

Submitted: 10 January 2018; Accepted: 12 March 2018

DATA-SURVEY

Migrant Acceptance Index: A Global Examination of the Relationship Between Interpersonal Contact and Attitudes toward Migrants

John H. Fleming[†]
Neli Esipova
Anita Pugliese
Julie Ray
Rajesh Srinivasan

Abstract

Using independently sampled Gallup World Poll survey data from 140 countries, we explored the relationship between interpersonal contact and attitudes toward migrants from a perspective not typically found in the social psychological literature. We hypothesized that respondents who report personally knowing a migrant living in their home country would be more accepting of migrants generally (using a three-item Migrant Acceptance Index (MAI) score) than respondents who do not know a migrant. Results supported our hypothesis in 134 of the 140 countries suggesting that the strong relationship between interpersonal contact and attitudes toward migrants is near-universal. We also quantified migrant acceptance at the country level, finding a wide spectrum of attitudes toward migrants. Low acceptance countries were located primarily in Eastern and Southeastern Europe and high acceptance countries were located in Northern Europe and sub-Saharan Africa. We discuss these results in the context of interpersonal contact theory (Allport, 1954) and the larger context of global migration.

Keywords: migrant acceptance; attitudes; interpersonal contact; Gallup World Poll.

Introduction

Few issues have captured the world's attention recently more than immigration. From both a social and political perspective, migrants¹ – the economic benefits they bring, the potential threats they may pose, how governments should handle them, how they are perceived by citizens, and whether those citizens accept them – are of critical importance to the countries they affect. Migrants and immigration policy figured prominently in recent elections in the United Kingdom, the Netherlands, the United

[†] Corresponding author is John H. Fleming, Ph.D., Chief Scientist, Gallup, The Gallup Building, 901 F Street NW, Washington, DC 20004, United States. Neli Esipova and Rajesh Srinivasan are Regional Research Directors for the Gallup World Poll. Anita Pugliese is Director of Quality and Julie Ray is a writer and editor for the Gallup World Poll.

Acknowledgement: The authors gratefully acknowledge the helpful comments of Joel Cooper and Jonathan Rothwell on an earlier version of this paper.

¹ Consistent with its use in the migrant population literature and by the UN and World Bank, we use the term "international migrant" in this paper to refer to "a person who is living in a country other than his or her country of birth" (UN DESA, 2016, p. 4). Occasionally, and specifically when referring to questions asked in the World Poll, we use the term "immigrant" and "international migrant" interchangeably. This usage differs slightly from more conventional uses of these terms where "migrants" may refer to persons who migrate either within or across country borders in search of work and have no fixed address and "immigrants" which refers to persons who intend to establish permanent residence in a country other than their country of birth. For a detailed treatment of terminology, see: <https://www.iom.int/key-migration-terms>.



States, France, and Germany and could have a major impact on coming elections in other countries.

One influential social psychological theory sheds some light on how migrants are perceived by those who choose to – or choose not to – interact with them. Allport's (1954) interpersonal contact theory states that direct interpersonal contact with members of minority and other social groups is one of the most effective ways to reduce stereotyping, prejudice, and intergroup conflict. By inference, direct interpersonal contact with migrants ought to reduce stereotyping and prejudice against them and ease their transition and integration into the social fabric of their adopted countries. In this research, we explored the relationship between interpersonal contact and attitudes toward migrants from a perspective not typically found in the social psychological literature. Specifically, we analyzed independently sampled survey data from 140 countries provided by the Gallup World Poll.

The interpersonal contact effect has been documented empirically in a wide variety of settings, including both field and experimental studies, in a variety of situations, and with a range of social groups (Pettigrew & Tropp, 2006; 2008, 2011). Pettigrew and Tropp (2006) conducted an expansive meta-analysis of the existing interpersonal contact literature that included 515 different published studies using rigorous selection criteria and careful classification of the parameters of each study. By doing so, Pettigrew and Tropp (2006) were able to explore a wide range of questions about the validity of interpersonal contact theory across settings as well as methodological concerns present in previous meta-analyses of the effect.

Contact hypothesis studies have varied in terms of the characteristics of the interpersonal setting; whether the study was a laboratory experiment, a quasi-experiment (Campbell & Stanley, 1963), a survey, or field research; whether contact was face-to-face or removed; direct or indirect; whether group membership was based on racial or ethnic characteristics or on other characteristics; whether or not participants were familiar with the other group; and whether or not participants had choice to interact with the other group, among others.

Pettigrew and Tropp (2006) concluded that the effect is robust across settings – including experimental settings as well as those that used self-reports of personal interaction – situations, and social groups, with the strongest effects emerging for face-to-face interactions. It emerges for both direct and indirect contact and, not surprisingly, higher levels of contact lead to larger reductions in reported prejudice. Although 72% of the studies in their meta-analysis were conducted in the United States, Pettigrew and Tropp (2006: 765) were able to determine – across six broad global regions



– that the contact effect is consistent and of similar effect size across these regions.

Allport's Optimal Circumstances

Included in the Pettigrew and Tropp (2006) meta-analysis was an examination of Allport's (1954) original four criteria for the interpersonal contact effect to emerge. Allport (1954) originally theorized that contact between different groups *under optimal circumstances* could serve as an effective prejudice reducer. However, these "optimal circumstances" – equal status between the groups in the situation; common goals; intergroup cooperation; and the support of authorities, law, or custom – complicated the simplicity and applicability of the core contact hypothesis by placing limits on the effect that may or may not be relevant. They also triggered a robust empirical effort to test the theory.

Based on the results of their meta-analysis, Pettigrew and Tropp (2006) conclude that although experiments that incorporated situations meeting Allport's optimal conditions yielded larger effects than other studies, those conditions are not essential for intergroup contact to positively affect attitudes. Even studies where "optimal conditions" were absent showed significant relationships between interpersonal contact and attitudes. Pettigrew and Tropp (2006) suggest that rather than being necessary for interpersonal contact to reduce prejudice, Allport's optimal conditions simply enhance the positive effects of intergroup contact. More recently, Kende, Phalet, Van Den Noortgate, Kara, and Fischer (2017) reanalyzed a number of studies from the Pettigrew and Tropp (2006) meta-analysis, augmenting them with culture-level measures of egalitarian and hierarchy values. Results of their analysis demonstrated that while egalitarian cultures yielded stronger contact–prejudice associations and hierarchical cultures corresponded with weaker contact–prejudice associations, neither orientation was essential for intergroup contact to positively affect attitudes. Understanding the role of optimal conditions on the contact hypothesis is critical for the present study as well as any research where optimal conditions can either not be measured or cannot be controlled.

Contact Research with Migrant Minorities in Europe

The majority of research on interpersonal contact theory in the United States has focused on racial attitudes toward black Americans (e.g., Brown, Brown, Jackson, Sellers, and Manuel, 2003), but has also included sexual orientation, religious affiliation, and disability status (Herek, 1987; Herek & Glunt, 1993; Herek & Capitanio, 1996; Smith, Axelton, & Saucier, 2009).



More germane to the current discussion, however, the effect has also been demonstrated extensively in research on attitudes toward migrants in Europe.

In their review of the contact literature, Brown and Hewstone (2005) observe that the beneficial effects of intergroup contact have been demonstrated using a wide range of outcome measures beyond traditional measures of attitude. These include perceived outgroup variability (Islam & Hewstone, 1993; Paolini, Hewstone, Cairns, & Voci, 2004), mutual accommodation (Harwood, Hewstone, Paolini, & Voci, 2005), positive and negative emotions (Tam et al., 2007), and trust in the outgroup and intergroup forgiveness (Hewstone et al., 2004; Tam et al., 2008). Much of the European contact research conducted since the Pettigrew and Tropp (2006) meta-analysis has utilized these diverse measures.

For example, in an intriguing twist on the contact hypothesis, Maliepaard and Phalet (2012) found that among members of Dutch Muslim communities (Turkish and Moroccan), more frequent contact with majority group members (non-Muslim Dutch) reduced the expression of their Muslim identity while more frequent contact with minority group members (Dutch Muslims) was associated with higher levels of religious practice and greater assertion of minority group members' Muslim identities.

Hindriks, Verkuyten, and Coenders (2014) found that among Muslim migrants in the Netherlands, more frequent contact with a different *minority* group was associated with less social distance and bias toward that group, but was stronger for the more similar (Muslim) minority group than for the less similar one (non-Muslim). No reduction in bias or social distance was observed for greater contact with the majority group.

In a study of Bosnian Muslims, Cehajic, Brown, and Castano (2008) found that positive and frequent intergroup contact with Bosnian Serbs led to greater forgiveness for the Bosnian Serbs' "misdeeds" during the 1992-1995 war in Bosnia and Herzegovina. This enhanced forgiveness, in turn, was associated with reduced social distance between the groups. Additional analyses revealed that intergroup contact affected forgiveness through empathy for and trust in the outgroup and the perception of outgroup variability.

Several longitudinal studies in Europe have clarified the direction of the causal processes underlying the contact effect: Does contact reduce prejudice or does prejudice reduce contact? Binder et al. (2009) conducted a longitudinal field survey in Germany, Belgium, and England with school students from both ethnic minorities and ethnic majorities. Path analytic results revealed that while contact reduced prejudice, prejudice also reduced contact.



Swart, Hewstone, Christ, and Voci (2011) conducted a 3-wave longitudinal study among minority high school students in South Africa to explore the effects of cross-group friendships on positive outgroup (white South African high school students) attitudes. Swart et al. (2011) found that over time, cross-group friendships predicted outgroup attitudes and that outgroup attitudes predicted cross-group friendships. This bidirectional model described the relationship between contact, mediators, and attitudes significantly better than other models they tested. However, consistent with interpersonal contact theory, full longitudinal mediation was only found in the direction from contact to prejudice. Specifically, cross-group friendships (higher levels of contact) were positively associated with positive outgroup attitudes.

Finally, using data collected from eight European countries, Schmid, Hewstone, Küpper, Zick, and Wagner (2012) examined the relationship between intergroup contact with immigrants and attitudes toward primary (immigrants) and secondary (homosexuals and Jews) outgroups. Results showed that intergroup contact was not only directly related with primary outgroup attitudes but also indirectly associated with secondary outgroup attitudes.

While these studies and those that Pettigrew and Tropp (2006) analyzed outside of the United States represent an important and substantial validation of the contact hypothesis in places other than North America, our goal in this research was to dig deeper: Is interpersonal contact related to more positive attitudes toward migrants even in places where traditional social psychological research is rare, such as Rwanda, Paraguay, or Mongolia? We sought to explore the impact of interpersonal contact at a country level in the self-reports of respondents from 140 different countries. This research was made possible by the depth and breadth of the data collected by the Gallup World Poll, which collects nationally representative and projectable survey data each year from over 140 countries.

Method

Measures Used

Launched in 2005, the World Poll is Gallup's global survey instrument to measure the opinions and attitudes of residents annually in more than 140 countries and areas. Country-level samples typically contain 1,000 respondents, although in some larger countries sample sizes are larger. Topics covered are wide-ranging and include health and well-being, personal economics, social trends and topics, and life satisfaction, among



many others. World Poll surveys are probability-based random samples, representative of the civilian, non-institutionalized population, aged 15 and older in each country. Coverage includes both urban and rural areas, although unsafe zones may be excluded to minimize risk for the field staff. In countries where telephone penetration is at least 80% or is the customary survey methodology, trained staff conduct interviews via computer-assisted telephone interviewing (CATI). In Central and Eastern Europe, much of Latin America, former Soviet states, nearly all of Asia, the Middle East and Africa, surveys are conducted face-to-face by trained interviewers. With the exception of a couple of countries, face-to-face interviewing is conducted using computer-assisted personal interviewing (CAPI). Since its launch, the World Poll has collected the opinions of more than 1.7 million individuals and results have been used to inform initiatives in the United Nations Sustainable Development Goals (SDGs), forced labor, hunger and food security, human trafficking, and financial inclusion, among others.

Three questions asked in the World Poll in 2016 and 2017 were used to create interim and final versions of the Migrant Acceptance Index. The questions are presented in Table 1.

Table 1. Migrant Acceptance Items

Question	Response options*
I would like to ask you some questions about foreign immigrants - people who have come to live and work in this country from another country. Please tell me whether you, personally, think each of the following is a good thing or a bad thing? How about: Immigrants living in [country name]? An immigrant becoming your neighbor? An immigrant marrying one of your close relatives?	1 A good thing 2 A bad thing 3 (It depends) 4 (Don't know) 5 (Refused)
Do you, personally, know any immigrants living in [country name]?	1 Yes 2 No

**Note: Responses in parentheses were volunteered by the respondent.*

Copyright © 2016-2017 Gallup, Inc. All rights reserved.

These items were always asked in the same order as in the table and located in the same place in the questionnaire flow. To specifically test the effects of interpersonal contact on attitudes toward migrants, respondents were then asked whether they personally know an immigrant living in their



home country.² Gallup asked 147,695 adults aged 15 and older these questions in 140 of the 142 countries surveyed in 2016³ and 2017.⁴ Country sample sizes are presented in Table 2.

Creating the Migrant Acceptance Index

There are a number of ways the three items above could be combined to create a composite Migrant Acceptance metric. We explored a number of the potential qualitative methods before arriving at our final quantitative approach. These are included in Table 3 and included computing country-level percentages of respondents who positively endorsed all three items (both with and without including the volunteered responses “It depends” and “Don’t know”), percentages of respondents who negatively endorsed all three items, and a “net score” subtracting the percentage of those who negatively endorsed all three items from those who positively endorsed all three items. While informative, none of these methods yielded a sufficiently satisfactory and comprehensive description of the full set of responses in the data.

² Although our analyses were specifically designed to test the applicability and validity of the interpersonal contact hypothesis (Allport, 1954) in multiple countries, sociologists, demographers, and others have explored different ways of assessing the likelihood that members of one social or ethnic group will interact with members of different groups and how evenly different social or ethnic groups are spread throughout a population. While these formulations were not the focus of our efforts, we have included several of these statistics to provide context for our analysis. None of them were significantly correlated with the Migrant Acceptance Index at the country level. The Entropy Index (*h*) was the only measure that correlated with the percentage of respondents who know an immigrant ($r = 0.58, p < .001$). Additional statistics are presented in Table 2. For additional information, see White (1983; 1986).

Index of Dissimilarity (D). The Index of Dissimilarity (Duncan & Duncan, 1955; Sakoda, 1981) is the most common measure of group isolation or segregation. The value of *D* represents the proportion of migrants (or native-born) that would need to move to a different country within the group in order to create a uniform distribution of population within the countries in the group. If $D = .60$, then 60% of migrants would need to move to another country in the group in order to achieve a uniform distribution of population by migrant status. The value of *D* is a maximum when each country contains only one group; it is minimized (0) when the proportion of each group in each country is the same as the proportion in the group of countries as a whole.

Interaction or Exposure Index (B). The Exposure Index (Massey & Denton, 1988; McCauley, Plummer, Moskalenko, & Mordkoff, 2001) is a measure of the probability that a member of one group will meet or interact with a member of another group. For example, if $B = 0.25$, the probability of a migrant “interacting” with a native-born person is about 25%. Similarly, in this case *B* can also be interpreted to mean that 25 out of every 100 people a migrant meets will be native born. The value of *B* will be highest when the two groups have equal numbers and are spread evenly among the countries in each group.

Entropy Index (h). The Entropy Index (Theil, 1967) is a measure of diversity within a specified population. The minimum value for *h* is 0 and the maximum value is $\ln(k)$, or $\ln 2 = 0.69$. Countries with lower *h* values are less diverse. A country with $h = 0.69$ would have equal proportions of migrants and native-born (50% each). A country with $h = 0$ contains only members of a single group.

Table 2. Additional Measures of Isolation & Exposure

Country Group	Migrant Acceptance Index Score	Native Population	Migrant Population	Total Population	% Native Born	% Migrants	Index of Dissimilarity (D)	Exposure Index (B)	Entropy Index (h)
Most Accepting Countries (N = 23)	7.73	855,702,830	84,751,998	940,454,828	91.0	9.0	0.45	0.12	0.30
Countries < 1 SD Above the MAI Mean (N = 53)*	6.32 (6.34)**	1,488,743,664	78,396,736	1,567,140,400	95.0	5.0	0.59	0.03	0.20
Countries < 1 SD Below the MAI Mean (N = 32)*	4.66 (4.68)**	3,579,305,026	30,190,327	3,609,495,353	99.2	0.8	0.62	0.08	0.05
Least Accepting Countries (N = 29)	2.61	856,811,948	40,105,248	896,917,196	95.5	4.5	0.42	0.09	0.18
Global (N = 137)	5.37	6,780,563,468	233,444,309	7,014,007,777	96.7	3.3			

Notes: *UN population data for Kosovo, Northern Cyprus, & South Sudan are not available. **Means presented with/(without) missing countries.

³ Migrant Acceptance items were not included in Algeria or Bahrain.

⁴ Data for the United States and Canada were collected in 2017.



Having explored alternative score creation methods, the response options for the three Migrant Acceptance questions struck us as sharing some similar properties to the scoring system used in the professional football (soccer) leagues around the world. In football scoring, a team earns three points for a win, one point for a draw, and no points for a loss. The team with the highest point total at the end of the season wins the championship. We applied this logic to the item scoring for the Migrant Acceptance Index, coding “a good thing” as three points, “it depends” and “don’t know” as one point, and “a bad thing” as zero points. Each respondent’s Migrant Acceptance Index is the sum of the points across the three questions with a maximum score of nine (all three are good things) and a minimum score of zero (all three are bad things).⁵ The distribution of country-level MAI scores ranges from 1.47 to 8.26 ($M = 5.37$, $SD = 1.79$, 95% $CI = 5.07-5.67$).

At both a respondent and a country level, the Migrant Acceptance Index has a reasonably high alpha reliability (Cronbach’s alpha = 0.84 and 0.97, for respondent and country levels, respectively). The distribution is slightly negatively skewed (-0.31) which is to be expected given the higher weight given in the scoring method to “good thing” responses. Because the resulting country-level Migrant Acceptance Index scores are approximately normally distributed and unburdened by either ceiling or floor effects, we produced indexed scores in addition to the raw scores. These, along with the raw Migrant Acceptance Index scores, are presented by country in Table 4.

Results

Migrant Acceptance at the Country Level

Migrant Acceptance Index scores ranged from a high of 8.26 in Iceland to a low of 1.47 in Macedonia resulting in a significant main effect for Country, $F(138,140162) = 213.5$, $p < .0001$, partial $\eta^2 = .17^6$.

Countries least accepting of migrants. Twenty-nine countries’ MAI scores fall more than one standard deviation below the country-level mean score. With the exception of Israel, the 10 least-accepting countries are all located in the East and Southeast European portion of the former Soviet bloc, specifically the Balkans (Croatia, Macedonia, Montenegro, and Serbia), the Baltic states (Estonia and Latvia), the former Czechoslovakia

⁵ We also explored the possibility of scoring “good thing” responses as 2 rather than three, but opted for the 0, 1, 3 scoring approach because we felt that “Don’t know” or “It depends” responses were ambivalent and did not represent a midpoint value, and because of the greater separation among high and low country-level scores. Both approaches achieved comparably high alpha reliabilities at both a respondent and a country level (Cronbach’s alphas = 0.84 and 0.97, respectively).

⁶ Observed power = 1.0 for all effects.



Table 3. Migrant Acceptance Item Classification Frequencies by Country (Sorted by Net)

Country ¹	Region	Migrant Acceptance Item Classification Frequencies					Net (%)	Unweighted N
		All 3 are "good things" (%)	All 3 "It depends" or "Don't know" (%)	All 3 are "bad things" (%)	All other item combinations (%)			
Iceland	Western Europe	85.7	1.1	2.3	11.0	+83.4	529	
New Zealand	Australia & New Zealand	82.6	0.3	2.4	14.6	+80.2	1,004	
Canada	Northern America	83.8	1.3	3.9	11.2	+79.9	2,008	
Rwanda	East Africa	79.3	0.8	2.0	17.9	+77.3	1,000	
Sierra Leone	West Africa	77.0	2.2	1.2	19.6	+75.8	1,000	
Australia	Australia & New Zealand	79.2	2.0	4.0	14.8	+75.2	1,004	
Mali	West Africa	76.4	2.8	2.3	18.4	+74.1	1,000	
Sweden	Western Europe	76.3	2.9	2.9	17.7	+73.4	1,000	
Ireland	Western Europe	72.8	4.0	3.7	19.5	+69.1	1,000	
Nigeria	West Africa	71.6	2.4	2.6	23.4	+69.0	1,000	
Norway	Western Europe	73.4	0.3	5.1	21.1	+68.3	1,000	
Ivory Coast	West Africa	71.9	1.2	4.5	22.2	+67.4	1,000	
United States	Northern America	79.5	2.0	5.8	12.8	+66.7	2,013	
Burkina Faso	West Africa	66.2	1.9	1.2	30.7	+65.0	1,000	
Luxembourg	Western Europe	70.0	4.8	5.0	20.1	+65.0	1,000	
Benin	West Africa	67.7	2.3	3.1	26.9	+64.6	1,000	
Spain	Southern Europe	66.6	6.3	2.5	24.6	+64.1	1,000	
Netherlands	Western Europe	69.1	0.9	7.0	23.0	+62.1	1,000	
Bangladesh	South Asia	62.5	4.3	2.4	30.7	+60.1	1,000	
Switzerland	Western Europe	66.5	6.3	7.0	20.0	+59.5	1,000	
Chad	Central Africa	67.4	1.7	8.4	22.5	+59.0	1,000	
Albania	Southeast Europe	61.8	1.0	4.4	32.8	+57.4	999	
Denmark	Western Europe	65.0	1.0	9.7	24.2	+55.3	1,000	
Congo (Kinshasa DRC)	Central Africa	58.7	4.5	5.7	31.1	+53.0	1,000	
Togo	West Africa	61.5	3.7	9.3	25.5	+52.2	1,000	
Taiwan	East Asia	54.0	8.4	2.6	34.8	+51.4	1,000	
Uruguay	Latin America	55.5	12.4	4.4	27.6	+51.1	1,000	
Ghana	West Africa	60.3	2.5	9.3	27.7	+51.0	1,000	
Germany	Western Europe	55.4	3.2	5.1	36.2	+50.3	1,000	
Guinea	West Africa	52.4	8.0	2.8	36.8	+49.6	1,000	
Senegal	West Africa	53.5	2.3	4.1	40.1	+49.4	1,000	
Congo (Brazzaville RC)	Central Africa	55.4	2.5	7.1	34.9	+48.3	1,000	
Paraguay	Latin America	54.0	19.2	5.7	21.1	+48.3	1,000	
Venezuela	Latin America	51.7	12.3	3.4	32.4	+48.3	1,000	
Portugal	Southern Europe	50.6	6.9	3.3	39.3	+47.3	1,008	
Philippines	Southeast Asia	54.8	2.0	7.9	35.3	+46.9	1,000	
Zimbabwe	South Africa	55.5	1.3	8.8	34.3	+46.7	1,000	
Finland	Western Europe	53.1	4.4	8.5	33.9	+44.6	1,000	
Argentina	Latin America	48.2	10.3	3.6	37.9	+44.6	1,000	
United Kingdom	Western Europe	53.3	3.7	8.8	34.1	+44.5	1,000	
Italy	Southern Europe	54.8	3.1	11.5	30.5	+43.3	1,000	
Brazil	Latin America	53.6	5.8	10.7	29.9	+42.9	1,001	
Kenya	East Africa	55.7	1.1	13.0	30.2	+42.7	1,000	
Peru	Latin America	51.6	7.3	8.9	32.2	+42.7	1,000	
Lesotho	South Africa	53.1	0.5	10.5	35.9	+42.6	1,000	
Central African Republic	Central Africa	52.5	6.8	10.0	30.7	+42.5	1,000	
Niger	West Africa	49.1	1.6	6.7	42.5	+42.4	1,000	
France	Western Europe	54.3	8.3	12.1	25.3	+42.2	1,000	
Japan	East Asia	48.2	8.5	6.2	37.2	+42.0	1,003	
South Korea	East Asia	49.9	5.3	8.1	36.5	+41.8	1,000	
Morocco	North Africa	50.4	8.9	10.3	30.4	+40.1	1,008	
Tunisia	North Africa	46.7	8.7	6.7	37.8	+40.0	1,001	
Cameroon	Central Africa	49.6	3.7	10.6	35.9	+39.0	1,000	
Colombia	Latin America	50.1	9.0	11.7	29.3	+38.4	1,000	
Vietnam	Southeast Asia	40.3	22.1	3.1	34.4	+37.2	1,039	
Belgium	Western Europe	51.9	2.3	15.2	30.5	+36.7	1,000	
Ecuador	Latin America	43.4	8.6	6.7	41.2	+36.7	1,000	
Liberia	West Africa	54.0	4.7	18.4	22.8	+35.6	1,000	
Austria	Western Europe	43.6	13.2	8.3	34.8	+35.3	1,000	
Gabon	West Africa	46.4	2.2	12.4	38.9	+34.0	1,000	
Nicaragua	Latin America	39.5	10.3	6.1	44.0	+33.4	1,000	
Nepal	South Asia	43.6	2.3	11.7	42.3	+31.9	1,000	
Dominican Republic	Caribbean	43.8	6.0	11.9	38.2	+31.9	1,000	
Hong Kong	East Asia	46.1	4.0	14.4	35.5	+31.7	1,005	
El Salvador	Latin America	40.2	7.7	8.5	43.6	+31.7	1,000	
Malawi	South Africa	46.3	0.0	15.2	38.4	+31.1	1,000	
Saudi Arabia	GCC	33.8	7.0	3.1	56.2	+30.7	554	
Armenia	Caucasus CIS	37.4	15.1	7.9	39.6	+29.5	1,000	
Mauritius	South Africa	36.8	11.1	9.1	43.0	+27.7	1,000	
South Sudan	East Africa	36.7	8.8	10.0	44.6	+26.7	1,000	
Haiti	Caribbean	35.8	9.7	11.4	43.1	+24.4	504	



112 Migrant Acceptance Index

Table 3 (cont'd.). Migrant Acceptance Item Classification Frequencies by Country

Country ¹	Region	Migrant Acceptance Item Classification Frequencies					
		All 3 are "good things" (%)	All 3 "It depends" or "Don't know" (%)	All 3 are "bad things" (%)	All other item combinations (%)	Net (%)	Unweighted N
Costa Rica	Latin America	35.9	8.5	11.7	43.8	+24.2	1,000
Chile	Latin America	35.0	24.8	11.1	29.2	+23.9	1,008
China	East Asia	30.1	33.8	6.7	29.3	+23.4	4,373
Bolivia	Latin America	35.4	10.4	12.2	42.1	+23.2	1,000
Singapore	Southeast Asia	28.1	29.4	5.3	37.1	+22.8	1,000
Ethiopia	East Africa	32.9	25.5	10.3	31.3	+22.6	1,000
Cyprus	Southern Europe	33.3	7.2	11.8	47.8	+21.5	1,006
United Arab Emirates	GCC	26.1	0.8	4.8	68.4	+21.3	1,025
Honduras	Latin America	34.9	12.4	14.3	38.4	+20.6	1,000
Uganda	East Africa	41.8	0.9	21.4	35.8	+20.4	1,000
Libya	North Africa	27.3	2.4	7.6	62.7	+19.7	1,001
Madagascar	South Africa	43.5	3.3	24.6	28.6	+18.9	1,000
India	South Asia	27.6	18.4	11.1	43.0	+16.5	3,000
Botswana	South Africa	39.5	2.2	23.2	35.0	+16.3	1,000
Mauritania	West Africa	21.0	22.7	5.4	50.9	+15.6	1,000
Mexico	Latin America	32.6	16.4	18.6	32.3	+14.0	1,000
Uzbekistan	Asian CIS	24.7	13.5	11.0	50.8	+13.7	1,000
Zambia	South Africa	34.4	3.3	20.9	41.3	+13.5	1,000
Kuwait	GCC	14.8	11.4	3.4	70.5	+11.4	267
Malta	Southern Europe	33.1	2.0	23.1	41.7	+10.0	1,011
Azerbaijan	Caucases CIS	21.9	19.9	12.4	45.7	+9.5	1,000
Somalia	East Africa	28.2	10.5	19.6	41.8	+8.6	1,191
Panama	Latin America	22.3	18.9	14.8	43.9	+7.5	1,000
Tanzania	East Africa	39.1	0.3	31.8	28.7	+7.3	1,000
Kyrgyzstan	Asian CIS	30.0	11.3	22.9	35.8	+7.1	1,000
South Africa	South Africa	31.9	1.4	24.9	41.7	+7.0	1,000
Guatemala	Latin America	26.1	8.6	19.1	46.1	+7.0	1,000
Turkmenistan	Asian CIS	12.7	3.8	5.8	77.6	+6.9	1,000
Northern Cyprus	Southeast Europe	29.5	9.7	22.6	38.1	+6.9	1,000
Kazakhstan	Asian CIS	20.8	25.8	17.6	35.8	+3.2	1,000
Tajikistan	Asian CIS	18.4	12.7	17.5	51.4	+0.9	1,000
Slovenia	Eastern Europe	34.5	2.7	35.1	27.6	-0.6	1,000
Moldova	Europe CIS	13.7	26.9	15.6	43.8	-1.9	1,000
Kosovo	Southeast Europe	17.2	5.7	19.3	57.6	-2.1	1,000
Lebanon	Rest of MENA	22.7	9.6	25.5	42.2	-2.8	1,000
Yemen	Rest of MENA	13.3	18.5	16.3	52.0	-3.0	1,000
Iran	Rest of MENA	15.0	11.2	20.3	53.4	-5.3	1,000
Ukraine	Europe CIS	8.6	36.6	14.9	40.0	-6.3	1,000
Belarus	Europe CIS	14.6	37.9	21.9	25.7	-7.3	1,039
Palestinian Territories	Rest of MENA	15.6	10.1	23.5	50.6	-7.9	1,000
Indonesia	Southeast Asia	24.4	8.5	32.9	34.1	-8.5	1,000
Turkey	Southeast Europe	9.1	12.1	19.0	59.8	-9.9	1,001
Greece	Southern Europe	15.4	10.1	28.8	45.7	-13.4	1,000
Cambodia	Southeast Asia	17.6	2.9	31.9	47.5	-14.3	1,000
Poland	Eastern Europe	14.4	20.0	30.1	35.5	-15.7	1,000
Russia	Europe CIS	5.3	40.1	21.7	32.9	-16.4	2,000
Iraq	Rest of MENA	15.7	1.6	32.7	49.9	-17.0	1,011
Georgia	Caucases CIS	12.9	27.6	30.4	29.0	-17.5	1,000
Lithuania	Eastern Europe	8.1	35.5	27.1	29.3	-19.0	1,000
Mongolia	East Asia	8.8	8.7	29.4	53.0	-20.6	1,000
Romania	Eastern Europe	13.3	17.3	35.3	34.0	-22.0	1,001
Egypt	North Africa	16.2	3.8	38.5	41.4	-22.3	1,000
Jordan	Rest of MENA	16.0	8.7	40.1	35.2	-24.1	1,000
Myanmar	Southeast Asia	9.2	2.8	33.5	54.5	-24.3	1,020
Estonia	Eastern Europe	6.1	23.4	30.4	40.0	-24.3	1,000
Bulgaria	Eastern Europe	5.3	28.6	31.3	34.8	-26.0	1,000
Afghanistan	South Asia	5.6	14.0	35.0	45.5	-29.4	1,000
Bosnia & Herzegovina	Southeast Europe	9.4	25.9	39.1	25.5	-29.7	1,000
Thailand	Southeast Asia	10.5	7.9	41.3	40.2	-30.8	1,000
Czech Republic	Eastern Europe	6.7	25.3	38.1	29.9	-31.4	1,000
Latvia	Eastern Europe	3.4	25.2	35.9	35.4	-32.5	1,019
Croatia	Southeast Europe	10.1	23.7	45.5	20.7	-35.4	1,000
Israel	Rest of MENA	4.0	15.3	40.6	40.1	-36.6	1,000
Pakistan	South Asia	7.2	2.0	47.6	43.3	-40.4	1,000
Hungary	Eastern Europe	1.7	25.6	42.2	30.5	-40.5	1,000
Slovakia	Eastern Europe	3.5	30.0	44.5	22.0	-41.0	1,000
Serbia	Southeast Europe	5.6	16.3	51.3	26.8	-45.7	1,000
Macedonia	Southeast Europe	2.8	17.2	53.3	26.7	-50.5	1,024
Montenegro	Southeast Europe	5.6	9.9	58.4	26.1	-52.8	1,000
Weighted Global Average		36.8	16.2	12.9	34.1	+23.9	146,677

¹Country & Global samples are weighted to accurately reflect their population parameters.

²Migrant Acceptance Index Score is based on a 0 to 9 scale.



(Czech Republic and Slovakia), and Hungary. Two of the remaining Balkan states (Bulgaria and Bosnia and Herzegovina), the remaining Baltic state (Lithuania), as well as Belarus, Georgia, Poland, Romania, Russia, and Ukraine all fall in the next tier of 19 least-accepting countries. Only the Balkan states of Albania (ranked 21), Kosovo (ranked 104), and Slovenia (ranked 99) did not make the list of least-accepting countries or areas for migrants (see Figure 1).

Rounding out the set of countries whose MAI scores fall more than one standard deviation below the country-level mean were a pair from South Asia (Afghanistan and Pakistan; see Figure 2), a pair from Southeast Asia (Myanmar and Thailand), three from the Middle East/North Africa (Egypt; see Figure 3, Iraq, and Jordan; see Figure 2), two nestled at the base of Eastern Europe (Greece and Turkey; see Figure 1), and Mongolia in East Asia (see Figure 2).

Countries most accepting of migrants. As Table 4 shows, 23 countries' MAI scores fall more than one standard deviation above the country-level mean score. The 10 most-accepting countries for migrants are situated in four regions: Oceania (Australia and New Zealand), Western Europe (Iceland, and Sweden; see Figure 1), sub-Saharan Africa (Burkina Faso, Mali, Nigeria, Rwanda, and Sierra Leone; see Figure 3), and Northern America (Canada and the United States).

While many of the 10 least-accepting countries share borders, with the exception of Mali and Sierra Leone, none of the 10 most-accepting countries share a border. This pattern changes, however, if we add the rest of the most accepting countries (those with Migrant Acceptance Index scores one standard deviation or more above the mean). The addition of Ivory Coast, Benin, Chad, and Senegal completes a set of countries with contiguous borders in coastal West Africa along the Bight of Benin and Gulf of Guinea. All nine of these African countries generate per capita annual GDP of less than \$5,900 (Central Intelligence Agency, 2016). And seven of them fall into the bottom quintile of the World Bank's annual income classification for 2018 (World Bank Group, 2017). The remaining two countries fall into the next lowest income quintile. We believe that one of the reasons for these countries' particularly positive attitudes toward migrants is the prospect that those migrants bring much-needed financial resources with them.

The remaining eight most-accepting countries are in Western Europe (Ireland, Luxembourg, the Netherlands, Norway, Spain, and Switzerland), as well as Bangladesh and Albania. Albania is the lone outlier in Eastern/Southeastern Europe that has positive attitudes toward migrants.



114 Migrant Acceptance Index

Table 4. Migrant Acceptance Index (MAI) Raw and Indexed Scores by Country (Sorted by MAI)

Rank	Country ¹	Region	Migrant Acceptance Index		
			Raw Score ²	Indexed Score (100 = average; SD = 15)	Unweighted N
23 Most Accepting Countries: 1 Standard Deviation or More Above the Mean					
1	Iceland	Western Europe	8.26	124.2	529
2	New Zealand	Australia & New Zealand	8.25	124.1	1,004
3	Rwanda	East Africa	8.16	123.4	1,000
4	Canada	Northern America	8.14	123.2	2,008
5	Sierra Leone	West Africa	8.05	122.5	1,000
6	Mali	West Africa	8.03	122.3	1,000
7	Australia	Australia & New Zealand	7.98	121.9	1,004
8	Sweden	Western Europe	7.92	121.4	1,000
9	United States	Northern America	7.86	120.8	2,013
10	Nigeria	West Africa	7.76	120.0	1,000
11	Ireland	Western Europe	7.74	119.9	1,000
11	Burkina Faso	West Africa	7.74	119.9	1,000
13	Norway	Western Europe	7.73	119.8	1,000
14	Ivory Coast	West Africa	7.71	119.6	1,000
15	Benin	West Africa	7.67	119.3	1,000
16	Luxembourg	Western Europe	7.54	118.2	1,000
17	Netherlands	Western Europe	7.46	117.5	1,000
18	Bangladesh	South Asia	7.45	117.4	1,000
19	Spain	Southern Europe	7.44	117.3	1,000
20	Chad	Central Africa	7.26	115.8	1,000
21	Albania	Southeast Europe	7.22	115.5	999
22	Switzerland	Western Europe	7.21	115.4	1,000
23	Senegal	West Africa	7.17	115.1	1,000
88 Countries Within +/-1 Standard Deviation of the Mean					
24	Germany	Western Europe	7.09	114.4	1,000
24	Denmark	Western Europe	7.09	114.4	1,000
26	Congo (Kinshasa DRC)	Central Africa	7.05	114.1	1,000
27	Guinea	West Africa	7.01	113.7	1,000
28	Togo	West Africa	6.96	113.3	1,000
29	Ghana	West Africa	6.91	112.9	1,000
30	Venezuela	Latin America	6.82	112.2	1,000
31	Congo (Brazzaville RC)	Central Africa	6.81	112.1	1,000
32	Taiwan	East Asia	6.80	112.0	1,000
33	Uruguay	Latin America	6.77	111.7	1,000
33	Philippines	Southeast Asia	6.77	111.7	1,000
35	Zimbabwe	South Africa	6.70	111.1	1,000
36	Lesotho	South Africa	6.65	110.7	1,000
36	Portugal	Southern Europe	6.65	110.7	1,008
38	Niger	West Africa	6.64	110.6	1,000
39	United Kingdom	Western Europe	6.61	110.4	1,000
40	Finland	Western Europe	6.58	110.1	1,000
41	Kenya	East Africa	6.51	109.6	1,000
41	Argentina	Latin America	6.51	109.6	1,000
43	Paraguay	Latin America	6.50	109.5	1,000
44	Italy	Southern Europe	6.49	109.4	1,000
44	South Korea	East Asia	6.49	109.4	1,000
46	Tunisia	North Africa	6.47	109.2	1,001
47	France	Western Europe	6.46	109.1	1,000
48	Japan	East Asia	6.42	108.8	1,003
49	Morocco	North Africa	6.39	108.6	1,008
49	Saudi Arabia	GCC	6.39	108.6	554
51	Brazil	Latin America	6.38	108.5	1,001
52	Central African Republic	Central Africa	6.36	108.3	1,000
52	Cameroon	Central Africa	6.36	108.3	1,000
54	Peru	Latin America	6.33	108.0	1,000
55	Nepal	South Asia	6.28	107.6	1,000
56	Belgium	Western Europe	6.16	106.6	1,000
57	Liberia	West Africa	6.14	106.5	1,000
58	Colombia	Latin America	6.13	106.4	1,000
58	Ecuador	Latin America	6.13	106.4	1,000
60	Gabon	West Africa	6.12	106.3	1,000



Table 4 (cont'd.). Migrant Acceptance Index (MAI) Raw and Indexed Scores by Country (Sorted by MAI)

Rank	Country ¹	Region	Migrant Acceptance Index		
			Raw Score ²	Indexed Score (100 = average; SD = 15)	Unweighted N
61	Malawi	South Africa	6.10	106.1	1,000
62	Vietnam	Southeast Asia	6.08	106.0	1,039
63	Austria	Western Europe	6.06	105.8	1,000
64	Dominican Republic	Caribbean	6.03	105.5	1,000
65	Nicaragua	Latin America	6.00	105.3	1,000
66	Hong Kong	East Asia	5.89	104.4	1,005
67	Libya	North Africa	5.79	103.5	1,001
67	United Arab Emirates	GCC	5.79	103.5	1,025
69	Armenia	Caucuses CIS	5.78	103.4	1,000
70	El Salvador	Latin America	5.73	103.0	1,000
71	South Sudan	East Africa	5.63	102.2	1,000
72	Mauritius	South Africa	5.58	101.8	1,000
73	Uganda	East Africa	5.45	100.7	1,000
74	Costa Rica	Latin America	5.44	100.6	1,000
75	Bolivia	Latin America	5.42	100.4	1,000
76	Cyprus	Southern Europe	5.41	100.3	1,006
Country-Level Migrant Acceptance Index Mean Score = 5.37; SD = 1.79; 95% CI = 5.07-5.67					
77	Turkmenistan	Asian CIS	5.36	99.9	1,000
78	Haiti	Caribbean	5.31	99.5	504
79	Mauritania	West Africa	5.29	99.3	1,000
80	Madagascar	South Africa	5.24	98.9	1,000
81	Singapore	Southeast Asia	5.21	98.7	1,000
82	Ethiopia	East Africa	5.19	98.5	1,000
83	Chile	Latin America	5.17	98.3	1,008
84	Honduras	Latin America	5.15	98.2	1,000
84	Zambia	South Africa	5.15	98.2	1,000
86	China	East Asia	5.11	97.8	4,373
87	Botswana	South Africa	5.10	97.7	1,000
88	Somalia	East Africa	4.99	96.8	1,191
89	South Africa	South Africa	4.98	96.7	1,000
90	Malta	Southern Europe	4.95	96.5	1,011
91	Uzbekistan	Asian CIS	4.90	96.1	1,000
91	India	South Asia	4.90	96.1	3,000
93	Kuwait	GCC	4.85	95.7	267
94	Tanzania	East Africa	4.82	95.4	1,000
95	Mexico	Latin America	4.75	94.8	1,000
96	Northern Cyprus	Southeast Europe	4.66	94.1	1,000
97	Guatemala	Latin America	4.59	93.5	1,000
97	Kyrgyzstan	Asian CIS	4.59	93.5	1,000
99	Slovenia	Eastern Europe	4.42	92.0	1,000
100	Tajikistan	Asian CIS	4.39	91.8	1,000
101	Panama	Latin America	4.36	91.5	1,000
102	Azerbaijan	Caucuses CIS	4.34	91.4	1,000
103	Kazakhstan	Asian CIS	4.28	90.9	1,000
104	Kosovo	Southeast Europe	4.17	90.0	1,000
105	Iran	Rest of MENA	3.95	88.1	1,000
106	Indonesia	Southeast Asia	3.93	87.9	1,000
106	Yemen	Rest of MENA	3.93	87.9	1,000
108	Palestinian Territories	Rest of MENA	3.90	87.7	1,000
109	Lebanon	Rest of MENA	3.89	87.6	1,000
110	Moldova	Europe CIS	3.80	86.9	1,000
111	Cambodia	Southeast Asia	3.65	85.6	1,000
29 Least Accepting Countries: 1 Standard Deviation or More Below the Mean					
112	Egypt	North Africa	3.50	84.3	1,000
113	Iraq	Rest of MENA	3.42	83.7	1,011
114	Belarus	Europe CIS	3.38	83.3	1,039
115	Greece	Southern Europe	3.34	83.0	1,000
116	Poland	Eastern Europe	3.31	82.8	1,000
117	Turkey	Southeast Europe	3.27	82.4	1,001
118	Ukraine	Europe CIS	3.15	81.4	1,000
119	Georgia	Caucuses CIS	3.05	80.6	1,000
120	Mongolia	East Asia	2.99	80.1	1,000



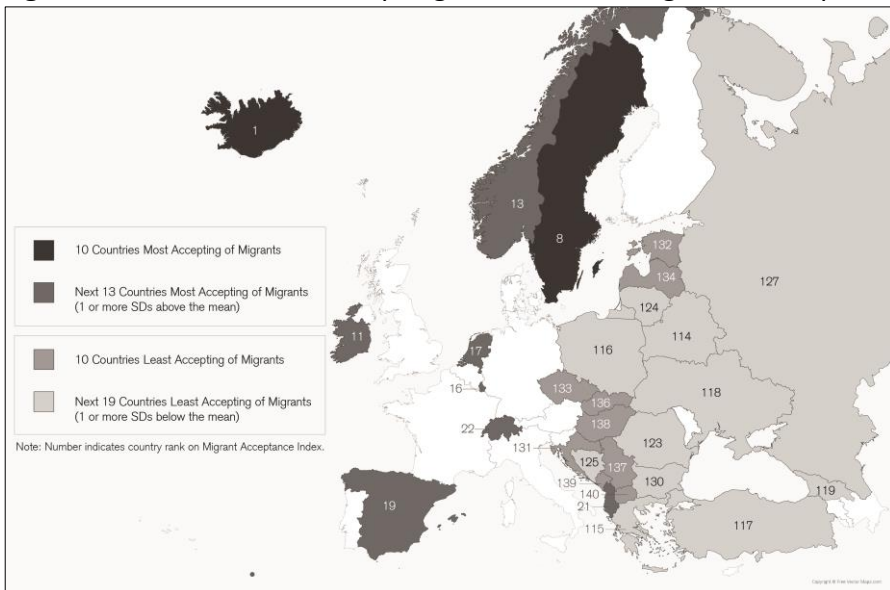
116 Migrant Acceptance Index

Table 4 (cont'd.). Migrant Acceptance Index (MAI) Raw and Indexed Scores by Country (Sorted by MAI)

Rank	Country ¹	Region	Migrant Acceptance Index		
			Raw Score ²	Indexed Score (100 = average; SD = 15)	Unweighted N
120	Jordan	Rest of MENA	2.99	80.1	1,000
122	Myanmar	Southeast Asia	2.96	79.8	1,020
123	Romania	Eastern Europe	2.93	79.6	1,001
124	Lithuania	Eastern Europe	2.72	77.8	1,000
125	Bosnia & Herzegovina	Southeast Europe	2.71	77.7	1,000
126	Thailand	Southeast Asia	2.69	77.6	1,000
127	Russia	Europe CIS	2.60	76.8	2,000
128	Afghanistan	South Asia	2.51	76.0	1,000
129	Pakistan	South Asia	2.47	75.7	1,000
130	Bulgaria	Eastern Europe	2.42	75.3	1,000
131	Croatia	Southeast Europe	2.39	75.0	1,000
132	Estonia	Eastern Europe	2.37	74.9	1,000
133	Czech Republic	Eastern Europe	2.26	74.0	1,000
134	Latvia	Eastern Europe	2.04	72.1	1,019
135	Israel	Rest of MENA	1.87	70.7	1,000
136	Slovakia	Eastern Europe	1.83	70.4	1,000
137	Serbia	Southeast Europe	1.80	70.1	1,000
138	Hungary	Eastern Europe	1.69	69.2	1,000
139	Montenegro	Southeast Europe	1.63	68.7	1,000
140	Macedonia	Southeast Europe	1.47	67.3	1,024
- Weighted Global Average			5.34	-	146,677

¹Country & Global samples are weighted to accurately reflect their population parameters.
²Migrant Acceptance Index Score is based on a 0 to 9 scale.

Figure 1. Most and least accepting countries for migrants: Europe



Finally and somewhat surprisingly, the countries whose recent elections were marked by considerable anti-immigrant rhetoric – the United States, the United Kingdom, the Netherlands, France, and Germany – are all among



Figure 2. Most and least accepting countries for migrants: Middle East and Asia

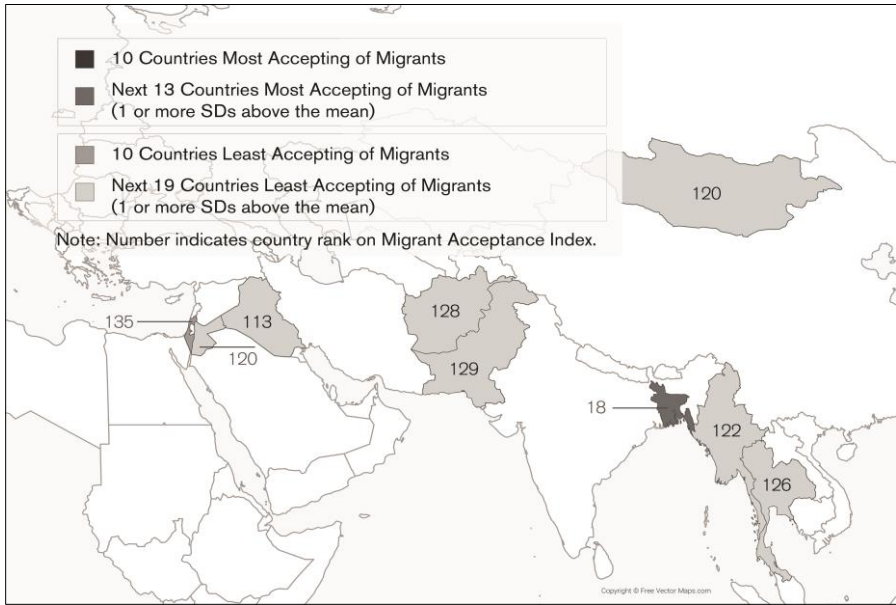
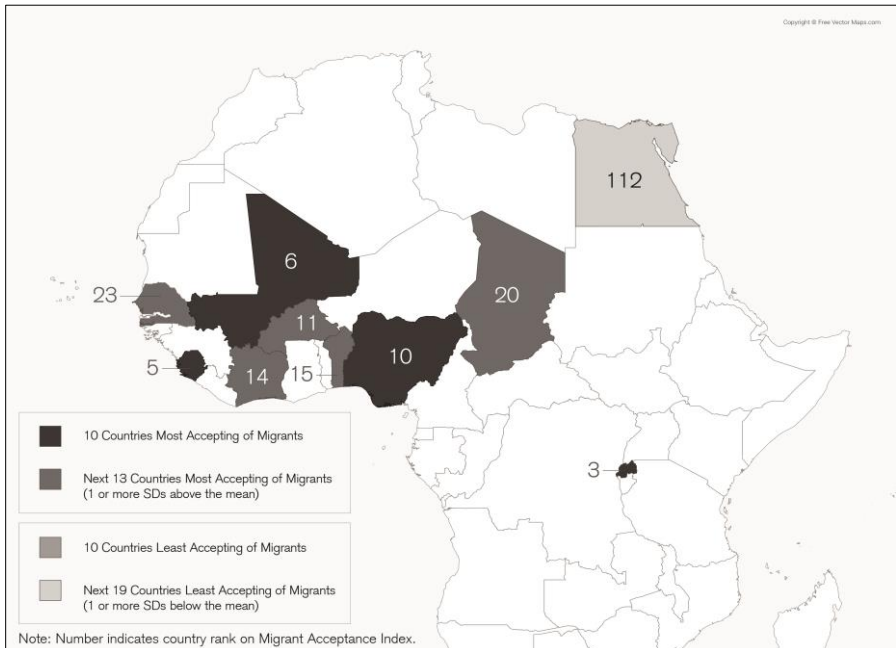


Figure 3. Most and least accepting countries for migrants: Sub-Saharan & North Africa



the most accepting of migrants. All five had Migrant Acceptance Scores in the top third of the distribution (> 6.45) with an average MAI of 7.10.

It is intriguing to speculate about the close clustering of the countries that are least-accepting of migrants. During 2016, a significant flow of Syrian refugees heading toward Western European countries transited many of these countries on the way to their destinations. If, as has been speculated (Edwards, 2016; Horn, 2015; Malik, 2015), residents of many of these countries are predisposed to be less accepting to migrants under the best of circumstances, then large numbers of refugees from the Middle East migrating through their homelands could inflame their pre-existing anti-migrant attitudes. Whatever the ultimate reason that such intense anti-migrant attitudes are concentrated in such a closely circumscribed geographic region, the fact that such a concentration exists given the sheer number of countries included in this research is remarkable.

Knowing Immigrants at the Country Level

Table 5 presents the percentage of survey respondents who indicated that they personally know an immigrant living in their country by country along with the 2015 United Nations Department of Economic and Social Affairs (UN DESA, 2016) estimates of each country's actual immigrant population as a percentage of the total population. A total of 139 countries are presented, as this item was not asked in Croatia. Thirty countries had percentages of respondents who know an immigrant that were one or more standard deviation units above the country-level mean ($M = 45.6\%$; $SD = 24.8\%$; $95\% \text{ CI} = 41.5\% - 49.7\%$) while 30 countries had percentages that were one or more standard deviation units below the country-level mean. Myanmar recorded the lowest percentage of respondents who know an immigrant (4.1%) and Sweden recorded the highest percentage (89.8%). Country-level percentages of respondents who know an immigrant track reasonably well with the UN DESA statistics ($r(134) = 0.48$, $p < .001$).

Differences between Respondents Who Know and Don't Know Immigrants

Of the 139 countries with valid data, 131 of them (94%) show statistically significant evidence of the interpersonal contact effect with respondents in those countries who indicated that they know an immigrant providing significantly higher Migrant Acceptance Index scores ($M = 6.78$, $95\% \text{ CI} = 6.75-6.81$) than respondents who said that they do not know an immigrant ($M = 4.80$, $95\% \text{ CI} = 4.78-4.82$), $F(1,140162) = 4156.1$, $p < .0001$, $d = .62$,



Table 5. Percentage of Population Reporting They Know Immigrants by Country

Country ¹	% Who Know an Immigrant	Actual Immigrant Population (%) ²	Country	% Who Know an Immigrant	Actual Immigrant Population (%)
30 Countries Most Familiar With Immigrants: 1 Standard Deviation or More Above the Mean					
Sweden	89.8	14.3	Tunisia	40.5	0.3
Kuwait	88.4	70.0	Russia	40.2	7.7
Australia	88.2	27.7	South Korea	39.7	2.9
Spain	88.1	14.0	Belarus	38.8	11.6
Saudi Arabia	86.2	31.4	Brazil	38.5	0.9
United Arab Emirates	86.2	83.7	Philippines	37.8	4.6
Canada	84.4	21.9	El Salvador	37.7	0.6
Italy	83.6	8.3	Malawi	37.4	1.3
Norway	83.5	13.8	Peru	36.8	0.3
New Zealand	83.3	25.1	Slovenia	36.5	11.3
Costa Rica	83.3	8.7	Japan	34.1	1.9
Switzerland	82.4	28.9	Moldova	33.9	11.2
Portugal	81.5	7.5	Togo	57.5	3.0
Denmark	81.4	11.1	Mali	57.4	7.2
Greece	81.4	9.0	Botswana	57.4	1.3
Ireland	81.3	15.9	Ghana	57.2	1.4
Venezuela	81.1	3.9	Hong Kong	57.0	38.9
Gabon	80.6	23.6	Ecuador	56.8	2.2
Luxembourg	79.1	43.3	Burkina Faso	56.5	4.1
Iceland	77.7	10.7	Uganda	56.0	1.4
United States	77.2	14.3	Singapore	55.9	42.9
Ivory Coast	77.1	12.0	Zambia	55.5	0.7
Argentina	75.8	4.6	Jordan	53.5	40.2
United Kingdom	75.6	13.2	South Sudan	53.4	2.7
South Africa	75.5	0.3	Chile	53.4	5.6
Austria	75.3	15.2	Taiwan	53.3	-
Libya	75.1	12.2	Lesotho	53.3	0.1
Dominican Republic	74.2	3.9	Guinea	52.5	3.2
Congo (Brazzaville RC)	74.0	9.7	Congo (Kinshasa DRC)	51.9	0.7
Senegal	72.4	1.5	Chad	49.9	3.4
79 Countries Within +/-1 Standard Deviation of the Mean			Uruguay	47.6	0.7
Cyprus	69.4	18.2	Niger	47.6	2.3
France	68.9	11.1	Bolivia	47.5	1.4
Germany	68.5	14.9	Liberia	47.2	5.3
Netherlands	67.8	11.1	Malta	46.3	8.0
Finland	67.0	5.4	Country-Level Mean = 45.6%; SD = 24.8%; 95% CI = 41.5% - 49.7%		
Belgium	66.7	12.9	Mauritius	45.1	3.6
Lebanon	65.7	-	Central African Republic	43.6	2.9
Rwanda	64.8	3.8	Cameroon	43.1	1.3
Paraguay	63.2	2.8	Mongolia	42.6	0.6
Panama	61.0	4.7	Kazakhstan	42.6	21.1
Benin	60.6	2.3	Sierra Leone	42.4	1.6
Northern Cyprus	60.2	-	Turkey	42.1	5.8
Mauritania	57.9	2.3	Zimbabwe	41.6	2.6
			Kenya	40.7	3.4
			Iran	40.7	2.2

¹Country samples are weighted to accurately reflect their population parameters. ²United Nations Department of Economic and Social Affairs (UN DESA).

(2016). *International Migration Report 2015*. New York: United Nations.

(<http://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2015.pdf>)



Table 5 (cont'd.). Percentage of Population Reporting They Know Immigrants by Country

Country ¹	% Who Know an Immigrant	Actual Immigrant Population (%) ²
Somalia	33.0	0.2
Hungary	31.7	4.7
Guatemala	31.4	0.5
Albania	31.1	3.1
Nigeria	30.4	0.7
Estonia	30.3	16.4
Nicaragua	30.0	0.7
Iraq	29.7	0.3
Colombia	29.4	0.3
Tajikistan	28.6	3.4
Slovakia	28.1	3.3
Honduras	28.0	0.4
Israel	27.6	26.5
Cambodia	27.1	0.5
Armenia	26.4	10.6
Haiti	24.9	11.4
Ukraine	24.9	0.4
Czech Republic	24.0	4.0
Mexico	23.0	0.9
Lithuania	22.1	4.9
Poland	21.9	1.6
30 Countries Least Familiar With Immigrants: 1 Standard Deviation or More Below the Mean		
Turkmenistan	20.7	4.3
Thailand	20.5	5.6
Palestinian Territories	19.9	5.9
Tanzania	19.1	0.6
Kyrgyzstan	18.6	4.6

Country	% Who Know an Immigrant	Actual Immigrant Population (%)
Nepal	18.3	3.5
Bulgaria	18.0	1.2
Vietnam	17.9	0.1
Morocco	17.7	0.2
Pakistan	16.6	2.2
Georgia	16.4	4.4
Madagascar	16.1	0.1
Azerbaijan	15.9	3.4
India	15.0	0.4
Latvia	14.9	13.8
Egypt	13.2	0.4
Indonesia	12.4	0.1
Montenegro	12.3	8.2
Romania	11.9	0.9
Yemen	11.1	1.3
Kosovo	10.3	-
Bangladesh	8.4	0.9
Uzbekistan	7.9	4.4
Ethiopia	6.9	0.8
Afghanistan	6.9	0.3
China	5.9	0.1
Macedonia	5.7	6.6
Serbia	4.9	5.6
Bosnia & Herzegovina	4.7	0.6
Myanmar	4.1	0.2
Croatia	-3	17.6
World ⁴	29.1	3.3

¹Country samples are weighted to accurately reflect their population parameters. ²United Nations Department of Economic and Social Affairs (UN DESA). (2016). *International Migration Report 2015*. New York: United Nations. (<http://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2015.pdf>)

³Question was not asked in Croatia. ⁴World sample is weighted to be projectable to the global population

partial $\eta^2 = .037$. Differences in three more countries (Saudi Arabia, Sierra Leone, and Uganda) fell just short of statistical significance ($p < .10$). Just five countries – Afghanistan, Benin, Congo Brazzaville, Malawi, and the UAE – did not show evidence of the contact effect. Migrant Acceptance Index scores for respondents who indicated that they know an immigrant and those who indicated they do not are presented by country in Table 6.

The magnitude of the contact effect differed from country to country. Serbia ($\Delta = +3.37$ scale points) produced the largest statistically or marginally significant Migrant Acceptance Index difference and Sierra Leone ($\Delta = +0.16$ scale points) yielded the smallest difference. This range of

⁷ Observed power = 1.0 for all effects.



index score differences produced a significant Country x Migrant Contact interaction, $F(138, 140162) = 8.9, p < .0001, \text{partial } \eta^2 = .01.$

Table 6. Migrant Acceptance Index (MAI) Differences Between Respondents Who Know Immigrants and Respondents Who Do Not Know Immigrants by Country (Sorted by MAI)

Country ²	Region	% who know immigrants	Migrant Acceptance Index Score ¹			95% CI for Δ (1-tailed)		Observed Power		
			Know immigrants	Don't know immigrants	Country Overall	Know - Don't know Δ (1-tailed)	Lower Bound		Upper Bound	
23 Most Accepting Countries: 1 Standard Deviation or More Above the Mean										
Iceland	Western Europe	77.7	8.42	7.70	8.26	+0.72	**	0.00	0.44	0.53
New Zealand	Australia & New Zealand	83.3	8.43	7.33	8.25	+1.10	***	0.00	0.38	0.99
Rwanda	East Africa	64.8	8.32	7.88	8.16	+0.44	***	0.00	0.23	0.63
Canada	Northern America	84.4	8.45	6.52	8.14	+1.93	***	0.00	0.33	1.00
Sierra Leone	West Africa	42.4	8.17	8.01	8.05	+0.16	†	0.00	0.20	0.15
Mali	West Africa	57.4	8.35	7.60	8.03	+0.75	***	0.00	0.22	0.98
Australia	Australia & New Zealand	88.2	8.05	7.50	7.98	+0.55	*	0.00	0.42	0.39
Sweden	Western Europe	89.8	8.11	6.25	7.92	+1.86	***	0.00	0.52	1.00
United States	Northern America	77.2	8.21	6.73	7.86	+1.48	***	0.00	0.22	1.00
Nigeria	West Africa	30.4	7.99	7.66	7.76	+0.33	*	0.00	0.25	0.34
Ireland	Western Europe	81.3	8.01	6.58	7.74	+1.43	***	0.00	0.39	1.00
Burkina Faso	West Africa	56.5	8.03	7.35	7.74	+0.68	***	0.00	0.22	0.95
Norway	Western Europe	83.5	7.91	6.84	7.73	+1.07	***	0.00	0.40	0.99
Ivory Coast	West Africa	77.1	7.89	7.18	7.71	+0.71	***	0.00	0.34	0.88
Benin	West Africa	60.6	7.67	7.71	7.67	-0.04	ns	0.00	0.25	0.05
Luxembourg	Western Europe	79.1	7.90	6.19	7.54	+1.71	***	0.00	0.41	1.00
Netherlands	Western Europe	67.8	7.89	6.56	7.46	+1.33	***	0.00	0.33	1.00
Bangladesh	South Asia	8.4	8.67	7.40	7.45	+1.27	***	0.00	0.25	0.95
Spain	Southern Europe	88.1	7.71	5.48	7.44	+2.23	***	0.00	0.47	1.00
Chad	Central Africa	49.9	7.72	6.84	7.26	+0.88	***	0.00	0.30	1.00
Albania	Southeast Europe	31.1	7.61	7.04	7.22	+0.57	***	0.00	0.28	0.76
Switzerland	Western Europe	82.4	7.67	5.03	7.21	+2.64	***	0.00	0.48	1.00
Senegal	West Africa	72.4	7.56	6.15	7.17	+1.41	***	0.00	0.31	1.00
88 Countries Within +/-1 Standard Deviation of the Mean										
Germany	Western Europe	68.5	7.45	6.29	7.09	+1.16	***	0.00	0.32	1.00
Denmark	Western Europe	81.4	7.48	5.38	7.09	+2.10	***	0.00	0.46	1.00

¹Migrant Acceptance Index score ranges from 0 to 9.
²Country samples are weighted to accurately reflect their population parameters.
 ***p < .001; **p < .01; *p < .05; †p < .10; ns = nonsignificant. All tests one-tailed with Bonferroni adjustment for family-wise error rate.



122 Migrant Acceptance Index

Table 6 (Cont'd.). Migrant Acceptance Index (MAI) Differences Between Respondents Who Know Immigrants and Respondents Who Do Not Know Immigrants by Country (Sorted by MAI)

Country ²	Region	% who know immigrants		Migrant Acceptance Index Score ¹			95% CI for Δ (1-tailed)			Observed Power
		Know immigrants	Don't know immigrants	Country Overall	Know - Don't know Δ	Δ Sig. (1-tailed)	Lower Bound	Upper Bound		
Congo (Kinshasa DRC)	Central Africa	51.9	7.26	6.88	7.05	+0.38	*	0.00	0.29	0.43
Guinea	West Africa	52.5	7.54	6.42	7.01	+1.12	***	0.00	0.27	1.00
Togo	West Africa	57.5	7.47	6.36	6.96	+1.11	***	0.00	0.33	1.00
Ghana	West Africa	57.2	7.17	6.61	6.91	+0.56	**	0.00	0.32	0.88
Venezuela	Latin America	81.1	7.21	5.16	6.82	+2.05	***	0.00	0.38	1.00
Congo (Brazzaville RC)	Central Africa	74.0	6.76	7.02	6.81	-0.26	ns	0.00	0.34	0.17
Taiwan	East Asia	53.3	7.00	6.62	6.80	+0.38	*	0.00	0.29	0.83
Uruguay	Latin America	47.6	7.40	6.21	6.77	+1.19	***	0.00	0.30	1.00
Philippines	Southeast Asia	37.8	7.58	6.27	6.77	+1.31	***	0.00	0.29	1.00
Zimbabwe	South Africa	41.6	7.39	6.23	6.70	+1.16	***	0.00	0.30	1.00
Lesotho	South Africa	53.3	6.84	6.44	6.65	+0.40	*	0.00	0.32	0.65
Portugal	Southern Europe	81.5	6.86	5.74	6.65	+1.12	***	0.00	0.39	1.00
Niger	West Africa	47.6	6.97	6.34	6.64	+0.63	***	0.00	0.30	0.81
United Kingdom	Western Europe	75.6	7.09	5.16	6.61	+1.93	***	0.00	0.39	1.00
Finland	Western Europe	67.0	7.18	5.38	6.58	+1.80	***	0.00	0.34	1.00
Kenya	East Africa	40.7	6.99	6.18	6.51	+0.81	***	0.00	0.34	0.99
Argentina	Latin America	75.8	6.66	6.01	6.51	+0.65	**	0.00	0.36	0.82
Paraguay	Latin America	63.2	7.05	5.56	6.50	+1.49	***	0.00	0.33	0.99
Italy	Southern Europe	83.6	6.82	4.76	6.49	+2.06	***	0.00	0.51	1.00
South Korea	East Asia	39.7	7.07	6.14	6.49	+0.93	***	0.00	0.31	1.00
Tunisia	North Africa	40.5	7.36	5.88	6.47	+1.48	***	0.00	0.28	1.00
France	Western Europe	68.9	6.97	5.32	6.46	+1.65	***	0.00	0.39	1.00
Japan	East Asia	34.1	7.08	6.08	6.42	+1.00	***	0.00	0.31	1.00
Morocco	North Africa	17.7	7.04	6.25	6.39	+0.79	***	0.00	0.40	0.91
Saudi Arabia	GCC	86.2	6.46	6.11	6.39	+0.35	†	0.00	0.45	0.12
Brazil	Latin America	38.5	7.08	5.94	6.38	+1.14	***	0.00	0.34	1.00
Central African Republic	Central Africa	43.6	7.57	5.44	6.36	+2.13	***	0.00	0.31	1.00
Cameroon	Central Africa	43.1	6.77	6.08	6.36	+0.69	***	0.00	0.33	0.96

¹Migrant Acceptance Index score ranges from 0 to 9.

²Country samples are weighted to accurately reflect their population parameters.

***p < .001; **p < .01; *p < .05; †p < .10; ns = nonsignificant. All tests one-tailed with Bonferroni adjustment for family-wise error rate.



Table 6 (Cont'd). Migrant Acceptance Index (MAI) Differences Between Respondents Who Know Immigrants and Respondents Who Do Not Know Immigrants by Country (Sorted by MAI)

Country ²	Region	% who know immigrants			Migrant Acceptance Index Score ¹			95% CI for Δ (1-tailed)		Observed Power
		Know immigrants	Don't know immigrants	Country Overall	Know - Don't know Δ	Δ Sig. (1-tailed)	Lower Bound	Upper Bound		
Peru	Latin America	36.8	7.30	6.33	+1.52	***	0.00	0.32	1.00	
Nepal	South Asia	18.3	6.72	6.28	+0.54	*	0.00	0.42	0.43	
Belgium	Western Europe	66.7	6.84	6.16	+2.06	***	0.00	0.39	1.00	
Liberia	West Africa	47.2	6.96	6.14	+1.51	***	0.00	0.37	1.00	
Colombia	Latin America	29.4	7.54	6.13	+1.99	***	0.00	0.33	1.00	
Ecuador	Latin America	56.8	6.52	6.13	+0.92	***	0.00	0.32	0.98	
Gabon	West Africa	80.6	6.62	6.12	+2.39	***	0.00	0.47	1.00	
Malawi	South Africa	37.4	6.24	6.10	+0.22	ns	0.00	0.35	0.31	
Vietnam	Southeast Asia	17.9	7.14	6.08	+1.18	***	0.00	0.34	1.00	
Austria	Western Europe	75.3	6.49	6.06	+1.72	***	0.00	0.40	1.00	
Dominican Republic	Caribbean	74.2	6.16	6.03	+0.47	*	0.00	0.39	0.66	
Nicaragua	Latin America	30.0	6.98	6.00	+1.39	***	0.00	0.32	1.00	
Hong Kong	East Asia	57.0	6.52	5.89	+1.48	***	0.00	0.36	1.00	
Ubya	North Africa	75.1	6.21	5.79	+1.67	***	0.00	0.33	1.00	
United Arab Emirates	GCC	86.2	5.86	5.42	+0.44	ns	0.00	0.59	0.28	
Armenia	Caucasus CIS	26.4	6.89	5.78	+1.44	***	0.00	0.35	1.00	
El Salvador	Latin America	37.7	6.06	5.55	+0.51	**	0.00	0.34	0.69	
South Sudan	East Africa	53.4	6.28	5.63	+1.28	***	0.00	0.33	1.00	
Mauritius	South Africa	45.1	5.79	5.58	+0.34	*	0.00	0.33	0.42	
Uganda	East Africa	56.0	5.60	5.45	+0.35	†	0.00	0.38	0.17	
Costa Rica	Latin America	83.3	5.64	4.49	+1.15	***	0.00	0.46	0.98	
Bolivia	Latin America	47.5	6.32	5.42	+1.70	***	0.00	0.33	1.00	
Cyprus	Southern Europe	69.4	5.89	4.35	+1.54	***	0.00	0.37	1.00	
Country-Level Migrant Acceptance Index Mean Score = 5.37; SD = 1.79; 95% CI = 5.07-5.67										
Turkmenistan	Asian CIS	20.7	6.66	5.02	+1.64	***	0.00	0.22	1.00	
Haiti	Caribbean	24.9	6.26	5.06	+1.20	***	0.00	0.52	0.98	
Mauritania	West Africa	57.9	6.04	4.36	+1.68	***	0.00	0.28	1.00	
Madagascar	South Africa	16.1	5.88	5.11	+0.77	**	0.00	0.51	0.84	

¹ Migrant Acceptance Index score ranges from 0 to 9.

² Country samples are weighted to accurately reflect their population parameters.

***p < .001; **p < .01; *p < .05; †p < .10; ns = nonsignificant. All tests one-tailed with Bonferroni adjustment for family-wise error rate.



Table 6 (Cont'd.). Migrant Acceptance Index (MAI) Differences Between Respondents Who Know Immigrants and Respondents Who Do Not Know Immigrants by Country (Sorted by MAI)

Country ²	Region	% who know immigrants	Migrant Acceptance Index Score ¹			Country Overall	Know - Don't know Δ	Δ Sig. (1-tailed)	95% CI for Δ (1-tailed)		Observed Power
			Know immigrants	Don't know immigrants	Overall				Lower Bound	Upper Bound	
Singapore	Southeast Asia	55.9	5.62	4.76	5.21	+0.86	***	0.00	0.30	0.99	
Ethiopia	East Africa	6.9	7.66	5.00	5.19	+2.66	***	0.00	0.50	1.00	
Chile	Latin America	53.4	5.67	4.60	5.17	+1.07	***	0.00	0.34	1.00	
Honduras	Latin America	28.0	6.27	4.73	5.15	+1.54	***	0.00	0.38	1.00	
Zambia	South Africa	55.5	5.72	4.52	5.15	+1.20	***	0.00	0.37	1.00	
China	East Asia	5.9	7.03	5.00	5.11	+2.03	***	0.00	0.29	1.00	
Botswana	South Africa	57.4	5.97	3.97	5.10	+2.00	***	0.00	0.38	1.00	
Somalia	East Africa	33.0	6.09	4.61	4.99	+1.48	***	0.00	0.34	1.00	
South Africa	South Africa	75.5	5.52	3.30	4.98	+2.22	***	0.00	0.42	1.00	
Malta	Southern Europe	46.3	5.67	4.34	4.95	+1.33	***	0.00	0.37	1.00	
Uzbekistan	Asian CIS	7.9	5.86	4.81	4.90	+1.05	***	0.00	0.64	0.90	
India	South Asia	15.0	7.24	4.56	4.90	+2.68	***	0.00	0.24	1.00	
Kuwait	GCC	88.4	5.02	3.59	4.85	+1.43	***	0.00	0.70	0.86	
Tanzania	East Africa	19.1	5.72	4.62	4.82	+1.10	***	0.00	0.51	1.00	
Mexico	Latin America	23.0	6.17	4.36	4.75	+1.81	***	0.00	0.42	1.00	
Northern Cyprus	Southeast Europe	60.2	5.06	4.03	4.66	+1.03	***	0.00	0.38	1.00	
Guatemala	Latin America	31.4	5.75	4.06	4.59	+1.69	***	0.00	0.37	1.00	
Kyrgyzstan	Asian CIS	18.6	5.12	4.50	4.59	+0.62	*	0.00	0.49	0.57	
Slovenia	Eastern Europe	36.5	6.13	3.44	4.42	+2.69	***	0.00	0.39	1.00	
Tajikistan	Asian CIS	28.6	4.96	4.25	4.39	+0.71	***	0.00	0.35	0.93	
Panama	Latin America	61.0	5.14	3.14	4.36	+2.00	***	0.00	0.31	1.00	
Azerbaijan	Caucasus CIS	15.9	5.48	4.15	4.34	+1.33	***	0.00	0.45	1.00	
Kazakhstan	Asian CIS	42.6	5.23	3.61	4.28	+1.62	***	0.00	0.33	1.00	
Kosovo	Southeast Europe	10.3	5.59	4.03	4.17	+1.56	***	0.00	0.50	1.00	
Iran	Rest of MENA	40.7	4.16	3.81	3.95	+0.35	*	0.00	0.33	0.50	
Indonesia	Southeast Asia	12.4	5.60	3.71	3.93	+1.89	***	0.00	0.59	1.00	
Yemen	Rest of MENA	11.1	5.29	3.80	3.93	+1.49	***	0.00	0.50	0.99	
Palestinian Territories	Rest of MENA	19.9	5.73	3.45	3.90	+2.28	***	0.00	0.39	1.00	

¹Migrant Acceptance Index score ranges from 0 to 9.

²Country samples are weighted to accurately reflect their population parameters.

***p < .001; **p < .01; *p < .05; ns = nonsignificant. All tests one-tailed with Bonferroni adjustment for family-wise error rate.



Table 6 (Cont'd.). Migrant Acceptance Index (MAI) Differences Between Respondents Who Know Immigrants and Respondents Who Do Not Know Immigrants by Country (Sorted by MAI)

Country ²	Region	% who know immigrants	Migrant Acceptance Index Score ¹			95% CI for Δ (1-tailed)		Observed Power		
			Know immigrants	Don't know immigrants	Country Overall	Know - Don't know Δ	Δ Sig. (1-tailed)		Lower Bound	Upper Bound
Lebanon	Rest of MENA	65.7	4.08	3.52	3.89	+0.56	**	0.00	0.37	0.72
Moldova	Europe CIS	33.9	4.83	3.29	3.80	+1.54	***	0.00	0.32	1.00
Cambodia	Southeast Asia	27.1	4.40	3.36	3.65	+1.04	***	0.00	0.40	1.00
29 Least-Accepting Countries: 1 Standard Deviation or More Below the Mean										
Egypt	North Africa	13.2	4.81	3.30	3.50	+1.51	***	0.00	0.53	1.00
Iraq	Rest of MENA	23.7	3.98	3.19	3.42	+0.79	***	0.00	0.38	0.99
Belarus	Europe CIS	38.8	4.18	2.88	3.38	+1.30	***	0.00	0.32	1.00
Greece	Southern Europe	81.4	3.65	2.06	3.34	+1.59	***	0.00	0.36	1.00
Poland	Eastern Europe	21.9	4.83	2.90	3.31	+1.93	***	0.00	0.39	1.00
Turkey	Southeast Europe	42.1	3.78	2.89	3.27	+0.89	***	0.00	0.29	0.99
Ukraine	Europe CIS	24.9	4.02	2.93	3.45	+1.09	***	0.00	0.34	0.98
Georgia	Caucases CIS	16.4	3.87	2.89	3.05	+0.98	***	0.00	0.47	1.00
Mongolia	East Asia	42.6	3.67	2.54	2.99	+1.13	***	0.00	0.31	1.00
Jordan	Rest of MENA	53.5	3.48	2.44	2.99	+1.04	***	0.00	0.34	1.00
Myanmar	Southeast Asia	4.1	4.13	2.91	2.96	+1.22	**	0.00	0.78	0.62
Romania	Eastern Europe	11.9	4.73	2.69	2.93	+2.04	***	0.00	0.53	1.00
Lithuania	Eastern Europe	22.1	4.42	2.25	2.72	+2.17	***	0.00	0.38	1.00
Bosnia & Herzegovina	Southeast Europe	4.7	5.58	2.54	2.71	+3.04	***	0.00	0.81	1.00
Thailand	Southeast Asia	20.5	4.08	2.34	2.69	+1.74	***	0.00	0.42	1.00
Russia	Europe CIS	40.2	3.12	2.27	2.60	+0.85	***	0.00	0.18	1.00
Afghanistan	South Asia	6.9	2.31	2.52	2.51	-0.21	ns	0.00	0.42	0.07
Pakistan	South Asia	16.6	3.06	2.34	2.47	+0.72	**	0.00	0.41	0.73
Bulgaria	Eastern Europe	18.0	4.20	2.01	2.42	+2.19	***	0.00	0.35	1.00
Croatia	Southeast Europe	-	-	-	2.39 ³	-	-	-	-	-
Estonia	Eastern Europe	30.3	3.58	1.85	2.37	+1.73	***	0.00	0.30	1.00
Czech Republic	Eastern Europe	24.0	3.61	1.84	2.26	+1.77	***	0.00	0.33	1.00
Latvia	Eastern Europe	14.9	3.03	1.85	2.04	+1.18	***	0.00	0.37	1.00
Israel	Rest of MENA	27.6	3.02	1.42	1.87	+1.60	***	0.00	0.29	1.00

¹Migrant Acceptance Index score ranges from 0 to 9.

²Country samples are weighted to accurately reflect their population parameters.

****p* < .001; ***p* < .01; **p* < .05; †*p* < .10; ns = nonsignificant. All tests one-tailed with Bonferroni adjustment for family-wise error rate.



Table 6 (Cont'd.). Migrant Acceptance Index (MAI) Differences Between Respondents Who Know Immigrants and Respondents Who Do Not Know Immigrants by Country (Sorted by MAI)

Country ²	Region	% who know immigrants	Migrant Acceptance Index Score ¹			95% CI for Δ (1-tailed)		Observed Power		
			Know immigrants	Don't know immigrants	Country Overall	Know- Don't know Δ	Δ Sig. (1-tailed)		Lower Bound	Upper Bound
Slovakia	Eastern Europe	28.1	2.85	1.43	1.83	+1.42	***	0.00	0.27	1.00
Serbia	Southeast Europe	4.9	5.00	1.63	1.80	+3.37	***	0.00	0.84	1.00
Hungary	Eastern Europe	31.7	2.80	1.17	1.69	+1.63	***	0.00	0.22	1.00
Montenegro	Southeast Europe	12.3	3.17	1.41	1.63	+1.76	***	0.00	0.49	1.00
Macedonia	Southeast Europe	5.7	2.74	1.36	1.47	+1.38	***	0.00	0.62	0.89
World ⁴		29.1	6.78	4.80	5.34	+1.98	***	0.00	0.03	1.00

¹Migrant Acceptance Index score ranges from 0 to 9.

²Country samples are weighted to accurately reflect their population parameters.

³Do you know an immigrant living in this country? was not included for Croatia.

⁴World sample is weighted to be projectable to the global population.

***p < .001; **p < .01; *p < .05; †p < .10; ns = nonsignificant. All tests one-tailed with Bonferroni adjustment for family-wise error rate.



Perhaps not surprisingly, the proportion of a country's population who say they know immigrants is strongly associated with that country's Migrant Acceptance Index score ($r(138) = 0.61, p < .001$) but not with the size of the difference between respondents who know and don't know immigrants ($r(138) = -0.10, ns$). These relationships are depicted graphically in Figures 4 and 5.

Two Outliers

Figure 4 highlights two extreme outliers that produce results that run counter to the contact hypothesis, Bangladesh and Greece. Both are interesting because they suggest some conditions that might limit the effects of interpersonal contact on attitudes toward migrants based on prevailing local conditions. Earlier we suggested that the high Migrant Acceptance Index scores from a number of sub-Saharan African countries could reflect the perception that migrants (few as they may be) bring much needed financial resources with them, an important positive benefit. The average percentage of respondents who report knowing an immigrant in the nine "most accepting" countries in sub-Saharan Africa is 56.8% while the average proportion of immigrants in those nine countries' actual populations is 4.1%. Immigrants likewise make up a miniscule slice of the Bangladeshi population (0.9%) and few Bangladeshis report knowing an immigrant (8.4% > 1 SD *below* the mean) yet their Migrant Acceptance Index Score (7.45) is more than one standard deviation unit *above* them mean. The situation for Bangladeshis is likely the same as the one proposed to operate in the countries in sub-Saharan Africa: Prevailing local economic conditions make migrants with financial resources more desirable and more acceptable despite the low levels of interpersonal contact with migrants reported by Bangladeshis.

Greece produces the exact opposite pattern: A preponderance of Greeks report knowing an immigrant (81.4% > 1 SD *above* the mean) yet their Migrant Acceptance Index Score (3.34) is more than one standard deviation *below* them mean. While not part of the former Soviet bloc, Greece borders both Macedonia and Bulgaria and is one of the countries transited by the wave of refugees fleeing conflict in the Middle East. For Greece, it is likely that prevailing local social conditions make migrants less desirable and less acceptable despite the high levels of interpersonal contact with migrants reported by Greeks. In spite of the paradoxical relationship between contact and attitudes toward migrants in these two countries, it is worth reiterating that Greeks and Bangladeshis who reported knowing an immigrant held significantly more positive attitudes toward migrants than their compatriots who said they did not know an immigrant.



Discussion

Allport’s (1954) contact hypothesis has a long history in the social sciences as a possible mechanism for reducing stereotyping and prejudice, particularly in research conducted in the United States. Meta-analysis has demonstrated that the effect is robust across research settings, social groups, types of interaction, and to some extent, geography. Our goal in this paper was to expand the depth of existing research at a country-level outside the United States. The current findings, while correlational, strongly demonstrate the relationship between self-reported interpersonal contact with migrants and personal attitudes toward them in 134 out of 139 countries independently polled by the Gallup World Poll. Residents of those countries were significantly more accepting of migrants if they had had prior contact with an immigrant compared to those who had not. This effect emerged on six continents, across myriad language groups, and within samples comprised of men and women, young and old, rich and poor, and educated and uneducated alike. Although these data do not allow us to determine the causal direction of the observed effects, it is likely that the effect works in both directions, as others have demonstrated (Binder et al., 2009; Swart et al., 2011), but with the stronger effect moving from contact to attitudes.

Figure 4. Country-Level Migrant Acceptance Index by % Who Know Immigrants

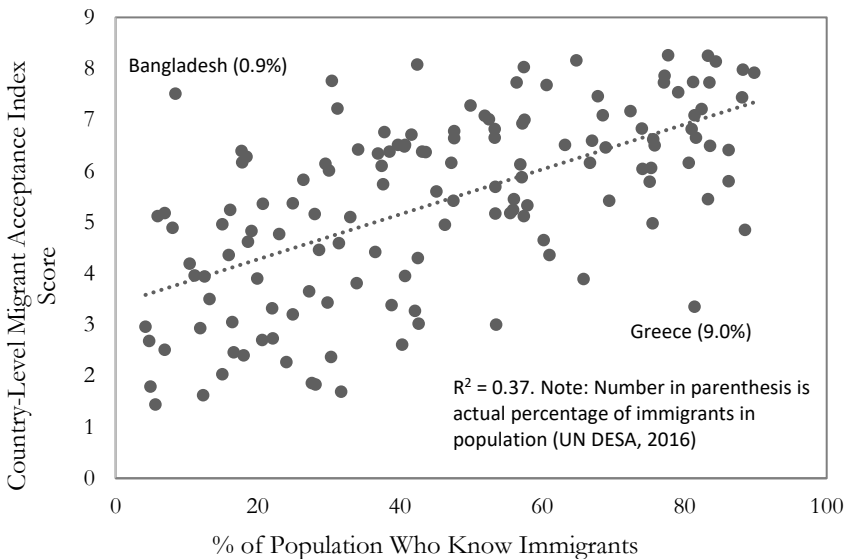
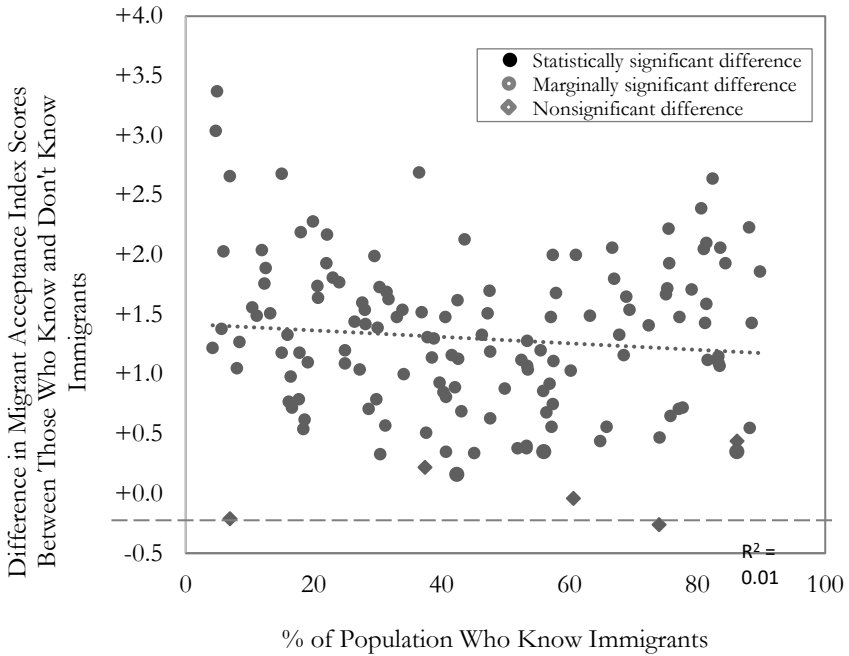


Figure 5. Country-Level Migrant Acceptance Index by Size of Know Immigrants-Don't Know Immigrants Difference



We can make no claim as to whether Allport’s “optimal circumstances” existed in the country-level samples we obtained. But the fact that a robust relationship between interpersonal contact with migrants and attitudes toward them emerged in so many different countries strongly suggests, as Pettigrew and Tropp (2006) noted, that optimal circumstances are not necessary preconditions for the contact effect to emerge.

With immigration taking such a high profile position around the world, understanding which countries are predisposed to accept of or reject migrants can help shed light on where immigration issues are likely to arise. More important, however, is the possibility that simple interpersonal contact with migrants can help moderate potential prejudice and discrimination across national boundaries, cultures, and languages.

References

Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Perseus Books.
 Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., Mayuul, A., Demoulin, S., & Leyens, J-P. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis amongst majority and

- minority groups in three European countries. *Journal of Personality and Social Psychology*, 96, 843-856.
- Brown, K. T., Brown, T. N., Jackson, J. S., Sellers, R. M., & Manuel, W. J. (2003). Teammates on and off the field? Contact with Black teammates and the racial attitudes of White student athletes. *Journal of Applied Social Psychology*, 33, 1379-1403. doi:10.1111/j.1559-1816.2003.tb01954.x
- Brown, R. & Hewstone, M. (2005). An integrative theory of intergroup contact. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 255-343). doi:10.1016/S0065-2601(05)37005-5
- Campbell, D. T. & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Boston, MA: Houghton Mifflin Co.
- Cehajic, S., Brown, R., & Castano, E. (2008). Forgive and forget? Antecedents and consequences of intergroup forgiveness in Bosnia and Herzegovina. *Political Psychology*, 29(3), 351-367.
- Central Intelligence Agency. (2016). *The World Factbook*. Washington, DC: Central Intelligence Agency. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/index.html>
- Duncan, O. D., & Duncan, B. (1955). A methodological analysis of segregation indexes. *American Sociological Review*, 20(2), 210-217.
- Edwards, M. (2016). Rethinking "Eastern European racism." *Opendemocracy.net*, March 22. Retrieved December 14, 2017 from <https://www.opendemocracy.net/can-europe-make-it/maxim-edwards/rethinking-eastern-european-racism>
- Harwood, J., Hewstone, M., Paolini, S., & Voci, A. (2005). Grandparent-grandchild contact and attitudes toward older adults: Moderator and mediator effects. *Personality and Social Psychology Bulletin*, 31, 393-406.
- Herek, G. M. (1987). The instrumentality of attitudes: Toward a neofunctional theory. *Journal of Social Issues*, 42, 99-114. doi:10.1111/j.1540-4560.1986.tb00227.x
- Herek, G. M., & Capitanio, J. P. (1996). Some of my best friends: Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians personality. *Social Psychology Bulletin*, 22, 412-424. doi:10.1177/0146167296224007
- Herek, G. M., & Glunt, E. K. (1993). Interpersonal contact and heterosexuals' attitudes toward gay men: Results from a national survey. *Journal of Sex Research*, 30, 239-244. doi:10.1080/00224499309551707
- Hewstone, M., Cairns, E., Voci, A., McLernon, F., Niens, U., & Noor, M. (2004). Intergroup forgiveness and guilt in Northern Ireland: Social psychological dimensions of 'The Troubles'. In N. R. Branscombe & B. Doosje (Eds.), *Collective guilt: International perspectives* (pp. 193-215). New York: Cambridge University Press.
- Hindriks, P., Verkuyten, M., & Coenders, M. (2014). Interminority attitudes: The roles of ethnic and national identification, contact, and multiculturalism. *Social Psychology Quarterly*, 77(1), 54-74.
- Horn, H. (2015). Is Eastern Europe any more xenophobic than Western Europe? Investigating a stereotype of the refugee crisis. *The Atlantic*, October 15. Retrieved December 21, 2017 from <https://www.theatlantic.com/international/archive/2015/10/xenophobia-eastern-europe-refugees/410800/>
- Islam, M. R. & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality & Social Psychology Bulletin*, 19, 700-710. doi:10.1177/0146167293196005
- Kende J., Phalet K., Van Den Noortgate W., Kara A., Fischer R. (2017). Equality revisited: A cross-cultural meta-analysis of the contact hypothesis. *Social Psychological and Personality Science*, September 12. doi:10.1177/1948550617728993



- Maliepaard, M. & Phalet, K. (2012). Social integration and religious identity expression among Dutch Muslims: The role of minority and majority group contact. *Social Psychology Quarterly*, 75(2), 131-148.
- Malik, K. (2015). Is Eastern Europe really more racist than the west? *The New York Times*, November 3. Retrieved from https://www.nytimes.com/2015/11/04/opinion/who-invented-fortress-europe.html?smid=fb-nytimes&smtyp=cur&_r=0
- Massey, D. S., & Denton, N. A. (1988). The dimensions of residential segregation. *Social Forces*, 67, 281-315.
- McCaughey, C. Plummer, M., Moskalenko, S., & Mordkoff, J. T. (2001). The Exposure Index: A measure of intergroup contact. *Peace and Conflict: Journal of Peace Psychology*, 7(4), 321-336.
- Paolini S., Hewstone, M., Cairns, E., & Voci, A. (2004). Effects of direct and indirect cross-group friendships on judgments of Catholics and Protestants in Northern Ireland: the mediating role of an anxiety-reduction mechanism. *Personality & Social Psychology Bulletin*, 30, 770-786. doi:10.1177/0146167203262848
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90 (5), 751–783. doi:10.1037/0022-3514.90.5.751. PMID 16737372
- Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology*, 38(6), 922-934. doi:10.1002/ejsp.504
- Pettigrew, T. F., & Tropp, L. R. (2011). *When groups meet: The dynamics of intergroup contact*. New York: Psychology Press.
- Sakoda, J. M. (1981). A generalized index of dissimilarity. *Demography*, 18(2), 245-250.
- Schmid, K., Hewstone, M., Küpper, B., Zick, A., & Wagner, U. (2012). Secondary transfer effects of intergroup contact: A cross-national comparison in Europe. *Social Psychology Quarterly*, 75, 1, 28-51.
- Smith, S. J., Axelson, A. M., & Saucier, D. A. (2009). The effects of contact on sexual prejudice: A meta-analysis. *Sex Roles*, 61(3-4), 178-191. doi:10.1007/s11199-009-9627-3
- Swart, H., Hewstone, M., Christ, O., & Voci, A. (2011). Affective mediators of intergroup contact: A three-wave longitudinal study in South Africa. *Journal of Personality and Social Psychology*, 101, 1221-1238.
- Tam, T., Hewstone, M., Cairns, E., Tausch, N., Maio, G., & Kenworthy, J.B. (2007). The impact of intergroup emotions on forgiveness in Northern Ireland. *Group Processes & Intergroup Relations*, 10, 119-136.
- Tam, T., Hewstone, M., Kenworthy, J.B., Cairns, E., Marinetti, C., Geddes, L., & Parkinson, B. (2008). Postconflict reconciliation: Intergroup forgiveness and implicit biases in Northern Ireland. *Journal of Social Issues*, 64, 303-320.
- Theil, H. (1967). *Economics and information theory*. Chicago: Rand McNally and Company.
- United Nations Department of Economic and Social Affairs (UN DESA). (2016). *International Migration Report 2015*. New York: United Nations. Retrieved from <http://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2015.pdf>
- White, M. J. (1983). The measurement of spatial segregation. *American Journal of Sociology*, 88(5), 1008-1018.
- White, M. J. (1986). Segregation and diversity measures in population distribution. *Population Index*, 52, 198-221.
- World Bank Group. (2017). *World Bank country and lending groups the current 2018 fiscal year*. New York: World Bank. Retrieved from <https://datahelpdesk>.



132 *Migrant Acceptance Index*

worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

