

Coercion and the Credibility of Assurances,
Supplemental Appendix (Online)

February 11, 2020

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1 Full Regression Tables

Tables 1, 2, and 3 display all control variables in our main regression tables.

Table 1: Assurance Credibility

Dependent Variable: Assurance Credibility				
If U.S. accepts demand, will China still contest U.S. military presence?				
	(1)	(2)	(3)	(4)
China Power	-0.181* (0.076)		-0.213** (0.078)	-0.283* (0.114)
China Reputation		0.340** (0.075)	0.351** (0.078)	0.286* (0.111)
Power*Reputation				0.132 (0.158)
GOP President			-0.001 (0.078)	-0.002 (0.078)
Age			0.002 (0.003)	0.002 (0.003)
Dem			-0.015 (0.088)	-0.013 (0.088)
Rep			-0.244* (0.108)	-0.245* (0.108)
PolKnow			-0.008 (0.030)	-0.008 (0.030)
Education			-0.039 (0.029)	-0.038 (0.029)
Income			-0.009 (0.014)	-0.009 (0.014)
Male			-0.086 (0.087)	-0.081 (0.087)
MilExp			-0.231† (0.135)	-0.230† (0.136)
African-American			0.145 (0.124)	0.145 (0.124)
Asian			0.160 (0.194)	0.169 (0.194)
Hispanic			0.091 (0.152)	0.085 (0.153)
Other Race			0.227 (0.208)	0.217 (0.207)
Constant	1.992** (0.053)	1.720** (0.055)	2.020** (0.174)	2.059** (0.181)
Observations	1,028	1,028	970	970
R ²	0.006	0.019	0.053	0.053
Adjusted R ²	0.005	0.019	0.038	0.037
Residual Std. Error	1.213 (df = 1026)	1.205 (df = 1026)	1.203 (df = 954)	1.203 (df = 953)
F Statistic	5.738* (df = 1; 1026)	20.405** (df = 1; 1026)	3.525** (df = 15; 954)	3.348** (df = 16; 953)

Note: †p<0.1; *p<0.05; **p<0.01
Robust SEs computed via Huber-White sandwich estimator.

Table 2: Threat Credibility

	Dependent Variable: Threat Credibility			
	If U.S. rejects demand, will China contest U.S. military presence?			
	(1)	(2)	(3)	(4)
China Power	0.397** (0.064)		0.451** (0.065)	0.442** (0.094)
China Reputation		-0.005 (0.065)	-0.068 (0.065)	-0.076 (0.089)
Power*Reputation				0.017 (0.131)
GOP President			0.053 (0.065)	0.053 (0.065)
Age			-0.009** (0.002)	-0.009** (0.002)
Dem			0.059 (0.075)	0.059 (0.075)
Rep			0.244** (0.088)	0.244** (0.088)
PolKnow			-0.002 (0.026)	-0.002 (0.026)
Education			0.022 (0.024)	0.022 (0.024)
Income			-0.054** (0.011)	-0.054** (0.011)
Male			0.061 (0.071)	0.062 (0.071)
MilExp			0.038 (0.110)	0.038 (0.110)
African-American			0.039 (0.111)	0.039 (0.111)
Asian			0.191 (0.147)	0.192 (0.146)
Hispanic			-0.018 (0.115)	-0.019 (0.115)
Other Race			0.050 (0.234)	0.048 (0.235)
Constant	1.784** (0.044)	1.985** (0.047)	2.263** (0.141)	2.268** (0.147)
Observations	1,028	1,028	970	970
R ²	0.036	0.00001	0.090	0.090
Adjusted R ²	0.035	-0.001	0.076	0.075
Residual Std. Error	1.030 (df = 1026)	1.049 (df = 1026)	1.009 (df = 954)	1.010 (df = 953)
F Statistic	38.120** (df = 1; 1026)	0.007 (df = 1; 1026)	6.309** (df = 15; 954)	5.910** (df = 16; 953)

Note:

†p<0.1; *p<0.05; **p<0.01
Robust SEs computed via Huber-White sandwich estimator.

Table 3: Resolve

	Dependent Variable: Resolve			
	How should U.S. respond to China's demand?			
	(1)	(2)	(3)	(4)
China Power	-0.184** (0.071)		-0.198** (0.071)	-0.213* (0.105)
China Reputation		-0.287** (0.071)	-0.246** (0.071)	-0.260** (0.096)
Power*Reputation				0.028 (0.142)
GOP President			-0.008 (0.070)	-0.009 (0.070)
Age			0.015** (0.002)	0.015** (0.002)
Dem			-0.085 (0.082)	-0.084 (0.082)
Rep			0.072 (0.096)	0.072 (0.096)
PolKnow			0.006 (0.028)	0.006 (0.028)
Education			0.028 (0.026)	0.029 (0.026)
Income			0.021 [†] (0.012)	0.021 [†] (0.012)
Male			0.101 (0.077)	0.102 (0.077)
MilExp			0.197 [†] (0.120)	0.197 [†] (0.120)
African-American			-0.069 (0.107)	-0.069 (0.107)
Asian			-0.123 (0.164)	-0.121 (0.165)
Hispanic			0.169 (0.121)	0.168 (0.121)
Other Race			-0.068 (0.207)	-0.070 (0.207)
Constant	1.823** (0.049)	1.885** (0.053)	0.992** (0.152)	1.000** (0.157)
Observations	1,028	1,028	970	970
R ²	0.006	0.016	0.101	0.101
Adjusted R ²	0.006	0.015	0.087	0.086
Residual Std. Error	1.138 (df = 1026)	1.133 (df = 1026)	1.087 (df = 954)	1.088 (df = 953)
F Statistic	6.711** (df = 1; 1026)	16.384** (df = 1; 1026)	7.138** (df = 15; 954)	6.687** (df = 16; 953)

Note:

[†]p<0.1; *p<0.05; **p<0.01
Robust SEs computed via Huber-White sandwich estimator.

2 Balance Tests

Figure 1 displays the difference in means for each control variable across levels of the power and reputation treatments, with 95% confidence intervals. We find no evidence of imbalance.

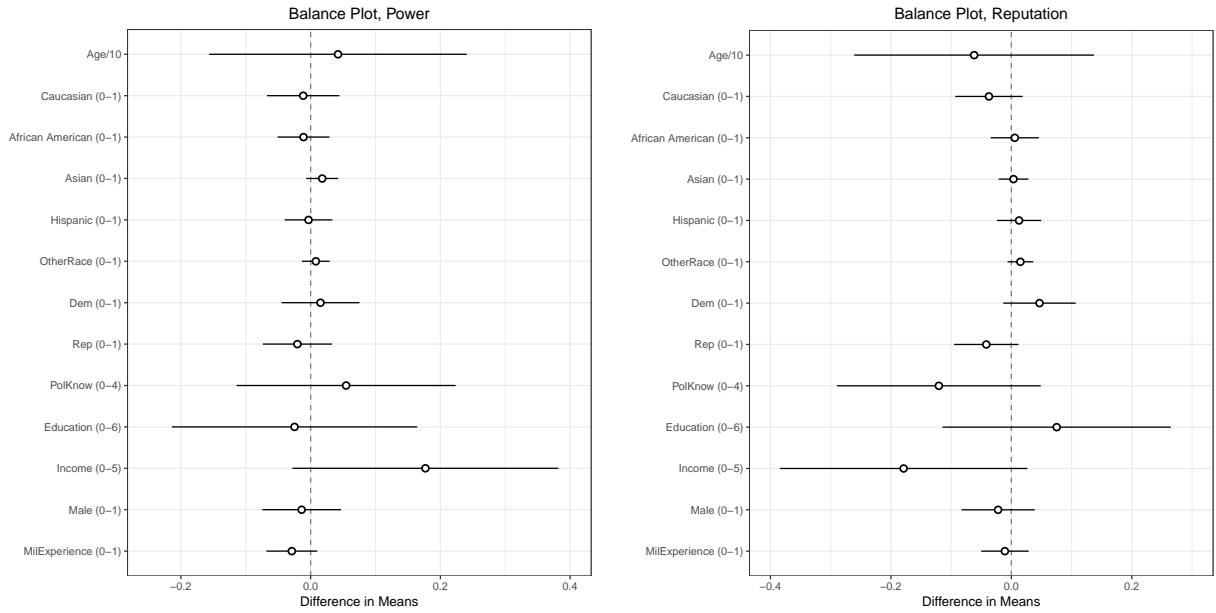


Figure 1: Balance Tests

3 Multiple Comparisons Bias Corrections

Multiple Comparisons Bias arises when multiple statistical tests are run, but only a subset are reported. Statistics will not have their intended properties if there is selective reporting based on those properties. To be concrete: if one runs 20 statistical tests, and one reveals a significant relationship, it would be misleading to draw attention to the lone significant test while neglecting the nineteen null results. The p -value of that one test (selected for reporting by its extreme value) would not truly express how unlikely it was to observe a result as or more extreme as was achieved under the null.

In this case, we emphasize that we did not selectively report results based on significance. We pre-registered our intention to run a set of tests of distinct predictions of our theory, and we then reported the results from each of those tests. Thus, multiple comparisons will

not bias our inferential statistics, and we need not adjust for them. Doing so as a matter of habit unnecessarily penalizes scholarship that tests elaborate theories with multiple diverse predictions and pre-registered designs, which we believe should be encouraged.

Nevertheless, our results are largely robust to adjustments for multiple comparisons bias. Tables 4, 5, and 6 report penalized p-values. We used four regression models for each dependent variable, providing the basis for adjustment: two univariate regressions (power and reputation), one model adding a battery of controls, and a final adding a power*reputation interaction. Using the Bonferroni method (the most conservative of penalized standard error calculations) therefore multiplies each p-value by 4. The effect of power on assurance credibility falls below the 0.05 range in the univariate model, but regains significance in the controlled model. All other hypothesized relationships retain significance at the 0.05 level.

Table 4: Assurance Credibility, Bonferroni

Dependent Variable: Assurance Credibility				
If U.S. accepts demand, will China still contest U.S. military presence?				
	(1)	(2)	(3)	(4)
China Power	-0.181 [†] <i>p</i> = 0.067		-0.213* <i>p</i> = 0.027	-0.283 [†] <i>p</i> = 0.054
China Reputation		0.340** <i>p</i> = 0.00003	0.351** <i>p</i> = 0.00004	0.286* <i>p</i> = 0.041
Power*Reputation				0.132 <i>p</i> = 1.000
Controls			✓	✓
Constant	1.992** <i>p</i> = 0.000	1.720** <i>p</i> = 0.000	2.020** <i>p</i> = 0.000	2.059** <i>p</i> = 0.000
Observations	1,028	1,028	970	970
R ²	0.006	0.019	0.053	0.053
Adjusted R ²	0.005	0.019	0.038	0.037
Residual Std. Error	1.213 (df = 1026)	1.205 (df = 1026)	1.203 (df = 954)	1.203 (df = 953)
F Statistic	5.738* (df = 1; 1026)	20.405** (df = 1; 1026)	3.525** (df = 15; 954)	3.348** (df = 16; 953)

Note:

[†]*p*<0.1; **p*<0.05; ***p*<0.01

Table 5: Threat Credibility, Bonferroni

	Dependent Variable: Threat Credibility			
	If U.S. rejects demand, will China militarize?			
	(1)	(2)	(3)	(4)
China Power	0.397** $p = 0.000$		0.451** $p = 0.000$	0.442** $p = 0.00001$
China Reputation		-0.005 $p = 1.000$	-0.068 $p = 1.000$	-0.076 $p = 1.000$
Power*Reputation				0.017 $p = 1.000$
Controls			✓	✓
Constant	1.784** $p = 0.000$	1.985** $p = 0.000$	2.263** $p = 0.000$	2.268** $p = 0.000$
Observations	1,028	1,028	970	970
R ²	0.036	0.00001	0.090	0.090
Adjusted R ²	0.035	-0.001	0.076	0.075
Residual Std. Error	1.030 (df = 1026)	1.049 (df = 1026)	1.009 (df = 954)	1.010 (df = 953)
F Statistic	38.120** (df = 1; 1026)	0.007 (df = 1; 1026)	6.309** (df = 15; 954)	5.910** (df = 16; 953)

Note: † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$

Table 6: Resolve, Bonferroni

	Dependent Variable: Resolve			
	How should U.S. respond to China's demand?			
	(1)	(2)	(3)	(4)
China Power	-0.184* $p = 0.039$		-0.198* $p = 0.021$	-0.213 $p = 0.169$
China Reputation		-0.287** $p = 0.0003$	-0.246** $p = 0.003$	-0.260* $p = 0.027$
Power*Reputation				0.028 $p = 1.000$
Controls			✓	✓
Constant	1.823** $p = 0.000$	1.885** $p = 0.000$	0.992** $p = 0.000$	1.000** $p = 0.000$
Observations	1,028	1,028	970	970
R ²	0.006	0.016	0.101	0.101
Adjusted R ²	0.006	0.015	0.087	0.086
Residual Std. Error	1.138 (df = 1026)	1.133 (df = 1026)	1.087 (df = 954)	1.088 (df = 953)
F Statistic	6.711** (df = 1; 1026)	16.384** (df = 1; 1026)	7.138** (df = 15; 954)	6.687** (df = 16; 953)

Note: † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$

4 Quasi-Elite Sample Subset

To allay concerns about external validity, we re-ran our analysis on a sample subset that more closely resembles elite policymakers. The truncated data set includes the 296 respondents who were above the age of 40 and had attained at least a college degree. As this group comprises less than 30% of the original sample, confidence intervals are noticeably wider, especially for the interacted model, which was already relatively imprecise. Nevertheless, the results broadly replicate, and are in some respects more favorable to our theory.

On Assurance Credibility (Table 7), a reputation for restraint increases assurance credibility as predicted. Increasing relative power decreases assurance credibility, but this negative relationship narrowly misses significance at the 0.05 level in the full model. Notably, both of these effects are of greater magnitude in this quasi-elite sample – for instance, the reputation coefficient in the full model (Model 3) is around 25% larger here than it was in the original analysis.

Table 7: Assurance Credibility (Quasi-Elites)

	Dependent Variable: Assurance Credibility			
	If U.S. accepts demand, will China still contest U.S. military presence?			
	(1)	(2)	(3)	(4)
China Power	-0.265 [†] (0.149)		-0.312 [†] (0.160)	-0.352 (0.238)
China Reputation		0.488** (0.148)	0.441** (0.152)	0.404 [†] (0.215)
Power*Reputation				0.070 (0.309)
Controls			✓	✓
Constant	1.957** (0.107)	1.536** (0.112)	2.305** (0.556)	2.326** (0.574)
Observations	295	295	277	277
R ²	0.011	0.036	0.106	0.106
Adjusted R ²	0.007	0.032	0.055	0.051
Residual Std. Error	1.276 (df = 293)	1.260 (df = 293)	1.254 (df = 261)	1.256 (df = 260)
F Statistic	3.160 [†] (df = 1; 293)	10.788** (df = 1; 293)	2.070* (df = 15; 261)	1.936* (df = 16; 260)

Note:

[†]p<0.1; *p<0.05; **p<0.01
Robust SEs computed via Huber-White sandwich estimator.

On Threat Credibility (Table 8), our results again replicate – power increases the credibility of threats, whereas a reputation for restraint has no effect. We further observe that the power coefficient in the full model (Model 3) is slightly smaller than it was in the full population analysis (about 15%). Combined with the assurance credibility analysis above, it therefore appears that the mass public neglects the effect of power on assurance credibility, and exaggerates its effect on threat credibility, relative to a quasi-elite sample.

Table 8: Threat Credibility (Quasi-Elites)

	Dependent Variable: Threat Credibility			
	If U.S. rejects demand, will China contest U.S. presence?			
	(1)	(2)	(3)	(4)
China Power	0.390** (0.119)		0.387** (0.128)	0.311 [†] (0.180)
China Reputation		0.159 (0.119)	0.046 (0.119)	-0.023 (0.179)
Power*Reputation				0.131 (0.248)
Controls			✓	✓
Constant	1.597** (0.086)	1.712** (0.085)	2.790** (0.485)	2.828** (0.487)
Observations	295	295	277	277
R ²	0.036	0.006	0.113	0.113
Adjusted R ²	0.032	0.002	0.062	0.059
Residual Std. Error	1.018 (df = 293)	1.033 (df = 293)	1.012 (df = 261)	1.014 (df = 260)
F Statistic	10.800** (df = 1; 293)	1.697 (df = 1; 293)	2.207** (df = 15; 261)	2.080** (df = 16; 260)

Note:

[†]p<0.1; *p<0.05; **p<0.01
Robust SEs computed via Huber-White sandwich estimator.

One interpretation of this finding that accords with the literature on elite populations is that, because elites are more strategic thinkers, they are more inclined to think farther down the game tree, considering the ramifications of current dynamics for future events. In this case, while the mass public clearly recognized that a powerful China was more likely to act on its immediate threat, quasi-elites were more likely to go one step further to identify that China's power (and reputation for restraint) also speak its likely future behavior.

Lastly, the quasi-elite results for Resolve (Table 9) are actually more supportive of our theoretical predictions than the full-sample analysis. As before, reputation for restraint has a

significant negative effect on respondents' willingness to resist China's demand. Indeed, the magnitude of this effect appears much larger among quasi-elites than in the broader public – the reputation coefficient in the full model (Model 3) is about 50% larger than the matching coefficient from the full-sample analysis. We are therefore confident that a reputation for restraint improves the odds of successful coercion.

Moreover, whereas power had a significant negative effect on Resolve in the full-sample analysis, this relationship is far from significance in the quasi-elite sample. This null result is in line with our original prediction that the effect of power on resolve should be indeterminate (as power decreases assurance credibility even as it increases threat credibility), though it is likely to be largely attributable to wider confidence intervals. Still, we observe that the coefficient sizes are again notably smaller in the quasi-elite analysis. As suggested above, one way to interpret this result is that strategically-minded quasi-elites are more inclined to worry that a strong China might challenge US interests in the future, and are therefore less willing to simply acquiesce to a strong China's current demands.

Table 9: Resolve (Quasi-Elites)

Dependent Variable: Resolve				
How should U.S. respond to China's demand?				
	(1)	(2)	(3)	(4)
China Power	-0.157 (0.128)		-0.148 (0.133)	-0.127 (0.192)
China Reputation		-0.394** (0.126)	-0.375** (0.127)	-0.356* (0.179)
Power*Reputation				-0.036 (0.261)
Controls			✓	✓
Constant	2.144** (0.092)	2.288** (0.092)	0.876† (0.476)	0.865† (0.484)
Observations	295	295	277	277
R ²	0.005	0.031	0.127	0.127
Adjusted R ²	0.002	0.028	0.077	0.073
Residual Std. Error	1.098 (df = 293)	1.083 (df = 293)	1.048 (df = 261)	1.050 (df = 260)
F Statistic	1.498 (df = 1; 293)	9.526** (df = 1; 293)	2.533** (df = 15; 261)	2.367** (df = 16; 260)

Note:

†p<0.1; *p<0.05; **p<0.01
 Robust SEs computed via Huber-White sandwich estimator.

5 Survey Instrument

Below, you will read about a conflict involving the United States and China in the East China Sea. Though hypothetical, the scenario details are realistic. Imagine that you are a foreign policy advisor to the U.S. president, advising him on how to respond to the crisis. Please read the scenario carefully, as you will also be asked several questions to gauge your attention.

The conflict takes place in 2025. In that year, the United States is led by [**Democratic / Republican**] President Linwood Sutter, and China is led by President Zhang Wei. President Wei demands that the United States recognize China's sovereignty over the Diaoyu Islands.

Background:

The Diaoyu Islands are a small, uninhabited island chain located in the East China Sea between China and Okinawa, Japan. Valuable for their proximity to vast offshore oil reserves, the islands have been administered by Japan since 1972. However, both China and Japan claim sovereignty over the islands, and each state uses its own name for them: Senkaku (Japanese) and Diaoyu (Chinese).

In the past, the United States has taken no official position on this dispute. At the same time, the United States is obliged by its alliance with Japan to defend all Japanese-administered territories should conflict arise.

After years of disagreement, tensions over the islands escalated. Chinese President Wei issued this statement:

“China does not desire conflict. However, Japanese control of the Diaoyu islands has become intolerable. China demands that the United States recognize China's rightful sovereignty over the islands. If the United States refuses, China is prepared to take more active measures to protect our sovereign rights in the region. China looks forward to peaceful relations with the United States and Japan once this dispute is resolved.”

Your national security experts say that President Wei's statement is a threat: if the U.S. were to reject Wei's demand, China would try to pressure the U.S. military to withdraw from international waters near China by harassing and possibly engaging U.S. patrols. If successful, this strategy would threaten U.S. control of vital trade routes and block security operations with regional allies.

Your team of national security experts has provided you with the following additional information:

- Your experts believe that it is [**likely** / **unlikely**] that China could force the U.S. military to withdraw from international waters near China, as [**U.S.** / **Chinese**] forces enjoy military superiority in the area. Your advisors are confident that China would [**lose** / **win**] a military conflict in the region, should one arise.
- Your experts note that in the past, China has been involved in similar disputes. In particular, China and Vietnam had long disagreed about sovereignty over the Paracel Islands in the South China Sea. In 2020, the two countries agreed to divide the island chain between them. Since then, China has [**abided by the agreement and has not attempted to renegotiate its terms; Vietnam has expressed gratitude for China's commitment to the compromise accord.** / **pressured Vietnam to renegotiate the terms of the deal; Vietnam has expressed frustration at Chinese antagonism, and skepticism that China will ever be satisfied with a compromise accord.**]

In summary:

- In 2025, China is led by President Wei, and the U.S. is led by President Sutter [(**Dem** / **GOP**)]
- China demands that the U.S. recognize Chinese sovereignty over the Diaoyu/Senkaku islands
- If the U.S. refuses, China threatens to contest U.S. military presence in the region
- The [**U.S.** / **China**] enjoys military superiority over China in the region
- China has [**abided by** / **tried to alter**] a past territorial agreement with Vietnam over the Paracel Islands

Click *Here* for a map showing the locations of various features of the scenario. Viewing this map is necessary to complete the survey.

1. How should the United States respond to China's demand for sovereignty over the Diaoyu Islands? The United States should . . .
 - Accept China's Demand, and ask Japan to renounce its claim to the Diaoyu Islands.
 - Reject China's Demand, but ask Japan to renounce its claim to the Diaoyu Islands if any conflict arises between U.S. and Chinese forces in the region.
 - Reject China's Demand, but ask Japan to renounce its claim to the Diaoyu Islands only if conflict between the U.S. and China results in more than 100 American fatalities.
 - Reject China's Demand even if conflict between the U.S. and China results in more than 100 American fatalities; take whatever measures necessary to maintain U.S. military presence in the region.
2. Please describe to us why you chose the answer that you did above in a few sentences.
3. Suppose that the United States rejects China's demand for sovereignty over the Diaoyu Islands. Do you think that China will follow through on its threat to contest U.S. military presence in the region?
 - Very Unlikely
 - Unlikely
 - As Likely as Not
 - Likely
 - Very Likely
4. Please describe to us why you chose the answer that you did above in a few sentences.
5. Suppose that the United States recognizes Chinese sovereignty over the Diaoyu Islands. Do you think that China will still attempt to contest U.S. military presence in the region at a later date?
 - Very Unlikely
 - Unlikely
 - As Likely as Not
 - Likely
 - Very Likely
6. Please describe to us why you chose the answer that you did above in a few sentences.

7. How many U.S. deaths (soldiers and civilians) do you think would result if this territorial dispute escalated into a military conflict between the US and China?
 - 0-24 deaths
 - 25-99 deaths
 - 100-249 deaths
 - 250-1000 deaths
 - Greater than 1000 deaths
8. In the scenario above, what was the balance of power between the U.S. and China?
 - China enjoyed military superiority over the United States
 - The United States enjoyed military superiority over China
 - Neither nation enjoyed a favorable balance of power
9. In the scenario above, how did China behave during its territorial dispute with Vietnam?
 - China and Vietnam never reached a compromise agreement
 - China and Vietnam reached a compromise agreement, and China has abided by the terms of that agreement
 - China and Vietnam reached a compromise agreement, but China has pressured Vietnam to alter the terms of that agreement

Thanks! You're almost done; please tell us a bit about yourself.

10. What is your gender?
 - Male
 - Female
 - Other
 - I prefer not to answer
11. How old are you (in years)?
12. What is the highest level of education you have completed?
 - Less than high school
 - High school or GED
 - Some college
 - 2-year college degree

- 4-year college degree
- Masters degree
- Doctoral degree
- Professional degree (e.g., JD or MD)
- I prefer not to answer

13. What is your race?

- Caucasian
- African-American
- Asian
- Hispanic
- Native American
- Pacific Islander
- Other
- I prefer not to answer

14. In which state do you currently reside?

15. What is your combined annual household income (in US dollars)?

- less than \$10,000
- \$10,000 - \$20,000
- \$20,000 - \$30,000
- \$30,000 - \$40,000
- \$40,000 - \$50,000
- \$50,000 - \$60,000
- \$60,000 - \$70,000
- \$70,000 - \$80,000
- \$80,000 - \$90,000
- \$90,000 - \$100,000
- More than \$100,000
- I prefer not to answer

16. Have you ever served in the military?

- Yes

- No
 - Prefer not to answer
17. How frequently do you read about foreign affairs, international relations, or international history in the news, in articles, or in books?
- Every day
 - 2-4 times a week
 - 2-4 times a month
 - 5-20 times a year
 - Less than 5 times a year
 - I prefer not to answer
18. Below is a 7-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale?
- Extremely liberal
 - Liberal
 - Slightly liberal
 - Moderate
 - Slightly conservative
 - Conservative
 - Extremely conservative
 - Haven't thought much about this
 - I prefer not to answer
19. Generally speaking, do you think of yourself as a Democrat, a Republican or an Independent?
- Democrat
 - Republican
 - Independent
 - Haven't thought much about this
 - I prefer not to answer

20. (For partisans) Do you think of yourself as a **strong** [Democrat / Republican]?

- Yes
- No
- I prefer not to answer

21. (For independents) Do you think of yourself as closer to the Democratic Party or closer to the Republican party?

- Closer to the Republican Party
- Closer to the Democratic Party
- Neither
- I prefer not to answer