

## Original Research Reports

# Security and Attitudes Toward Globalization: A Multilevel Analysis

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### Abstract

Globalization implicates a number of social psychological processes and outcomes, including openness to ideas, products, and people from outside one's national boundaries. Drawing from theory and research on intergroup threat, the researchers posited that people will be more open to connections between their nation and others if they feel their economic situation and culture are relatively secure. They found some support for these hypotheses in 2 sets of archival survey responses collected by the Pew Global Attitudes Project in 2002 (40 countries; N = 34,073) and 2009 (25 countries; N = 22,500). Personal economic security and perceived national economic security were associated with more positive attitudes toward globalization in both survey years. However, country-level variables—development status (as indexed by the United Nations' Human Development Index) and aggregated economic and cultural security—moderated the individual-level effects in several ways. Individual perceptions of national economic security more strongly predicted attitudes toward globalization in more favourable climates (e.g., in more developed countries, and at higher levels of country-level national economic security). Individual-level cultural security was positively associated with attitudes toward globalization in countries with higher levels of socioeconomic development, but negatively related to those attitudes in less developed nations. The results provide some new perspectives on individual and collective factors that inform the perceived benefits of globalization.

*Keywords:* globalization, attitudes, economic security, cultural security, Human Development Index

### Non-Technical Summary

#### Background

As the world becomes more connected—economically, culturally, politically, and technologically—there is a need to understand the factors underlying people's openness (or opposition) to various aspects of globalization (e.g., international trade, travel, and the availability of foreign products).

#### Why was this study done?

Whereas attitudes toward globalization are often quite positive, many people around the world feel that their "way of life" needs to be protected. In social psychology, it is well-established that when people feel threatened, economically and/or culturally, they are more likely to be negatively inclined to at least one aspect of globalization—that is, immigration. In the present study, the researchers hypothesized that this relationship would also help explain attitudes toward globalization more broadly. Specifically, they proposed that attitudes toward globalization would be more positive when people feel a sense of economic security—in their own income and job, as well as in their nation's economic situation—and cultural security (i.e., when people do not feel that their way of life needs to be protected from foreign influence). The researchers also addressed the role of the socioeconomic climate of countries in which people live, as indicated by the United Nations' Human Development Index (HDI).

### What did the researchers do and find?

The researchers analyzed data collected by the Pew Global Attitudes Project, comprising the responses of 34,073 individuals from 42 countries in 2002, and 22,500 people from 25 countries in 2009. Consistent with expectations, people expressed more favourable attitudes toward globalization when they felt relatively satisfied with their personal economic situation and felt that the economic situation and prospects of their nation were relatively good. Averaged at the country level, perceived national economic security (in 2002) and perceived personal economic security (in 2009) were associated with more positive attitudes toward globalization. Two additional effects showed that the relationship between perceived security and openness toward aspects of globalization depends on the socioeconomic status of the country: (a) feelings of national economic security were more positively associated with attitudes toward globalization for individuals in higher-HDI countries; and (b) the relationship between feelings of cultural security and attitudes toward globalization was negative in lower-HDI countries, and positive in higher-HDI countries.

### What do these findings mean?

These findings confirm that a sense of economic security, at both personal and collective levels, was associated with people's inclination to say that globalization was a "good thing" for them and their family. They suggest that economic security (or threat) is more strongly related to social attitudes in more socioeconomically developed countries. The way that feelings of cultural security may inform openness to globalization also depends on socioeconomic development. The results contribute to analyses of sociopolitical dynamics in the context of recent events (e.g., "Brexit"), which have been taken by some to signal a new era of "deglobalization."

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The global economy routinely occupies news headlines, often characterized by states such as "uncertainty," "crisis," and "turmoil." As these terms suggest, the globalized world is often portrayed and perceived as a threatening place; however, it is also a potential source of individual and collective opportunities. Indeed, every facet of globalization processes—e.g., economic, cultural, technological, political—can conceivably have double-edged effects in terms of perceptions and reactions (Chiu, Gries, Torelli, & Cheng, 2011). In this article we examine attitudes toward globalization using data collected by the Pew Global Attitudes Project (2002, 2009), with an approach that incorporates both person-level and country-level variables. Our purpose is to address a question that has so far been used to explain intergroup attitudes: Does people's sense of security inform their openness to economic integration and other cross-national ties encouraged by globalization?

Whereas there is no single definition of globalization, there is agreement that it involves multiple forms of connection between nations, such that "goods, capital, people, knowledge, images, communications, crime, culture, pollutants, drugs, fashions, and beliefs all readily flow across territorial boundaries" (McGrew, 1992, pp. 65-66). These intensifying interconnections take place at a number of levels of analysis, and they have important implications for attitudes, identities, and behaviour. Thus, social psychological concepts and theories, especially those associated

with intergroup relations, can help explain various individual and collective responses to globalization (e.g., Berry, 2008; Chiu et al., 2011; Reese, Rosenmann, & Cameron, 2019).

## Responses to Globalization

Social scientists attribute both positive and negative outcomes to globalization processes in economic, political, and social spheres. Whereas there is evidence that such processes broadly contribute to human welfare (Mukherjee & Kriekhaus, 2012; Tsai, 2007), given the vastly different circumstances of people's lives—due to personal wealth or collective prosperity, or various aspects of social and economic development—there is no expectation that globalization processes will be uniformly experienced within or across nations (e.g., Suryadinata, 2000). Indeed, globalization continues to be “a deeply divisive and, consequently, vigorously contested process” (Held & McGrew, 2003, p. 1) because some actors stand to gain (or lose) more than others.

What do people think about globalization? Whereas the results of several large-scale international surveys conducted by the *Pew Research Center's Global Attitudes Project* (2003, 2007) show international variability in feelings about globalization, the prevailing view has tended toward the positive: “people almost everywhere like globalization” (2003, p. 71). Other aspects of the Pew Center's data suggest that this is partly because perceived improvements (e.g., the availability of food and medicine) are attributed to global interconnectedness. On the other hand, cultural insecurity was pervasive: majorities in most countries felt that their traditional way of life was threatened, and that immigration should be further restricted and controlled. This is consistent with social and political developments following recent global economic crises, such as protectionist measures by some countries, and shifts toward right-wing parties and away from supranationalism in Europe (e.g., Saunders, 2009; Reese & Lauenstein, 2014). These patterns indicate the complex nature of responses to various aspects of globalization processes (e.g., international trade, travel, and the availability of foreign products), and highlight the concept of *security* (or, conversely, threat) as a variable that might help elucidate them.

## Threat, Security, and Attitudes Toward Globalization

According to intergroup threat theory (Stephan & Stephan, 2000; Stephan, Ybarra, & Morrison, 2009), perceived collective threats fall into one of two broad categories: *realistic threats*—those that might diminish “a group's power, resources, and general welfare” (Stephan et al., 2009, p. 44)—and *symbolic threats* to the group's ideology or worldview. A great deal of evidence supports the link between perceived threat and negative intergroup attitudes, emotions, and behaviour, and it is particularly well-established as an explanation of attitudes toward immigration and immigrants (e.g., Esses, Jackson, & Armstrong, 1998; Fasel, Green, & Sarrasin, 2013; Green, 2009).

The general association between perceived threat and responses toward outgroups and their members—that is, “when one's identity is threatened, people will reject others” (Berry, 2006, p. 729)—provides a basis for establishing expectations about attitudes toward globalization. More specifically, given that the international migration of individuals can be regarded as one facet of globalization, it is not a large conceptual leap to hypothesize that perceived threat predicts responses to other kinds of ties with (e.g., via trade), and influences from (e.g., food and media), other countries. Indeed, threat, particularly in its symbolic forms, is central to recent social psychological analyses of different reactions to cultural influences facilitated by globalization (e.g., Chiu & Cheng, 2010; Chiu et al., 2011; Reese et al., 2019). In particular, whereas threat perceptions are likely to be associated with *exclusionary* responses to global culture, including the separation and reaffirmation of heritage culture (Berry, 2008), *integrative* responses “facilitate the use of ideas from foreign cultures as means or resources to further one's valued goals” (Chiu et al.,

2011, p. 669). Thus, the distinction between exclusion and integration corresponds to that between the rejection of, and the openness to, the possible varieties of inflow from outside national boundaries.

Social psychological work on responses to globalization has focused on their symbolic or cultural aspects, but realistic threat can be particularly salient during periods of economic uncertainty. Exclusionary responses to realistic threat can be regarded in terms of economic nationalism (e.g., [Macesich, 1985](#)) expressed both collectively (e.g., in the establishment of protectionist economic policies) and individually (e.g., in “consumer ethnocentrism”; [Shimp & Sharma, 1987](#)). Evidence that perceived economic threat (e.g., job insecurity) is a good predictor of individual-level economic nationalism (e.g., attitudes toward trade protection; [Baughn & Yaprak, 1996](#)), suggests that realistic threat is associated with negative responses to other aspects of globalization as well (e.g., foreign products).

In summary, the extent to which people feel threatened or secure in their cultural and economic existence provide keys to understanding their receptivity to (or rejection of) the cross-national connections fostered by globalization: the less threatened people feel, the more they will tend to be open to foreign corporations, products, food, and media from other countries. In the present analysis, we make no conceptual distinction between “threat” and “(in)security,” and we use the latter term to denote specific operationalizations of: (a) *economic security* (i.e., the sense that one’s personal and/or collective economic status is satisfactory, and not likely to be imperiled in the foreseeable future) and (b) *cultural security* (i.e., the feeling that one’s heritage identity is robust in the current intergroup and/or sociopolitical context; see [Berry, 2006, 2017](#)). Varieties of security have also long comprised a central thread of development-related discourse. Indeed, economic and cultural security correspond to 2 of the 7 facets of “human security” identified by the United Nations (the others are food security, health security, environmental security, personal security, and political security; [United Nations Development Programme, 1994](#)). Inherent in this framework is the notion that security and vulnerability are shaped by broad forces as well as local conditions. Accordingly, we incorporate country-level variables to examine their effects on attitudes toward globalization as well as their potential moderating influences on the effects of individual-level security perceptions.

## The Role of Country-Level Variables

Intergroup threat theory recognizes that threat can be experienced at both individual and collective (e.g., national) levels ([Stephan et al., 2009](#)). For example, whereas individuals have idiosyncratic circumstances (e.g., their employment status, income, and family situation) that contribute to their subjective security, these are embedded within the wealth and socioeconomic climate of their country. The ways in which responses to globalization are shaped by country-level variables such as development status are unclear, because of the variety and complexity of potential mechanisms involved, and because there have been very few empirical examinations of them. However, there are some reasons to believe that the possible rewards (and costs) of globalization are not distributed symmetrically in more and less developed nations, given different socioeconomic contingencies.

Macro-level variables such as Gross Domestic Product (GDP) can be regarded as proxies for security at the country level ([Green, 2009](#)), such that wealthier nations might provide the conditions for more openness to inflows of people and products from other countries. In accordance with this, an analysis of attitudes toward immigration among 20 European countries found that lower GDP was associated with support for tighter requirements on the admission of newcomers ([Green, 2009](#)). This mirrors our expectation of a positive relationship between individual-level economic security and attitudes toward globalization.

Other structural factors may also influence how individuals' sense of security shapes their attitude toward globalization. According to economic norms theory (Mousseau, 2000), for example, many developing societies can be characterized as having clientelist economies—those based on informal networks involving exchanges between social ties within groups defined by families or other in-groups—in which individuals with privileged positions in the traditional hierarchy might be most threatened by market liberalization. For these individuals, the cultural or economic security afforded by their traditional networks could disincline them toward other opportunities associated with globalization. This implies a joint effect of security and development status, such that the relationship between security and attitude toward globalization is less positive (or even negative) in developing societies.

Two prior multilevel analyses of relevant issues (Ariely, 2012; Green, 2009), did not specifically examine attitudes toward globalization, but they convey additional complexities involving the interplay of psychological variables and country-level indicators. Green's (2009) study showed that perceived threat by individuals more strongly predicted attitudes toward immigration in higher-GDP European nations than in lower-GDP ones. Similarly, Ariely's (2012) analysis of data from 31 nations involved in the International Social Survey Program indicated that GDP per capita moderated the relationships between aspects of collective sentiment (nationalism and constructive patriotism) and xenophobia. For example, the relationship between individual-level nationalism and xenophobia was stronger in countries with higher levels of globalization and GDP. On this basis he speculated that experiences associated with globalization sensitize people to intergroup differences and similarities vis-à-vis the national in-group.

These patterns are consistent with a general tendency for higher-power group members to react more strongly to perceived threat than their lower-power counterparts (Riek, Mania, & Gaertner, 2006), perhaps reflecting both their greater capacity for loss of power, and their resources to defend against the threat (Stephan et al., 2009). However, at the country level, lower levels of GDP (or socioeconomic development in general) may confer higher levels of contextual threat (Green, 2009). Of course, attitudes toward immigration may also be shaped by different factors than are responses to other aspects of globalization.

To examine these complexities with respect to attitudes toward globalization, we employed a multi-level analysis that included indexes of both economic and cultural security, and that evaluated their aggregated (country-level) effects, in addition to that of socioeconomic development. We reasoned that the Human Development Index (HDI)—a composite of life expectancy, education, and gross national income per capita—has the advantage of reflecting life circumstances relevant to a range of concerns that extend beyond economic ones (it is “the best measure we have to index the extent to which a society is able to fulfill the basic needs of its citizens”; Liu & Sibley, 2012, p. 193). Following prior multilevel analyses (Ariely, 2012; Green, 2009), we evaluated the effect of HDI as both an index of macro-level threat, and as a moderator of the relationships between individual-level economic and cultural security and attitudes toward globalization.

## This Study

Archival data collected by the Pew Research Center's Global Attitudes Project (2002, 2009) provide an opportunity to analyze attitudes toward globalization on a large, international scale. Their surveys occasionally focus on issues related to globalization, and include items that correspond closely to economic security (i.e., judgments about current personal and national economic situations) and cultural security, or conversely, perceived threat from sources outside national borders. Our basic hypotheses follow from intergroup threat theory: the more secure people feel, both economically and culturally, the more they will be receptive to various connections between their

country and other countries. Economic security was assessed with respect to both personal security (e.g., as indexed by income) and perceptions about the national economic situation. In each of the 2 datasets we analyzed (2002 and 2009), there were 2 items referring specifically to economic aspects of globalization (e.g., “growing trade and business ties” between countries). However, the 2002 survey contained additional items assessing attitudes toward communication and travel between nations, as well as the increasing availability of media and products from other countries. Thus, our analyses focus on the larger measure from 2002—allowing a broader operationalization of attitudes toward globalization—and the 2-item measure from 2009.

We used a multilevel approach to evaluate the potential effects of a number of country-level variables: the HDI, as well as aggregated versions of economic and cultural security. Although our approach was more exploratory here, previous theory and research suggests that: (a) overall, people in lower-HDI countries might be less receptive to various aspects of globalization (Green, 2009); (b) HDI moderates the relationship between individual-level security and attitude toward globalization (Green, 2009; Mousseau, 2000); and (c) individual-level security might more strongly inform attitudes toward globalization in countries with higher levels of socioeconomic development (Ariely, 2012) and/or countries with higher average levels of personal and national economic security.

## Method

### Procedure and Respondents

Directed by Princeton Survey Research Associates, local survey organizations in the Americas, Africa, Europe, the Middle East, Asia, and Australia conducted telephone or face-to-face interviews during July-October, 2002 and May-June 2009. For the 2002 and 2009 surveys, analyses are based on the responses of 34,073 individuals from 42 countries, and 22,500 from 25 countries, respectively (there was a country overlap of 88% between the samples). Samples were nationally representative, except for 15 nations in 2002 and 4 in 2009, in which respondents were mostly urban (see [Supplementary Materials](#) for sample sizes and descriptive statistics).

### Measures

#### Demographic Variables

We included 3 demographic variables from the 2002 and 2009 PEW datasets: sex (coded males = 0, females = 1), age, and personal income. Personal income was standardized within country.

#### Cultural Security

We used one item common to the 2002 and 2009 datasets as an indicator of cultural security: “Our way of life needs to be protected against foreign influence.” The original 1 to 4 scale (from *completely agree* to *completely disagree*) was reversed, so that higher scores indicate a higher degree of cultural security.

#### Personal Economic Security

To create a measure of personal economic security, we averaged respondents’ satisfaction with (a) their household income, and (b) their job. Scores are interpreted along a 4-point scale, from *very dissatisfied* to *very satisfied*. Correlations between these items were .69 in 2002 and .70 in 2009.

### National Economic Security

We created an index of (perceived) national economic security by averaging responses to 3 items: “Now thinking about our economic situation, how would you describe the current economic situation in [survey country]—is it somewhat good, somewhat bad, or very bad?”; “And over the next 12 months do you expect the economic situation in our country to improve a lot, improve a little, remain the same, worsen a little, or worsen a lot?”; and “When children in [survey country] grow up, do you think they will be better off or worse off than people are now?”. As the items were measured on different scales, they were first transformed into z-scores prior to creating the composite. Cronbach’s alpha for this scale was .60 in 2002 and .65 in 2009.

### Attitude Toward Globalization

Two items were common to the 2002 and 2009 surveys: “What do you think about the growing trade and business ties between [survey country] and other countries—do you think it is a very good thing, somewhat good, somewhat bad, or a very bad thing for our country?”; and “Now thinking about you and your family—do you think the growing trade and business ties between our country and other countries are very good, somewhat good, somewhat bad, or a very bad for you and your family?”. The rating scale was 1 (*very good*) to 4 (*very bad*), and reversed for the purposes of the present study so that higher scores indicated more positive attitudes. For the 2002 survey, 6 additional items were included that appeared that year only, referring to people’s feelings about: “the faster communication and greater travel between the people of (survey country) and people in other countries”; “the way movies, TV and music from different parts of the world are now available in (survey country)” (this item was asked twice, in terms of whether participants felt it was good for their country, and for themselves and their family); “the different products that are now available from different parts of the world”; “the world becoming more connected through greater economic trade and faster communication”; and finally “globalization” itself (i.e., “There has been a lot of talk about globalization these days. Do you think that globalization is a very good thing, somewhat good, somewhat bad or a very bad thing?”). The 2 items common to both scales were correlated  $r = .43$ ,  $p < .001$  in 2002 and  $r = .58$ ,  $p < .001$  in 2009. The 2002 8-item measure of attitude toward globalization had a Cronbach’s alpha of .81.

### Country-Level Variable: Human Development Index

HDI values for each country are available via the United Nations Development Programme (<http://hdr.undp.org/en/statistics/>).

## Results

Using HLM Version 7.01 (Raudenbush, Bryk, & Congdon, 2013), we assessed the relationships between economic and cultural security and attitudes toward globalization using a two-level hierarchical linear modeling approach. Age, sex, income, personal economic security, national economic security, and cultural security were centered at country level and tested as predictors at Level 1. HDI and country-level aggregates of personal economic security, national economic security, and cultural security were evaluated as country-level predictors and cross-level moderators of the individual level effects (Level 2). Centering ensured that both person- and country-level effects of the security variables could be assessed orthogonally (Hoffman, 2015).

Model testing proceeded in 7 cumulative steps (see Table 1 and Table 2).

Table 1

Multilevel Analysis of 2002 Attitude Toward Globalization (Countries  $N = 42$ ; Individual Participants  $N = 34,073$ )

Model	Model 1.1	Model 1.2	Model 1.3	Model 1.4	Model 1.5	Model 1.6	Model 1.7
ATTG	3.149***	3.169***	3.168***	3.387***	3.272***	3.185***	3.271***
<b>IL Variable</b>							
Sex		-0.041***	-0.040***	-0.040***	-0.040***	-0.038***	-0.038***
Age		-0.004***	-0.004***	-0.004***	-0.004***	-0.004***	-0.004***
Income		0.018*	0.010	0.010	0.010	0.009	0.009
CS_IL			0.009	0.009	0.009	0.006	-0.230***
PES_IL			0.046***	0.046***	0.046***	0.046***	0.080
NES_IL			0.307***	0.307***	0.307***	0.310***	0.000
<b>Country-Level Variable</b>							
HDI				-0.309*	-0.122	-0.122	-0.122
CS_CL					-0.127	-0.127	-0.127
PES_CL					0.085	-0.085	-0.085
NES_CL					0.457*	0.457*	0.457*
<b>Cross-Level Interaction</b>							
HDI x CS_IL						0.282***	0.340***
HDI x PES_IL						0.017	-0.047
HDI x NES_IL						0.337**	0.441*
CS_CL x CS_IL							-0.060
CS_CL x PES_IL							0.054
CS_CL x NES_IL							0.005
PES_CL x CS_IL							0.047
PES_CL x PES_IL							-0.026
PES_CL x NES_IL							-0.146
NES_CL x CS_IL							0.113
NES_CL x PES_IL							-0.051
NES_CL x NES_IL							-0.076
AIC	52305.6	48258.0	42737.0	42733.9	42738.5	41736.6	41746.6
BIC	52331.2	48309.1	42812.9	42818.3	42848.2	41922.2	42008.1
Deviance	44723.1	44009.9	42773.4	42769.7	42772.9	42473.2	42421.5
ΔDeviance ( <i>df</i> )	–	713.2 (3)***	1236.5 (3)***	3.7 (1)	-3.2 (3)	299.7 (3)***	51.7 (9)***
-2LL	-22362	-22005	-21387	-21385	-21386	-21237	-21211
IL Error	0.216	0.212	0.204	0.204	0.204	0.202	0.201
IL Pseudo $R^{2a}$	–	.02	.06	.06	.06	.06	.07
CL Error	0.034	0.035	0.034	0.030	0.031	0.031	0.031
CL Pseudo $R^2$	–	0	0	.12	.09	.09	.09

Note. Fixed effects estimated using robust standard errors. ATTG = 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.

<sup>a</sup>Effect 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).

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . Individual-level predictors centered at their country mean.

Table 2

Multilevel Analysis of 2009 Attitude Toward Globalization (Countries  $N = 25$ ; Individual Participants  $N = 22,550$ )

Model	Model 2.1	Model 2.2	Model 2.3	Model 2.4	Model 2.5	Model 2.6	Model 2.7
ATTG	3.07***	3.08***	3.08***	3.31***	3.38***	3.38***	3.38***
<b>IL Variable</b>							
Sex		-0.032***	-0.033**	-0.033**	-0.033**	-0.033**	-0.034**
Age		0.000	0.000	0.000	0.000	0.000	0.000
Income		0.053***	0.032***	0.032***	0.032***	0.031***	0.030***
CS_IL			0.000	0.000	0.000	-0.267***	-0.043
PES_IL			0.066***	0.066***	0.066***	0.069	0.065
NES_IL			0.484***	0.484***	0.484***	0.413	0.405
<b>Country-Level Variable</b>							
HDI				-0.301	-0.379	-0.378	-0.378
CS_CL					-0.076	-0.076	-0.075
PES_CL					0.374**	0.374**	0.374**
NES_CL					0.122	0.122	0.122
<b>Cross-Level Interaction</b>							
HDI x CS_IL						0.358	0.040
HDI x PES_IL						-0.006	0.002
HDI x NES_IL						0.089	0.139
CS_CL x CS_IL							0.213**
CS_CL x PES_IL							0.033
CS_CL x NES_IL							0.196
PES_CL x CS_IL							0.053
PES_CL x PES_IL							-0.043
PES_CL x NES_IL							-0.322*
NES_CL x CS_IL							-0.084
NES_CL x PES_IL							0.147
NES_CL x NES_IL							0.701*
AIC	50211.6	44968.7	42814.5	42810.3	42809.1	42348.3	42351.5
BIC	50236.1	45017.0	42886.7	42890.5	42913.5	42524.9	42600.3
Deviance	44004.2	43864.8	42855.0	42856.4	42848.3	42766.1	42671.8
$\Delta$ Deviance ( $df$ )	-	139.4 (3)***	1009.8 (3)***	-1.4 (1)	8.1 (3)*	82.2 (3)***	94.3 (9)***
-2LL	-25103	-22478	-21398	-21395	-21392	-21152	-21145
IL Error	0.410	0.407	0.389	0.389	0.389	0.387	0.385
IL Pseudo $R^{2a}$	-	.01	.05	.05	.05	.06	.06
CL Error	0.034	0.035	0.034	0.034	0.024	0.024	0.024
CL Pseudo $R^{2}$	-	0	.04	.04	.29	.29	.29

Note. Fixed effects estimated using robust standard errors. ATTG = 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.

<sup>a</sup>Effect 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).

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . Individual-level predictors centered at their country mean.

First, intercepts-only models established the intra-class correlations (Models 1.1 and 2.1 for 2002 and 2009). The intercepts-only models tested at the first step indicated that attitude toward globalization (ATTG) scores differed significantly among countries in both 2002 and 2009. Intraclass correlation coefficients showed that in 2002 (and

2009) between-country differences accounted for 14% (and 8%) of variance in ATTG scores. Given these modest proportions of variance at the between-country level, we determined that multilevel modeling was justified.

Next, the study variables were added to the models in a stepwise manner: individual-level demographic control variables (Models 1.2 and 2.2); individual-level economic and cultural security variables (Models 1.3 and 2.3); country-level variables (HDI only, Models 1.4 and 2.4; country-level aggregates of the security variables added at Models 1.5 and 2.5); cross-level interactions of HDI with individual-level economic and cultural security (Models 1.6 and 2.6); and cross-level interactions of all country-level aggregates with the individual-level security variables (Models 1.7 and 2.7). Inclusion of variables or interactions in all the steps improved the model fit over the previous models in terms of lower BIC and AIC values and a significant deviance test except for the Models 1.4 and 1.5 in 2002, and Model 2.5 in 2009. These models included main effects of the country-level variables. However, in the next steps, inclusion of the cross-level interactions with these country-level variables improved the model fit (for the details of the model fit statistics, reduction in error and explained variances, see [Table 1](#) and [Table 2](#)).

Finally, the random effect of each person-level variable was tested in sequence (Models 1.8/2.8 to 1.13/2.13) to produce significance tests of the deviances for the variance components (see [Supplementary Materials](#)).

### Fixed Effects of Control Variables

Sex was significantly related to attitude toward globalization in both 2002 and 2009, with men in both datasets tending to be more favourably inclined toward aspects of globalization than women. Age was a significant predictor of ATTG in 2002 but not 2009, with younger people endorsing more positive attitudes toward globalization in that year. Income was a significant predictor of ATTG in both 2002 and 2009, with higher levels of household income associated with more positive attitudes toward globalization.

### Fixed Effects of Economic Security and HDI

Consistent with hypotheses, higher levels of perceived individual-level personal and national economic security were associated with more favourable attitudes toward globalization in both datasets (see Models 1.3 and 2.3). At the country level, HDI was a significant predictor of attitudes toward globalization in 2002 (Model 1.4), with higher HDI associated with more positive attitudes. When the aggregated security variables were added, the effect of HDI was supplanted by a significant positive effect of country-level national economic security in 2002 (Model 1.5). In the 2009 dataset, HDI was not significant (Model 2.4). However, country-level personal economic security was a significant positive predictor of attitudes toward globalization in 2009 (Model 2.5).

The HDI x Individual-Level National Economic Security cross-level interaction was significant in 2002. HDI moderated the positive relation between individual-level national economic security and attitude toward globalization, such that feelings of national economic security were more positively related with attitudes toward globalization for individuals in higher-HDI countries (high HDI:  $b = 0.36$ ,  $p < .001$ ; mid-HDI:  $b = 0.33$ ,  $p < .001$ ; and low-HDI:  $b = 0.26$ ,  $p < .001$ ; see [Figure 1](#)).

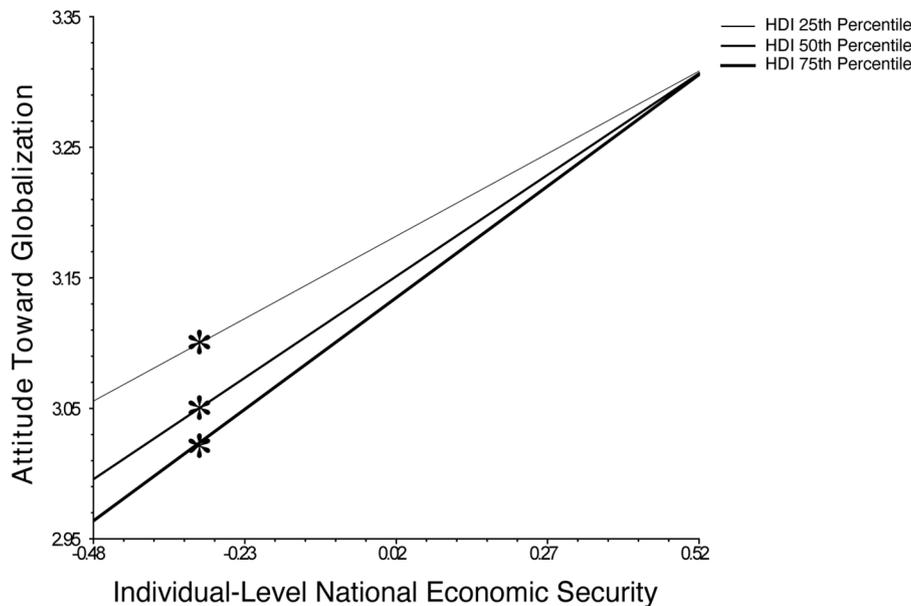


Figure 1. HDI moderates the relation between individual-level national economic security and attitude toward globalization (2002).

\* $p < .001$ .

In 2009, while there were two significant cross-level interactions, the simple slopes were not significant in either case. First, there was a joint effect of country-level and individual-level national economic security (for countries with higher aggregated personal economic security,  $b = 0.40$ ,  $p = .11$ ; for countries at the mid-level,  $b = 0.34$ ,  $p = .20$  at the 50<sup>th</sup> percentile; and for countries at the lower level,  $b = 0.30$ ,  $p = .28$  at the 25<sup>th</sup> percentile). Secondly, there was a joint effect of country-level personal economic security and individual-level national economic security (for countries whose citizens experienced lower personal economic security,  $b = 0.45$ ,  $p = .07$ ; for countries at the mid-level,  $b = 0.41$ ,  $p = .10$ ; and for countries at the higher level of aggregated personal economic security,  $b = 0.36$ ,  $p = .17$ ). Given the large sample size and the marginal significance values, we do not interpret these interactions.

### Fixed Effects of Cultural Security

Cultural security was not a significant predictor of ATTG at the individual level in either year. However, HDI significantly moderated the Level 1 beta for cultural security in 2002. An analysis of the simple slopes indicated that for people in less developed countries, a stronger sense of cultural security was associated with more negative attitudes toward globalization,  $b = -0.03$ ,  $p = .007$ , whereas for people in more highly-developed countries, stronger cultural security was associated with more positive attitudes toward globalization,  $b = 0.05$ ,  $p = .005$ ; at the mid-range of HDI, there was a positive but nonsignificant trend,  $b = 0.02$ ,  $p = .10$  (see Figure 2).

In 2009, there was also a significant joint effect of aggregated cultural security and individual-level cultural security; however, given that the individual slopes were not significant (lower cultural security,  $b = -0.06$ ,  $p = .45$ ; mid-range cultural security,  $b = -0.03$ ,  $p = .75$ ; and higher cultural security,  $b = 0.001$ ,  $p = .96$ ), its meaning is uncertain.

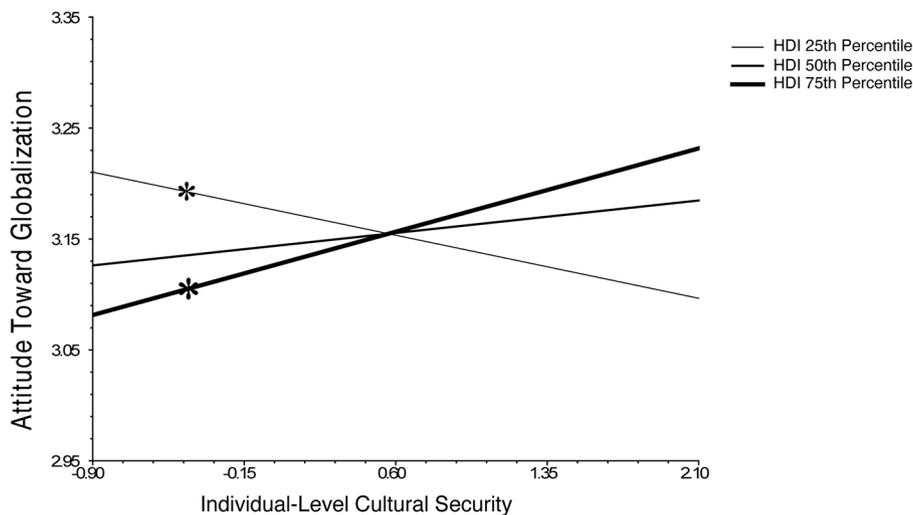


Figure 2. HDI moderates the relation between individual-level cultural security and attitude toward globalization (2002).

\* $p < .01$ .

## Explained Variances

Demographic variables accounted for 2% and 1% of the variance in ATTG in 2002 and 2009. Individual level security variables explained 4% of individual-level variance in attitudes in both 2002 and 2009. Country level variables explained 9% (of the 14%) variance at the country level in 2002 and 29% (of the 8%) variance at the country level in 2009. The interactions did not explain any additional variance in either dataset.

## Random Effects

Notable is that virtually all random effects of the Level 1 variables were significant, indicating that in both 2002 and 2009, the relationships between ATTG and the Level 1 predictors (age, sex, income, cultural security, personal economic security, and national economic security) differed significantly by country (see [Supplementary Materials](#) for 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.

## Robustness Check

To demonstrate the robustness of this between-year comparison, we tested all 2002 models using the reduced, 2-item version of the 2002 ATTG measure. The pattern of results for the two indexes of ATTG was the same (see [Supplementary Materials](#) for the full results of Models 3.1 to 3.7 of the 2-item 2002 ATTG measure, tested in the same sequence as the previous two sets of models).

## Discussion

The proliferation of international connections and foreign products—along with their symbolic connotations and realistic implications—can be met with varying degrees of reception or resistance (e.g., [Berry, 2008](#); [Chiu & Cheng, 2010](#); [Chiu et al., 2011](#)). This is particularly apparent in the context of recent events—most notably, the outcomes

of the “Brexit” referendum and the U.S. presidential election in 2016—which have been taken by some to signal a new era of “deglobalization.” Explanations of this discontent have focused less on traditional left/right politics than on the economic and cultural (in)security of those who are relatively “open” or “closed” to globalization (e.g., Inglehart & Norris, 2016; “The new political divide,” 2016).

In this study, we used intergroup threat theory (Stephan & Stephan, 2000; Stephan et al., 2009) to establish the basic expectation that people who feel more secure, both economically and culturally, will be more open to different aspects of globalization. We also took a multilevel approach with the recognition that whereas security is experienced by individuals, its expression and outcomes are shaped by the macro-socioeconomic circumstances in which they live (e.g., Green, 2009). We examined country-level variables in two ways: (a) by assessing the role of development status, including its possible moderation of the relationship between individual-level security and attitudes toward globalization; and (b) by evaluating analogous effects involving aggregated economic and cultural security.

### Effects of Economic Security

Elements of economic security, at both personal and collective levels, were associated with people’s inclination to say that aspects of being connected to other countries was a “good thing” for them and their family. At the individual level, the effects of personal economic security and perceived national economic security were significant across the survey years. Whereas these findings are consistent with our general expectations, and, more specifically, with previous work on economic nationalism (i.e., ingroup-favouring economic policies and decisions by nations and their citizens; Baughn & Yaprak, 1996), it is worth noting that they are not limited to strictly economic facets of globalization (e.g., trade and business ties). Rather, the same patterns hold when (as in the 2002 dataset) attitudes are assessed with respect to other sorts of international connections (e.g., via travel and communication).

Previous multilevel analyses of immigration-related attitudes indicated that (a) people in wealthier nations tended to be more open to newcomers (Green, 2009); and (b) some individual-level effects (including that of perceived threat) were stronger in countries with higher levels of GDP (Ariely, 2012; Green, 2009). We found some analogous country-level effects with respect to attitudes toward globalization in both surveys. In 2002, consistent with the notion that national wealth contributes to collective economic security, higher levels of socioeconomic development (as indicated by HDI and aggregated perceptions of national economic security) were associated with more positive attitudes toward globalization. Moreover, and only in 2002, individual-level perceptions of the economic security of their nation were more strongly predictive of attitudes toward globalization in higher-HDI countries (Figure 1). In parallel, in 2009, higher levels of aggregated perceptions of personal economic security (rather than national economic security) were associated with more positive attitudes toward globalization.

These findings thus confirm that openness toward globalization is aided by economic security at both individual and collective levels. For individuals, this security reflects not only their personal economic situation, but also the perceived prosperity and economic prospects of their country. At a macro-social level, the results add to previous research by demonstrating that perceptions of economic security may operate differently depending on the socioeconomic status of the nation; that is, the predictive effect of aggregated national economic security was amplified in more developed countries (at least in 2002).

One implication is that when people feel that their nation’s economic prospects are threatened (e.g., during or following an economic recession), the negative impact of this on attitudes toward globalization may be more evident in wealthier (and/or more modernized) nations. This is broadly consistent with the possibility (Ariely, 2012) that in

more developed and globally connected countries, people are more sensitive to both opportunities and threats beyond national borders.

It is unclear why the pattern of effects pertaining to aggregated perceptions of economic security differed across the survey years; that is, at the country level, national economic security seemed to matter more in 2002, whereas personal economic security predicted attitudes toward globalization in 2009. One possibility is that changing dynamics in the global economy, and specifically the effects of the Great Recession (which began in late 2007), brought economic and related sociopolitical issues into focus at a more personal level. This is consistent with the fact that personal economic security was indexed here in more immediate terms (e.g., satisfaction with income) that could be tangibly affected by a downturn in the economy.

## Effects of Cultural Security

Contrary to our expectations, there were no individual-level effects of cultural security on attitudes towards globalization. This suggests that the potential effects of cultural security need to be interpreted with respect to the socioeconomic conditions of the country. Indeed, in the 2002 sample, as seen in [Figure 2](#), the predicted positive association between cultural security and attitude toward aspects of globalization was evident only for nations with higher HDI values; for lower-ranked nations, the relationship was negative. At first glance, this second effect—people who feel their way of life is more secure are less open to various connections with other countries—seems counterintuitive. However, one interpretation follows from economic norms theory ([Mousseau, 2000](#)), which differentiates developing economies from liberalized ones in terms of the kinds of relationships in which economic exchange is embedded. In clientelist societies, where such exchange is conducted within historically established informal networks, commerce and culture can be more conflated than in market-based economies. Thus, it is possible that for (some) people in developing economies, subjective cultural security means that one need not look to the outside world for either economic opportunity or symbolic resources ([Chiu et al., 2011](#)). Put another way, if the “winners” of globalization are disproportionately represented by the young and mobile (and male), those who have less to gain can include traditionally powerful groups “who still keep to national and territorial identities and who need the shelter of the nation-state” ([Beck & Sznaider, 2010](#), pp. 642-643).

## Limitations and Implications

The model offered by the present analyses is a simple one, and although it reflects people’s perceptions of their local situations, it is also necessarily abstracted from those particularities. Survey research of this kind typically has the advantage of breadth, but not fidelity, and this is reflected in the poor reliabilities of some variables. Similarly, the operationalizations of economic and cultural security in the Pew surveys are relatively crude. Indeed, U.N.-derived notions of security have been criticized as being inconsistently and vaguely defined (e.g., [Kirby, 2010](#)), and this should encourage social psychologists to develop measures that capture aspects of security (or threat) that are relevant to globalization processes (e.g., those associated with climate, technology, infectious disease, and terrorism).

The relatively small amounts of variance accounted for is another indication that many other processes and relationships must come into play. For example, the content of the Pew surveys did not allow analyses of the strength and meaning of collective identities at cultural, national, or transnational levels, which are notable omissions from a social psychological perspective. Similarly, it will be important to attend to more ideologically-saturated attitudes and beliefs (e.g., regarding global social inequality) that might encourage collective action in the global arena

(e.g., Liu & Sibley, 2012). Nevertheless, the results suggest that security, at both individual and collective levels, can inform analyses of when and why people might accept or reject the cultural influences and interconnections that globalization make increasingly available. Whereas previous evidence exists with regard to the effect of realistic threat on attitudes toward immigration (e.g., Green, 2009), we are aware of no comparable analysis of attitudes toward globalization.

The results suggest that, in a world where the “winners” and “losers” of globalization comprise a dynamically shifting field (one not neatly mirrored by individual or national socioeconomic status), country-level representations of security can usefully index the social psychological “climate” of nations. Thus, a collective sense of economic prosperity, or a general feeling that the national “way of life” is secure (or not), may have implications that GDP or development status do not. With respect to the effects involving the HDI, as with similar analyses involving country-level indicators (e.g., GDP), it is impossible to know what particular elements of socioeconomic development (which tend to be highly correlated with each other) might underlie them (see Ariely, 2012). Similarly, it is also not possible to determine which factors specific to the times of the two Pew surveys (which also targeted different countries) may have played a role, such that different types of threat and security were heightened on a global scale. In any case, our interpretations are necessarily limited by our inability to analyze any dynamic and causal processes over time.

## Conclusion

The results confirm that people have favourable views about globalization partly to the extent that they feel secure about their economic situation, and, depending on macro-social variables, their way of life. If globalization remains “an idea in search of a theory” (McGrew, 2001, p. 293), then social psychological processes will remain a key part of understanding people’s perspectives on their place in the world.

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## Competing Interests

The authors have declared that no competing interests exist.

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## General Note

The Pew Research Center’s Global Attitudes Project bears no responsibility for the interpretations presented or conclusions reached based on analysis of the data.

## Supplementary Materials

The supplementary materials file contains descriptive statistics by country, model comparisons for random slopes for Level 1 variables, and the multilevel analysis of the 2002 2-item measure of ATTG (for access see Index of [Supplementary Materials](#) below).

### Index of Supplementary Materials

Cameron, J. E., Kocum, L., & Berry, J. W. (2020). *Supplementary materials to "Security and attitudes toward globalization: A multilevel analysis"* [Descriptive statistics and additional analysis]. *PsychOpen*. <https://doi.org/10.23668/psycharchives.4315>

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