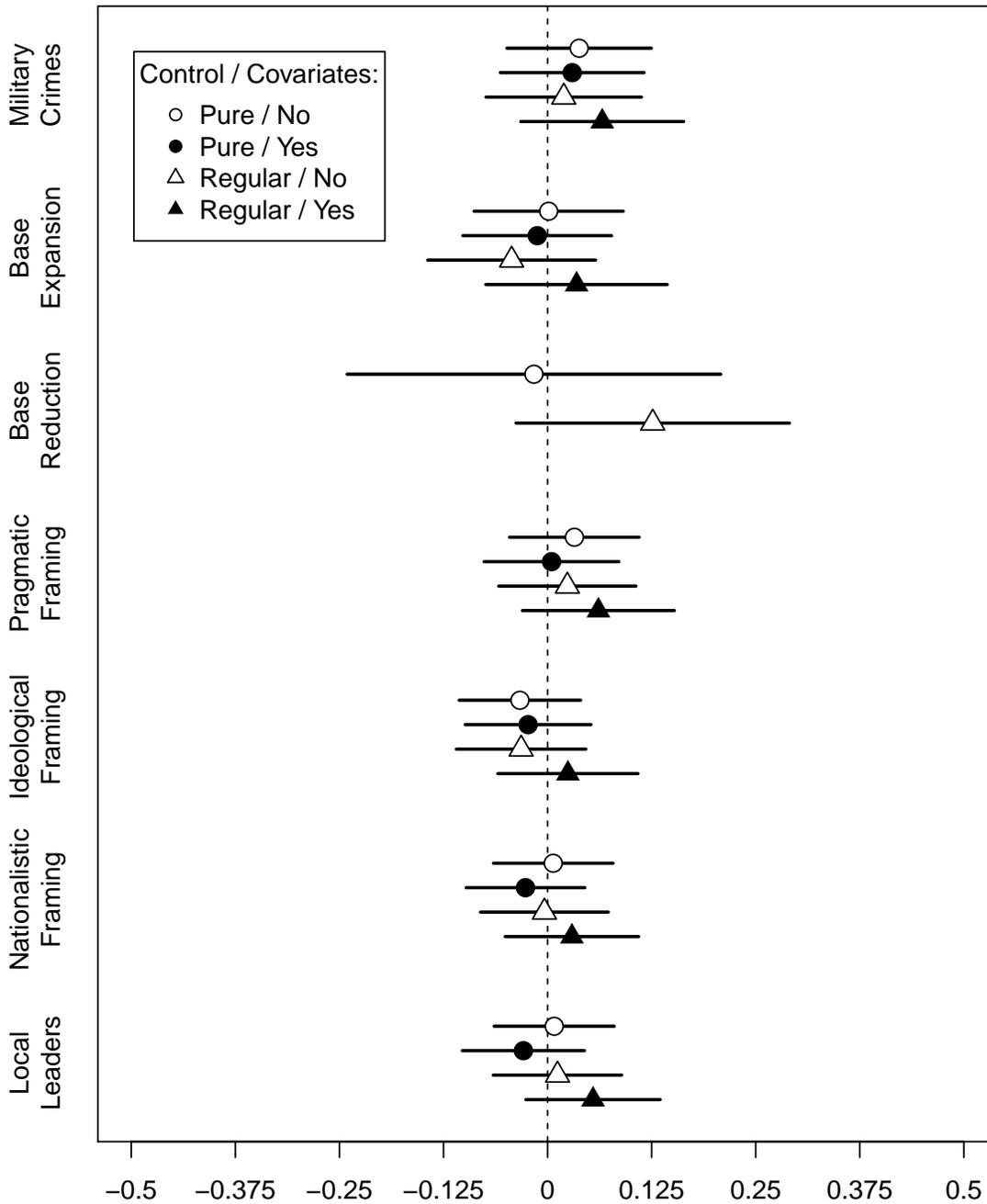
Note: Dependent variable is the proportion of prize money that the respondent agreed to donate to a Korean or Japanese anti-base organization in the event of winning the raffle. Icons give point estimates and lines give two-sided 90 percent confidence intervals.

10   Results Broken Down by Country

In the main text, we note that local public opinion regarding U.S. military bases reacts similarly to common social movement strategies in both South Korea and Japan. Figures 11, 12, 13, 14, 15, and 16 plot point estimates and 90% confidence intervals for our pooled estimates as well as those for each country (we exclude Status Quo Disruption–Base Reduction, which is relevant only to Daegu, South Korea). There are large overlaps among all the confidence intervals, indicating a lack of significant differences between countries.

Figure 11: Trigger Events Treatment Effect by Country
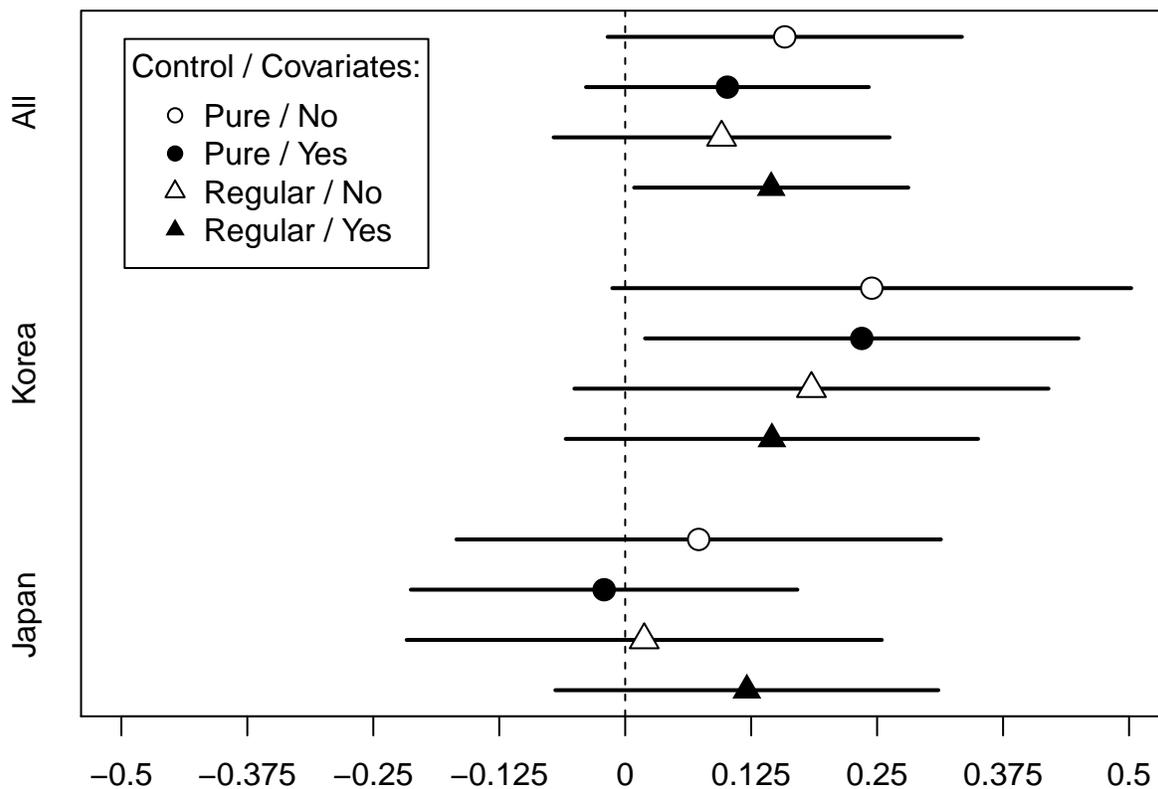
Note: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Icons give point estimates and lines give two-sided 90 percent confidence intervals.

Figure 12: Status Quo Disruption–Base Expansion Treatment Effect by Country
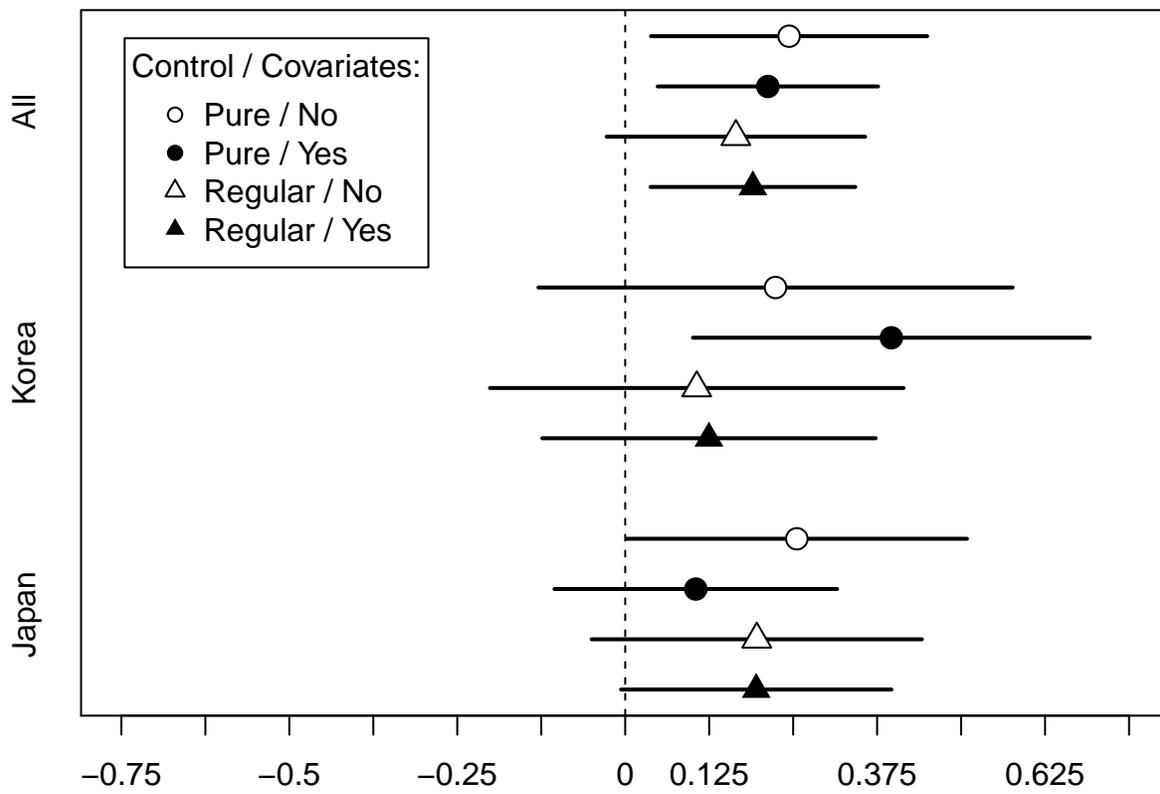
Note: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Icons give point estimates and lines give two-sided 90 percent confidence intervals.

Figure 13: Pragmatic Framing Treatment Effect by Country
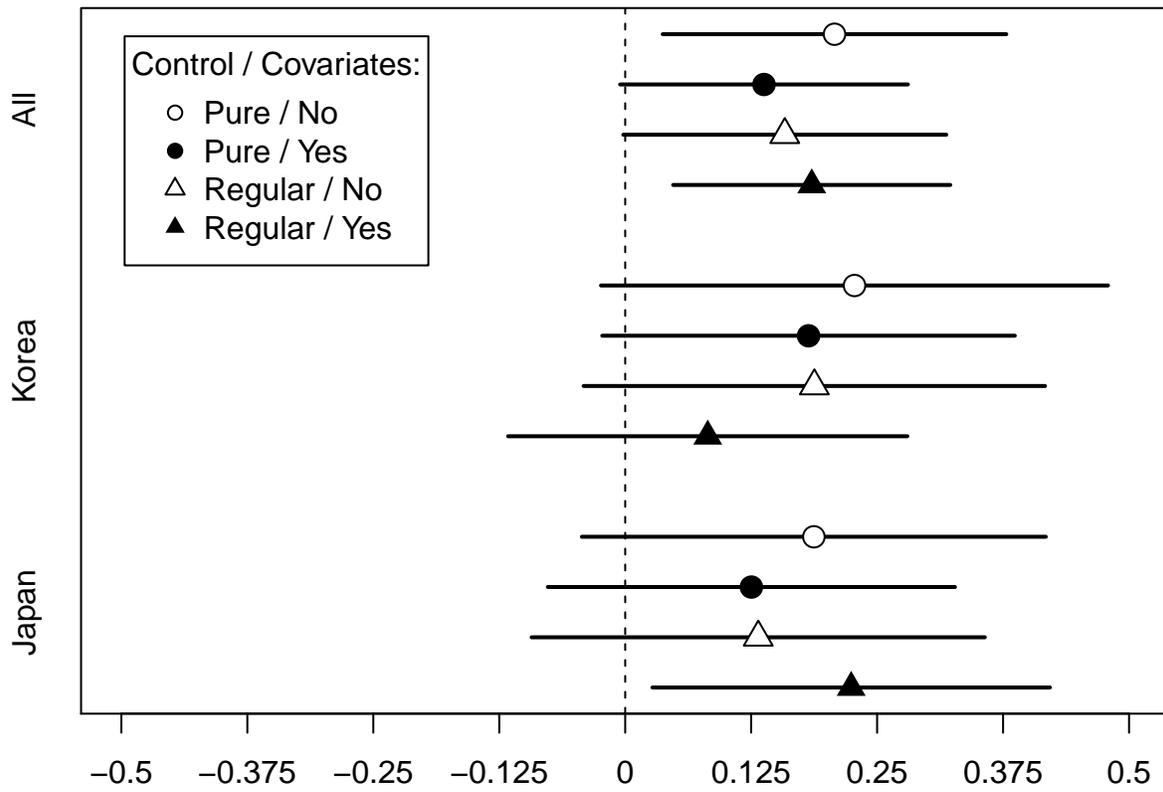
Note: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Icons give point estimates and lines give two-sided 90 percent confidence intervals.

Figure 14: Ideological Framing Treatment Effect by Country
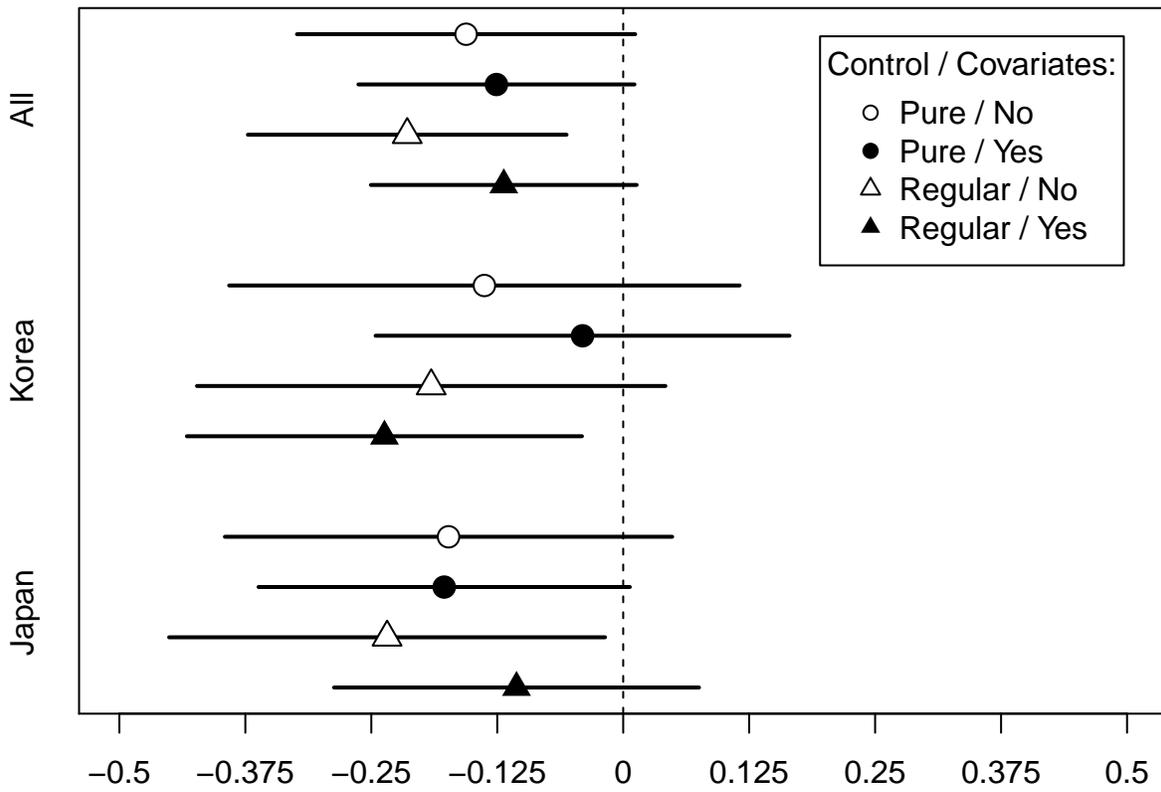
Note: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Icons give point estimates and lines give two-sided 90 percent confidence intervals.

Figure 15: Nationalistic Framing Treatment Effect by Country
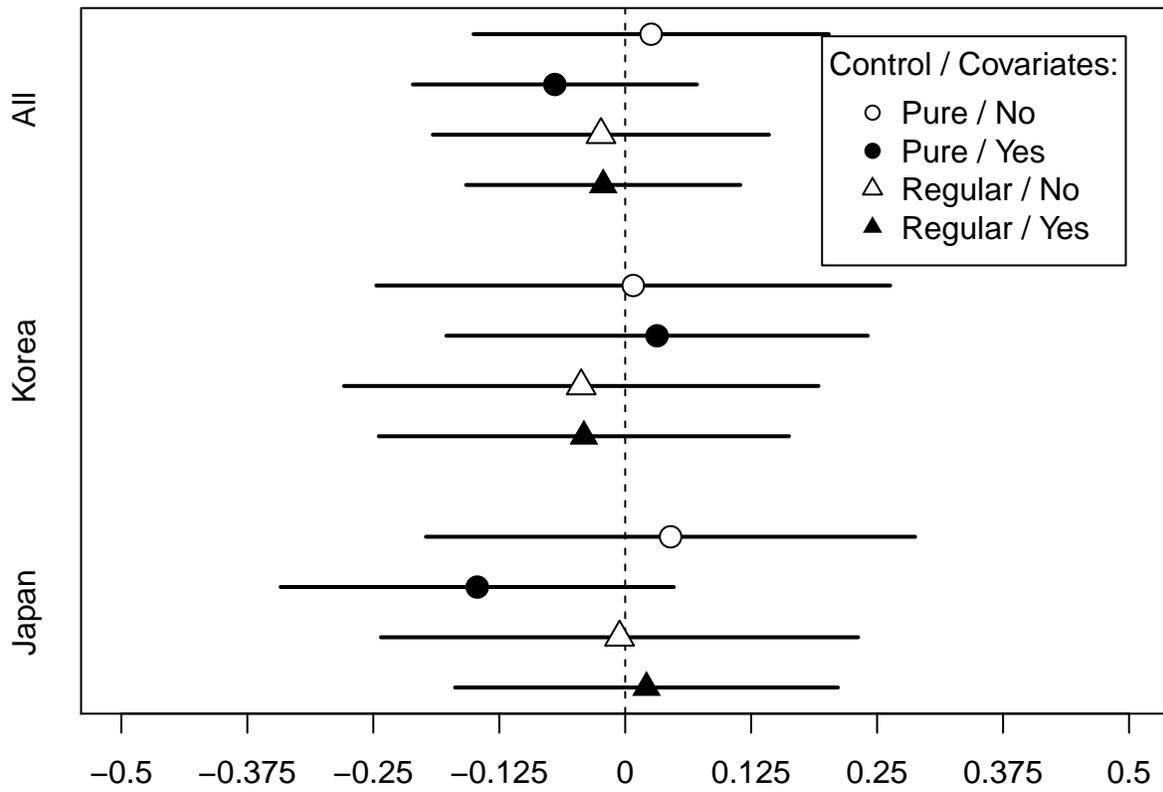
Note: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Icons give point estimates and lines give two-sided 90 percent confidence intervals.

Figure 16: Local Government Leaders Treatment Effect by Country
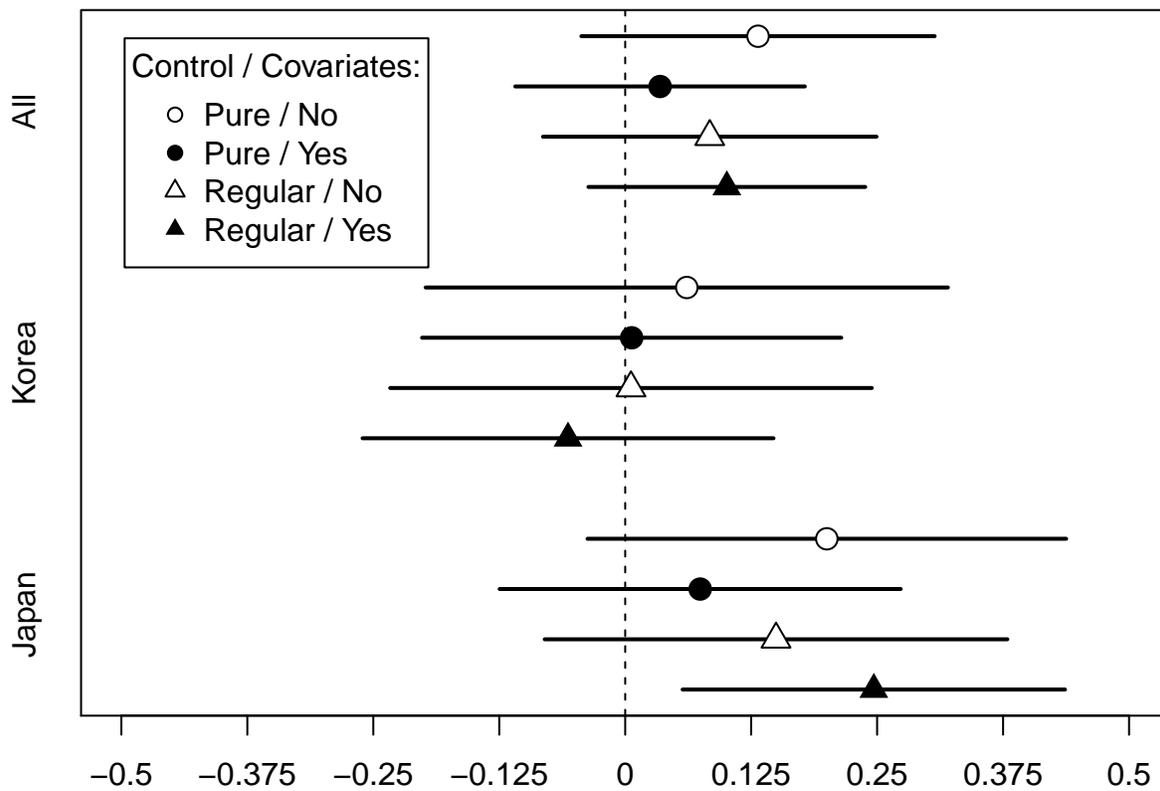
Note: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Icons give point estimates and lines give two-sided 90 percent confidence intervals.

11 Framing Effects Conditional on Ideology

In the main text, we discuss the possibility that nationalistic and/or ideological framing boosts opposition to U.S. bases among left-wing respondents, even if these strategies are ineffective or counterproductive among the public at large. Table 7 reports results from regressions that include a linear interaction between the framing treatment and ideological self-placement on a 1–10 scale. Figures 17 and 18 plot the estimated conditional effect of the treatment across the full range of the ideology variable for each of these eight models. In seven of eight models, the coefficient on the interaction term is smaller than or similar in size to its standard error. For the effect of ideological framing versus the regular control with covariates, the interaction with respondent ideology is nearly significant at the 0.05 level, in the expected direction. However, as shown in Figure 18, conditional average treatment effects as estimated in this model are significant only for right-of-center respondents, for whom the ideological framing generates a backlash effect, reducing opposition to U.S. bases. In no model does nationalistic or ideological framing significantly boost opposition to U.S. bases among left-of-center respondents.

Table 7: Average Treatment Effects on Attitudinal Outcome, Conditional on Ideology

	Treatment vs. Pure Control		Treatment vs. Regular Control	
	Ideological Framing	Nationalistic Framing	Ideological Framing	Nationalistic Framing
Covariates: No				
Intercept	2.8	2.84	2.86	2.9
	(0.07)	(0.07)	(0.06)	(0.07)
Treatment	-0.1	0.02	-0.16	-0.03
	(0.1)	(0.1)	(0.09)	(0.1)
Ideology	-0.22	-0.23	-0.22	-0.22
	(0.03)	(0.03)	(0.03)	(0.03)
Treatment ×	0.02	-0.03	0.03	-0.04
Ideology	(0.04)	(0.04)	(0.04)	(0.04)
Covariates: Yes				
Intercept	2.82	2.88	2.82	2.87
	(0.06)	(0.06)	(0.06)	(0.06)
Treatment	-0.13	-0.07	-0.12	-0.02
	(0.08)	(0.09)	(0.08)	(0.08)
Ideology	-0.15	-0.15	-0.09	-0.09
	(0.03)	(0.03)	(0.04)	(0.04)
Treatment ×	-0.03	0.01	-0.09	-0.05
Ideology	(0.05)	(0.05)	(0.05)	(0.05)
N	584	560	605	581

NOTE: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Estimated standard errors in parentheses. Regional fixed effects not shown. Ideology is demeaned, so the constitutive term of the interaction represents the effect for respondents of average ideology.

Figure 17: Conditional Average Treatment Effects on Attitudinal Outcome (No Covariates)
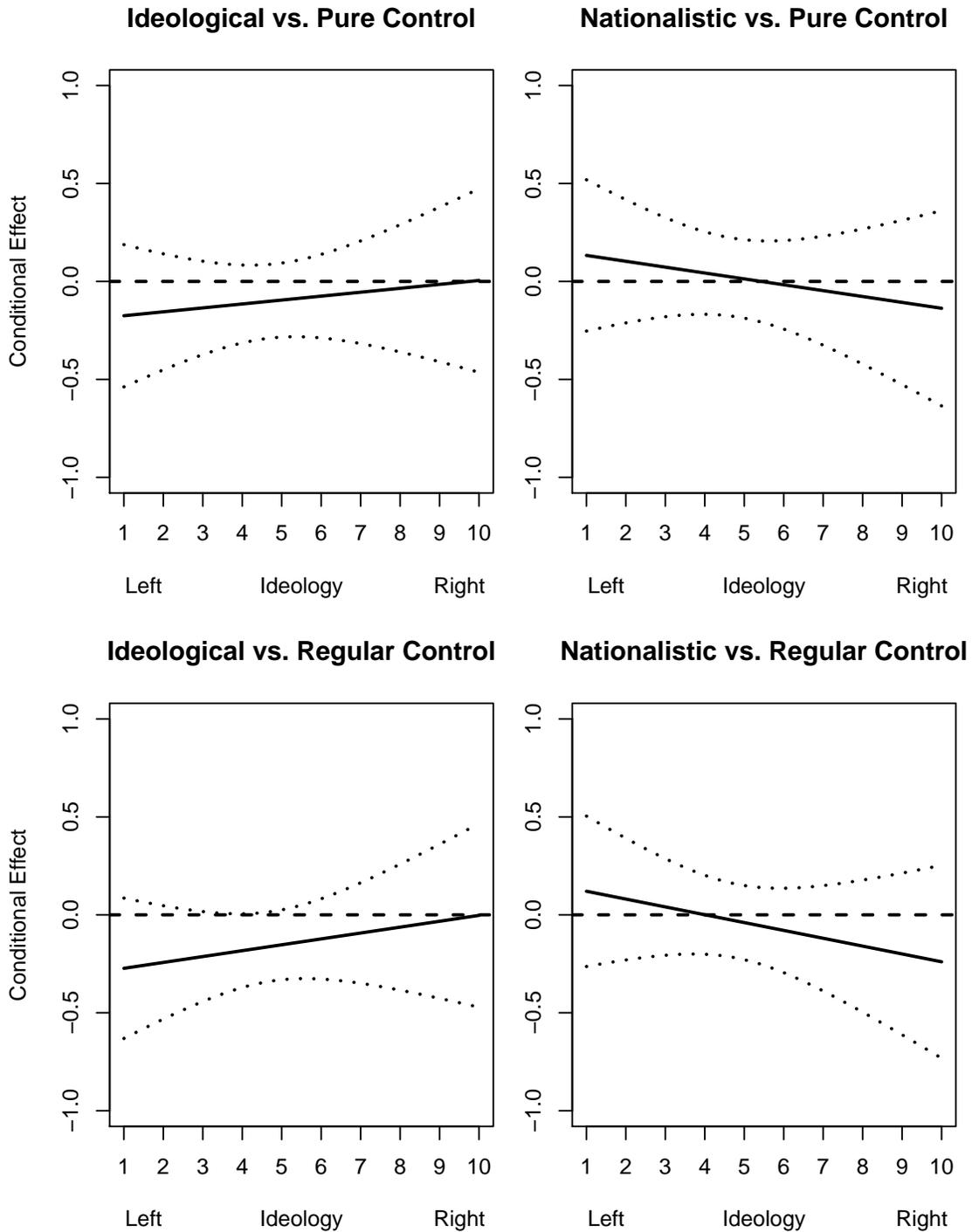
Note: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Dotted lines give 95% confidence intervals. Plot based on the estimates reported in Table 7.

Figure 18: Conditional Average Treatment Effects on Attitudinal Outcome (With Covariates)
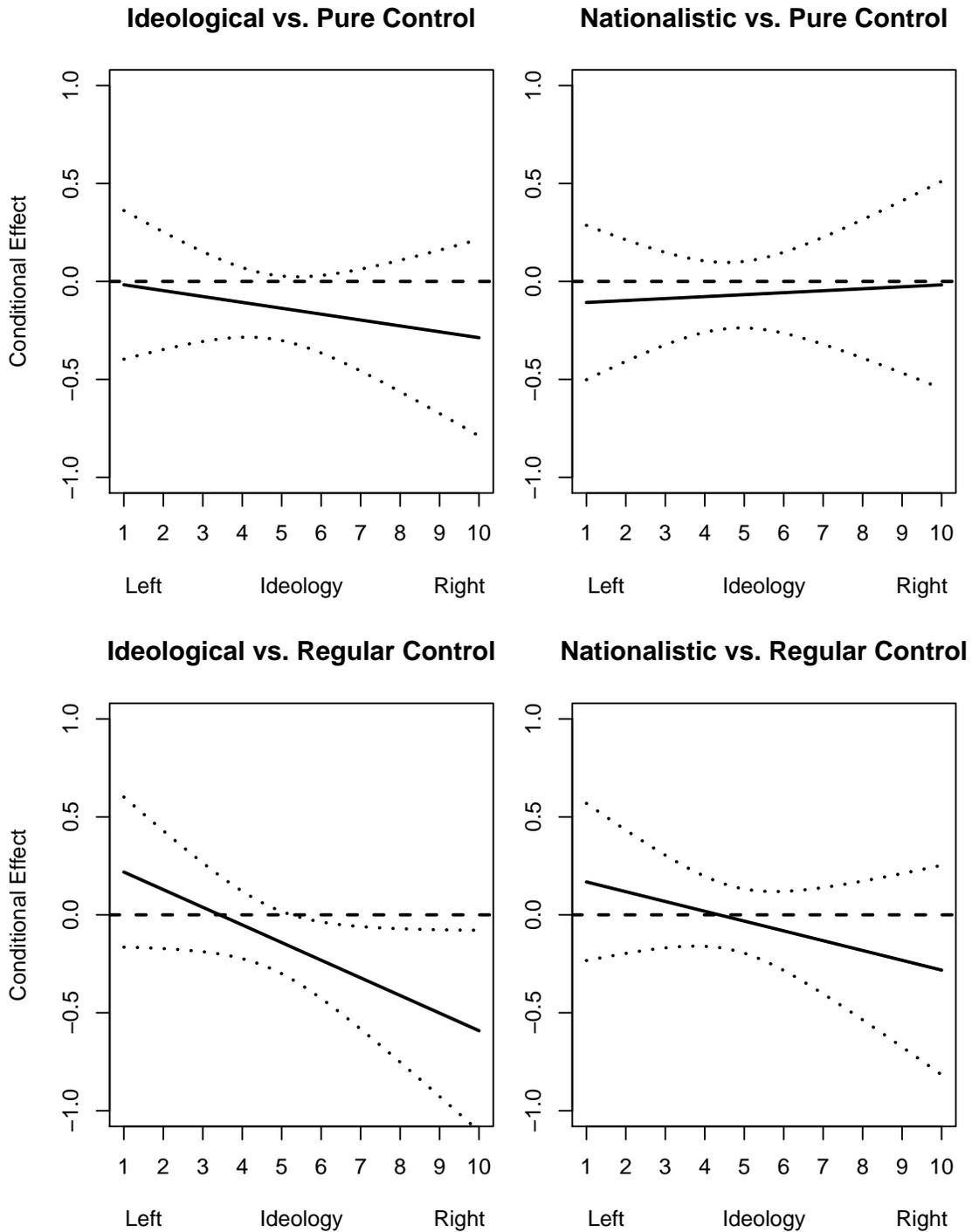
Ideological vs. Pure Control

Nationalistic vs. Pure Control

Ideological vs. Regular Control

Nationalistic vs. Regular Control

Note: Dependent variable is a 1–5 Likert scale measuring opposition to U.S. military bases in the respondent's region. Dotted lines give 95% confidence intervals. Plot based on the estimates reported in Table 7.

References

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