

SECURITY AND ATTITUDES TOWARD GLOBALIZATION: A MULTILEVEL ANALYSIS

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Supplementary Materials

Descriptive Statistics by Country

Sample sizes and descriptive statistics for the 2002 and 2009 datasets are presented in Tables S1 and S2, respectively.

Table S1. 2002 Demographic and Outcome Descriptive Statistics by Country.

Country	HDI	N		M(SD)		
		N	Male	Female	Age	ATTG
Angola	.381	780	398	382	28.9 (8.69)	3.19 (0.49)
Argentina	.851	814	385	429	42.8 (16.96)	2.82 (0.56)
Bangladesh	.509	689	547	142	34.7 (9.94)	3.13 (0.51)
Bolivia	.681	782	392	390	33.8 (12.89)	2.76 (0.50)
Brazil	.775	1000	423	577	40.7 (17.02)	2.95 (0.41)
Bulgaria	.796	514	247	267	48.7 (18.15)	3.24 (0.51)
Canada	.943	500	247	253	46.8 (16.94)	3.27 (0.43)
China	.750	3000	1276	1724	40.1 (11.06)	3.23 (0.37)
Czech Republic	.868	500	231	269	45.7 (17.03)	3.20 (0.37)
France	.932	507	237	270	47.0 (18.01)	3.20 (0.39)
Germany	.925	1000	475	525	48.5 (17.45)	3.22 (0.41)
Ghana	.568	702	349	353	35.9 (15.22)	3.29 (0.46)
Great Britain	.936	501	236	265	46.3 (16.88)	3.29 (0.42)
Guatemala	.649	500	251	249	37.5 (15.60)	3.08 (0.45)
Honduras	.672	506	257	249	35.0 (13.44)	3.22 (0.38)
India	.595	2189	1109	1080	34.8 (12.24)	3.22 (0.60)
Indonesia	.692	1017	516	501	35.8 (12.70)	3.08 (0.41)
Italy	.920	508	254	254	43.8 (16.17)	3.03 (0.43)
Ivory Coast	.399	708	355	353	29.0 (9.55)	3.38 (0.35)
Japan	.938	702	296	406	53.8 (16.59)	3.15 (0.39)
Jordan	.717	1000	509	491	35.6 (12.34)	2.55 (0.66)
Kenya	.488	658	331	327	35.2 (11.70)	3.13 (0.51)
Lebanon	.758	1000	502	498	35.9 (13.94)	3.10 (0.46)
Mali	.326	697	351	346	36.2 (14.59)	3.30 (0.46)
Mexico	.802	996	514	482	39.1 (14.47)	3.08 (0.56)
Nigeria	.466	1000	534	466	34.6 (13.19)	3.60 (0.38)
Pakistan	.497	2032	1017	1015	34.1 (13.66)	2.95 (0.57)
Peru	.752	711	326	385	36.0 (13.55)	2.99 (0.41)
Philippines	.753	700	344	356	39.8 (15.16)	3.13 (0.45)
Poland	.850	500	232	268	45.0 (17.34)	3.02 (0.54)
Russia	.795	1002	441	561	44.0 (15.64)	3.00 (0.50)
Senegal	.437	710	364	346	35.0 (13.25)	3.23 (0.41)
Slovak Rep.	.842	500	239	261	43.1 (16.84)	3.03 (0.41)
South Africa	.666	700	353	347	36.8 (15.13)	3.40 (0.50)
South Korea	.888	719	364	355	38.5 (13.38)	3.07 (0.38)
Tanzania	.407	720	365	355	40.0 (14.99)	3.20 (0.53)
Turkey	.751	1005	460	545	37.2 (15.10)	3.29 (0.62)

Uganda	.493	1008	500	508	34.5 (13.19)	3.48 (0.42)
Ukraine	.777	500	234	266	43.7 (16.31)	2.98 (0.41)
United States	.939	1501	670	831	46.2 (17.04)	3.10 (0.50)
Uzbekistan	.709	700	347	353	37.0 (14.85)	3.22 (0.44)
Venezuela	.778	700	350	350	36.9 (14.93)	3.23 (0.50)

Note: Standardized income was not included in the table because standardized variables have a mean of zero. ATTG = Attitude toward Globalization.

Table S2. 2009 Demographic and Outcome Descriptive Statistics by Country.

Country	HDI	N	N		M(SD)	
			Male	Female	Age	ATTG
Argentina	.798	800	313	487	45.4 (17.94)	2.81 (0.72)
Brazil	.719	813	340	473	43.7 (17.59)	3.06 (0.48)
Canada	.907	750	373	377	47.3 (16.66)	3.20 (0.61)
China	.68	3169	1603	1566	40.0 (12.47)	3.17 (0.44)
Egypt	.653	1000	499	501	36.7 (12.93)	2.75 (0.71)
France	.888	753	361	392	48.0 (18.22)	3.03 (0.65)
Germany	.914	751	369	382	48.2 (16.97)	3.16 (0.56)
Great Britain	.872	754	359	395	48.4 (17.52)	3.08 (0.64)
India	.54	2038	999	1039	36.1 (14.26)	3.39 (0.52)
Indonesia	.611	1000	462	538	35.6 (12.71)	2.96 (0.59)
Israel	.893	1201	636	565	41.0 (15.71)	3.26 (0.66)
Japan	.904	700	344	356	48.3 (17.12)	2.97 (0.62)
Jordan	.704	1000	511	489	34.8 (13.09)	2.66 (0.78)
Kenya	.505	1002	525	477	34.5 (12.37)	3.04 (0.76)
Lebanon	.739	1000	489	511	36.1 (12.88)	2.99 (0.67)
Mexico	.764	1000	476	524	38.2 (15.51)	3.05 (0.66)
Nigeria	.457	1000	502	498	32.4 (10.34)	3.34 (0.68)
Pakistan	.508	1254	627	627	34.3 (13.72)	3.27 (0.72)
Palestin. Territor.	.75	1204	599	605	36.6 (12.28)	3.16 (0.81)
Poland	.813	750	326	424	43.3 (16.63)	3.09 (0.54)
Russia	.777	1001	441	560	43.7 (17.29)	3.04 (0.61)
South Korea	.898	702	353	349	40.1 (13.37)	3.16 (0.46)
Spain	.88	750	362	388	46.1 (16.83)	3.21 (0.58)
Turkey	.709	1005	428	577	39.5 (15.72)	2.98 (0.88)
United States	.93	1000	507	493	51.4 (17.62)	2.73 (0.76)

Note: Standardized income was not included in the table because standardized variables have a mean of zero. ATTG = Attitude toward Globalization.

Random Effects of Level 1 Variables

As noted in the article, virtually all random effects of the level 1 variables were significant, indicating that in both 2002 and 2009, the relationships between Attitude toward Globalization (ATTG) and the level 1 predictors (age, sex, income, cultural security, personal economic security, and national economic security) differed significantly by country. Tables S3, S4, and S5 contain the variance components, effect sizes, and tests of deviance. Only sex in 2002 (for the 8-item version of the measure) did not have significant random effects.

Table S3. Model Comparisons for Random Slopes for 2002 Level 1 Variables.

Models	Model 1.6	Model 1.8	Model 1.9	Model 1.10	Model 1.11	Model 1.12	Model 1.13
IL Error	0.202	0.202	0.201	0.200	0.197	0.196	0.195
IL R^2 ^a	-	0	0	.01	.02	.03	.03
CL Error	0.031	0.028	0.028	0.029	0.029	0.029	0.029
Overall R^2 ^b	-	.01	.02	.02	.03	.03	.04
Variance Components (Errors) for Random Slopes							
Sex		0.001					
Age			0.000				
Income				0.001			
CS_IL					0.004		
PES_IL						0.002	
NES_IL							0.022
Deviance	42473.2	42447.3	42386.7	42277.3	41872.4	41697.6	41533.5
Δ Deviance(df)	-	5.9(2)	60.6(3)***	109.4(4)***	404.9(5)***	174.8(6)***	164.1(7)***
-2 Loglikelihood (LL)	-21236.5	-21223.7	-21193.4	-21138.7	-20936.2	-20848.8	-20766.7

Notes. IL = Individual Level; CL = Country Level; CS = Cultural Security; PES = Personal Economic Security; NES = National Economic Security. * $p < .05$; ** $p < .01$; *** $p < .001$. ^aIndividual level effect sizes were calculated using the effect size formula recommended by Kreft and de Leeuw (1998) and Singer (1998). ^bWe followed the recommendation of LaHuis, Hartman, Hakoyama, and Clark (2014) and calculated an overall model R^2 estimate (as per Snijders & Bosker, 1994) instead of a country-level effect size, given the inefficiency of effect size estimates at level 2 in the presence of random effects.

Table S4. Model Comparisons for Random Slopes for 2009 Level 1 Variables.

Models	Model 2.7	Model 2.8	Model 2.9	Model 2.10	Model 2.11	Model 2.12	Model 2.13
IL Error	0.385	0.385	0.384	0.383	0.380	0.378	0.376
IL R^2 ^a	-	0	0	.01	.01	.02	.02
CL Error	0.024	0.028	0.028	0.028	0.028	0.028	0.029
Overall R^2 ^b	-	0	0	0	0	.01	.01
Variance Components (Errors) for Random Slopes							
Sex		0.002					
Age			0.000				
Income				0.002			
CS_IL					0.005		
PES_IL						0.006	
NES_IL							0.054
Deviance	42671.8	42657.2	42652.2	42592.1	42487.1	42371.3	42292.2
Δ Deviance(df)	-	14.6(2)***	5.0(3)	60.1(4)***	105.0(5)***	115.8(6)***	79.1(7)***
-2 Loglikelihood (LL)	-213359.2	-213285.8	-213261.0	-212960.7	-212435.6	-211856.4	-211460.9

Notes. IL = Individual Level; CL = Country Level; CS = Cultural Security; PES = Personal Economic Security; NES = National Economic Security. * $p < .05$; ** $p < .01$; *** $p < .001$. ^aIndividual level error reduction is calculated using the effect size formula recommended by Kreft and de Leeuw (1998) and Singer (1998). ^bWe followed the recommendation of LaHuis, Hartman, Hakoyama, and Clark (2014) and calculated an overall model R^2 estimate (as per Snijders & Bosker, 1994) instead of a country-level effect size, given the inefficiency of effect size estimates at level 2 in the presence of random effects.

Table S5. Model Comparisons for Random Slopes for 2-Item ATTG for 2002 Level 1 Variables.

Models	Model 3.7	Model 3.8	Model 3.9	Model 3.10	Model 3.11	Model 3.12	Model 3.13
IL Error	0.310	0.309	0.309	0.308	0.305	0.303	0.302
IL R^2 ^a	-	0	0	.01	.02	.02	.03
CL Error	0.028	0.027	0.027	0.028	0.029	0.029	0.029
Overall R^2 ^b	-		0	0	.01	.02	.02
Variance Components (Errors) for Random Slopes							
Sex		0.002					
Age			0.000				
Income				0.001			
CS_IL					0.004		
PES_IL						0.003	
NES_IL							0.028
Deviance	56256.9	56231.5	56198.5	56122.1	55878.1	55732.7	55618.9
Δ Deviance(df)	-	25.4(2)***	33.0(3)***	76.4(4)***	244.0(5)***	145.4(6)***	113.8(7)***
-2 Loglikelihood (LL)	-28128.5	-28115.8	-28099.2	-28061.1	-27939.0	-27866.3	-27809.4

Notes. IL = Individual Level; CL = Country Level; CS = Cultural Security; PES = Personal Economic Security; NES = National Economic Security. * $p < .05$; ** $p < .01$; *** $p < .001$. ^aIndividual level error reduction is calculated using the effect size formula recommended by Kreft and de Leeuw (1998) and Singer (1998). ^bWe followed the recommendation of LaHuis, Hartman, Hakoyama, and Clark (2014) and calculated an overall model R^2 estimate (as per Snijders & Bosker, 1994) instead of a country-level effect size, given the inefficiency of effect size estimates at level 2 in the presence of random effects.

Robustness Check

Table S6 shows the results of tests of Models 3.1 to 3.7 using the reduced, 2-item version of the 2002 ATTG measure.

Table S6. Multilevel Analysis of 2002 2-Item Attitude toward Globalization.

Models	Model 3.1	Model 3.2	Model 3.3	Model 3.4	Model 3.5	Model 3.6	Model 3.7
ATTG2	3.20***	3.23***	3.23***	3.65***	3.42***	3.42***	3.42***
IL Variables							
Sex		-0.057***	-0.056***	-0.056***	-0.056***	-0.054***	-0.053***
Age		-0.002***	-0.002***	-0.002***	-0.002***	-0.002***	-0.002***
Income		0.019***	0.010	0.010	0.010	0.009	0.009
CS_IL			-0.004	-0.004	-0.003	-0.250***	-0.255***
PES_IL			0.052***	0.052***	0.052***	0.038	0.038
NES_IL			-0.323***	-0.323***	-0.323***	-0.104	-0.118
CL Variables							
HDI				-0.600***	-0.232	-0.232	-0.232
CS_CL					-0.245	-0.245	-0.245
PES_CL					0.113	0.113	0.113
NES_CL					0.793***	0.793***	0.793***
Cross-Level Interactions							
HDI x CS_IL						0.343***	0.353***
HDI x PES_IL						0.020	-0.071
HDI x NES_IL						0.618***	0.725***
CS_CL x CS_IL							-0.025
CS_CL x PES_IL							0.068*
CS_CL x NES_IL							0.019
PES_CL x CS_IL							0.048
PES_CL x PES_IL							-0.039
PES_CL x NES_IL							-0.131
NES_CL x CS_IL							0.069

NES_CL x PES_IL							-0.118
NES_CL x NES_IL							0.202
AIC	64516.9	61758.4	56567.8	56552.1	56550.7	55731.5	55741.9
BIC	64542.5	61809.3	56643.6	56636.3	56660.2	55916.8	56003.0
Deviance	57719.7	57516.5	56614.9	56603.3	56598.1	56275.5	56257.0
ΔDeviance(df)	-	203.2(3)***	901.6(3)***	11.6(1)***	5.2(3)	322.6(3)***	18.5(9)*
-2LL	-32256	-30873	-28275	-28266	-28262	-27844	-27840
IL Error	.325	.323	.314	.314	.314	.311	.310
IL Pseudo R^2 ^a	-	.01	.03	.03	.03	.04	.05
CL Error	.047	.046	.046	.036	.028	.028	.028
CL Pseudo R^2	-	.02	.02	.23	.40	.40	.40

Notes. Fixed effects estimated using robust standard errors. ATG2 = 2-Item Attitude toward Globalization; CS = Cultural Security; IL = Individual Level; PES = Personal Economic Security; NES = National Economic Security; HDI = Human Development Index; CL = Country Level; AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; LL = Log-likelihood. * $p < .05$; ** $p < .01$; *** $p < .001$. Individual-level predictors centered at their country mean. ^aEffect sizes were calculated separately for individual and country levels using the Pseudo R^2 formula recommended by Kreft and de Leeuw (1998) and Singer (1998).

References

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