Economic Inequality Shapes the Relationship Between Globalization and Prejudice

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Abstract

As globalization increases worldwide, it redefines our conceptions of other cultures, the media we consume, and our day-to-day interactions. Despite this increased interconnectivity, we lack a fundamental understanding of how globalization is related to prejudicial attitudes between social groups. We hypothesized that economic inequality may shape the relationship between globalization and intergroup prejudice. We tested this prediction with data from over 66,000 respondents across 44 countries. We found that globalization—and particularly its social aspects such as tourism and migration—is related to increased prejudice in countries with high economic inequality and is related to decreased prejudice in countries with low economic inequality. These findings offer new insight into how and why globalization may shape intergroup relations around the world.

Keywords

culture and cognition, prejudice/stereotyping, intergroup relations

I find that because of modern technological evolution and our global economy, and as a result of the great increase in population, our world has greatly changed: it has become much smaller. However, our perceptions have not evolved at the same pace; we continue to cling to old national demarcations and the old feelings of "us" and "them."

—Dalai Lama

The world is more globalized than ever before. Economies are increasingly interconnected and dependent upon international trade, and governments account for this increasing interconnectivity in policies and dealings with other nations (Deutsche Post DHL Group, 2019). Meeting diverse others face-to-face has also become increasingly commonplace due to advances in transportation. For example, between 1950 and 2018, the number of tourist arrivals worldwide increased 56-fold from 25 million (United Nations World Tourism Organization, 2017) to 1.4 billion (United Nations World Tourism Organization, 2018). Migration rates also continue to grow rapidly, reaching the highest recorded levels in 2017 at 258 million international migrants worldwide (United Nations, 2017). These data suggest that the world is becoming "smaller": economies, policies, and social interactions are increasingly diverse and integrated across traditional national boundaries.

Globalization is bringing diverse groups of people together, but how is it changing relations between these groups? Few studies have explicitly measured the psychological effects of globalization (Marsella, 2012), but related research suggests two contrasting possibilities for how this process may affect prejudice (Chiu et al., 2011; Guillen, 2001; Mewes & Mau, 2013). One possibility is that globalization decreases prejudice between groups. Research has found that exposure to cultural diversity may increase flexible thinking and openness to experience (Chiu & Cheng, 2007; Crisp & Turner, 2011; Leung et al., 2008; Maddux & Galinsky, 2009; Paulus & Nijstad, 2003; Shrira, 2019; Shrira et al., 2018), suggesting that globalization may create a more harmonious society. However, an alternative possibility is that globalization highlights the differences between groups, triggering feelings of incompatibility, cultural contamination, and ultimately increasing intergroup prejudice (Schlueter & Scheepers, 2010; Torelli et al., 2011). Given the rapid pace of globalization, testing these possibilities is increasingly urgent.

We propose that the extremity of economic inequality within a nation may shape the association between globalization and intergroup prejudice. Research suggests that economic inequality heightens perceived differences between groups and competition for resources and status (Buttrick & Oishi, 2017; Sommet et al., 2019; Wilkinson & Pickett, 2017). Therefore, we predict that when financial resources are distributed

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relatively unequally within a country, globalization may be associated with more intergroup prejudice. However, when resources are distributed relatively equally, globalization may instead be associated with less intergroup prejudice.

Theoretical Background

By definition, globalization increases intergroup contact. Research suggests that both face-to-face intergroup contact and indirect intergroup contact (such as virtual contact) can lead to intergroup prejudice reduction (Allport, 1954; Lemmer & Wagner, 2015; Paluck, 2009; Pettigrew & Tropp, 2008). By extension, globalization may have a similar effect on intergroup prejudice via increasing the number of interactions, both direct and indirect, that people have with out-group members (Gries et al., 2011). This view suggests that globalization may be harmonizing—intergroup prejudice may be lower among more globalized countries because of increased knowledge of and interaction with diverse peoples.

But globalization may not always predict prejudice reduction, particularly when globalization is not accompanied by the optimal conditions for prejudice reduction. Intergroup contact theory outlines four optimal contact conditions which need to be met in order to yield prejudice reduction from intergroup contact (Allport, 1954; Blumer, 1958; Pettigrew, 1998; Pettigrew et al., 2011). These conditions are equal status, common goals, intergroup cooperation, and support of authorities (Allport, 1954). That is, intergroup contact may yield prejudice reduction when individuals or groups have equal status within a situation, have a common goal, attainment of this goal requires cooperation (as opposed to competition), and authority figures, laws, or customs support intergroup contact. Although these optimal conditions have been updated and added to over the years (Pettigrew, 1998), we can consider these conditions as essential to facilitating intergroup contact, which may, over time, yield reduced intergroup prejudice. Globalization, however, may not always occur alongside these optimal conditions (Chiu & Kwan, 2016).

Economic inequality—or the breadth of differences in economic well-being among individuals in a given context—may stymie the potential prejudice reduction power of globalization. Economic inequality describes the distribution of economic resources across individuals (or households), rather than the overall level of resources in a country, and may be one way to measure the disruption of the optimizing conditions for intergroup contact. In particular, economic inequality may heighten concerns regarding equal status between groups and intergroup competition for resources (Sherif, 1956; Sommet et al., 2019; Wilkinson & Pickett, 2017) therefore rendering the optimizing conditions unmet. Indeed, previous work has demonstrated the importance of equal status in intergroup interactions in promoting positive intergroup attitudes (Clore et al., 1978; Cohen & Lotan, 1995; Robinson & Preston, 1976).

Previous research demonstrates that inequality can increase perceived differences, status concerns, and competition between social groups—outcomes which are particularly deleterious for harmonious intergroup relations. Simulations show that societal resource threat causes the emergence of strong group norms and increases sanctioning to preserve the integrity of these norms (Roos et al., 2015). These findings suggest that under conditions of scarce economic resources, the boundaries between different groups may become stronger. Economic inequality may also highlight existing differences between social groups: In more unequal places, signals of status (such as driving fancy cars) are more apparent (Walasek & Brown, 2015, 2016), and residents report greater status concerns, stress, and lower quality of life than do residents in more equal places (Layte & Whelan, 2014). Economic inequality can also lead to greater competition for scarce resources (Buttrick & Oishi, 2017; Sommet et al., 2019). Coupled with the finding that globalization increases intergroup contact and highlights the differences between cultures (Chiu & Cheng, 2007; Chiu & Kwan, 2016; Chiu et al., 2009; Torelli et al., 2011), inequality may create conditions in which different groups are seen as resource competitors in globalized societies, thereby violating the optimal conditions for intergroup contact and exacerbating prejudice.

Here, we test whether economic inequality shapes the relationship between globalization and prejudice by examining data from 44 nations around the world. Specifically, we investigate whether economic inequality moderates this relationship such that globalization is associated with increased prejudice in relatively unequal nations but is associated with decreased prejudice in relatively equal nations.

To test this hypothesis, we first investigate whether globalization and inequality interact to predict intergroup prejudice. For greater nuance and robustness, we next investigate whether inequality and each facet of globalization (social, economic, and political) interactively predict prejudice. Given that intergroup contact is integral to shaping prejudice (Allport, 1954; Lemmer & Wagner, 2015; Paluck, 2009; Pettigrew, 2008), social and economic globalization may be particularly important facets when predicting intergroup prejudice because of their high likelihood to encourage direct and indirect contact with diverse peoples and goods. Third, we test whether globalization and inequality interact to predict prejudicial attitudes toward specific out-groups to investigate whether the pattern of results is robust across social groups. These analyses contribute a novel and nuanced understanding of how globalization, one of the most powerful social forces of our time, relates to intergroup attitudes and prejudice.

Method

Links to download all raw data used in analyses, code for cleaning this raw data, a cleaned data file, and code for reproducing all analyses can be found on the Open Science Framework: https://osf.io/f25t4/.

Data Sources

We merged data from several sources to test our hypotheses. We used data from the most recent wave of the World Values Survey (WVS; Wave 6, collected from 2010 to 2014) to measure prejudice. We drew nation-level data on globalization from the KOF Swiss Economic Institute and nation-level data on economic inequality from the World Bank. We controlled for nation-level gross domestic product (GDP), population density, and the percent of people in poverty in all of our analyses, with estimates for all these measures sourced from the World Bank. After combining these data sources and excluding missing country-level information, data were available for a total of 44 countries, and approximately 66,000 respondents nested within these countries.¹

Measures

Prejudice. To assess prejudice, we used a WVS item that is based on traditional measures of prejudice, which determines willingness to be close to someone from a different social group (Bogardus, 1933). Specifically, the item asked participants to identify which groups from a predetermined list-if any-they would not like to have as neighbors. Although there were several groups listed in the WVS measure (such as "heavy drinkers"), a priori we identified groups which best assessed intergroup prejudices that may be present internationally, without assessing idiosyncratic prejudices that may be country specific. These groups were people of a different race, immigrants/ foreign workers, people of a different religion, and people who speak a different language. For these groups, we created a count variable reflecting overall prejudice that consisted of the sum of the number of groups each participant would not be willing to have as a neighbor (scores ranged from 0 to 4 with higher scores indicating more prejudice).

Globalization. Every year, the KOF Swiss Economic Institute releases globalization scores for over 200 countries. These scores are a weighted composite of measures of economic globalization (i.e., trade in goods and services, international investments), social globalization (i.e., international tourism and students, migration, trade in cultural goods), and political globalization (i.e., embassies, international nongovernmental organizations). The minimum possible score is 0, and the maximum possible score is 100 (higher numbers reflect more globalization). We obtained globalization scores for all the nations included in our analyses from the KOF Swiss Economic Institute's 2017 release of the globalization index. While published in 2017, this index is based on data from 2014. We used data from 2014 because it is the most recent year of Wave 6 of the WVS, from which we drew our individual-level data.

Inequality. We used World Bank Gini coefficient estimates as an operationalization of country-level inequality. The Gini coefficient is a measure of income inequality that ranges from 0 to 1, with 0 indicating complete equality (equal income across all

members of society) and 1 indicating complete inequality (one member of society earning all income). Importantly, Gini scores are not always available for every country for every year, and not all nations included in our analyses had Gini scores from 2014 (the most recent year of the WVS wave we drew our data from). Therefore, we averaged across each country's available Gini scores between 2010 and 2014, which is the same span of years during which Wave 6 of the WVS was conducted. Some nations had a Gini score available for all of these years, while some nations only had one Gini score available across these years. Averaging allowed us to calculate a representative measure of the inequality within a nation during the time that the Wave 6 of the WVS was being conducted.

Control variables. We controlled for nation-level GDP, population density, and national poverty levels in all analyses. GDP is a measure of national economy that reflects the value of all goods and services produced within a nation and is calculated on an annual basis. We chose this as a control variable to account for the possibility that national wealth may also affect prejudicial attitudes toward groups. We also controlled for the number of people per square km of land in a given country in all of our analyses. We chose this as a control variable to account for the possibility that the denser population within a nation might affect intergroup attitudes, presumably because people would come into more contact with diverse others in very densely populated nations as opposed to more sparsely populated nations. Finally, we controlled for povertyoperationalized by the World Bank as the percent of people within a nation making less than 1.90 USD a day-in all analyses to test whether inequality has a unique effect on prejudicial attitudes above and beyond poverty. We used World Bank estimates for all these indicators. We used estimates from 2014 for GDP and population density because there were sufficient data from all countries in our analyses during that year, the most recent year of Wave 6 of the WVS. Poverty estimates were not available for all nations in 2014. Therefore, we averaged across each country's available poverty estimates between 2010 and 2014, which is the same span of years during which Wave 6 of the WVS was conducted, to obtain a representative measure of the amount of poverty within a nation during the time that the Wave 6 of the WVS was being conducted. All control variables showed considerable positive skew (3.46 <skewness > 1.55) and were therefore log-transformed prior to analyses.

Model Specifications

We fit a series of multilevel models using the "lme4" package in R (version 3.6.3), with individual responses (Level 1 variable) nested within countries (Level 2 variable) and specified random intercepts and fixed slopes. For analyses using the count prejudice variable as the outcome measure, we fit models using a negative binomial distribution to account for the count nature of this variable (see Online Supplemental Materials for comparison of negative binomial and Poisson approaches). We



Figure 1. Map depicting international variation in globalization and inequality. Note. Gray nations do not have data for all variables and are therefore not included in analyses or represented in these maps.

used separate logistic regressions to assess attitudes toward each specific out-group. We standardized all predictor variables in all models following any necessary transformations because all variables were measured on vastly different scales.

Results

As a preliminary analysis, we investigated the association between globalization and inequality at the national level. The extent of globalization and inequality in the nations included in our analyses is represented in Figure 1. There is a small but significant negative correlation between the two indices, r = -.20, p < .001.

Does Economic Inequality Shape the Association Between Globalization and Prejudice?

We hypothesized that the relationship between globalization and prejudice would be moderated by the level of inequality within countries. The dependent variable in a model testing this prediction was the count measure of prejudice: the total number of out-groups (people of a different race, immigrants/foreign workers, people of a different religion, and people who speak a different language) that WVS participants indicated they would not want as neighbors. Because we used a negative binomial distribution and standardized all predictor variables, regression estimates indicate the expected change in the log count of out-groups a participant selects associated with a 1 SD increase in the independent variable, holding all other variables constant. The results can also be interpreted in terms of incidence rate ratios (IRRs), which are the exponentiated regression estimates. In the case of the current data, IRRs represent the rate at which prejudice is expected to change associated with a 1 SD increase in the independent variable.

As expected, our results revealed a significant interaction between globalization and inequality on prejudice, $\beta = .55$, SE = .14, z = 3.95, p < .001, IRR = 1.73, 95% confidence interval (CI) [1.32, 2.27], and this interaction holds when all control variables are dropped from the model (see Online Supplemental Materials). We probed this interaction by estimating

simple slopes at high (+1 SD), moderate (mean), and low (-1 SD) levels of inequality. See Table 1 for full results and Figure 2 for an illustration of the simple slopes of this interaction. For relatively unequal countries (+1 SD inequality), globalization was related to increased prejudice, $\beta = .65$, SE = .21, z = 3.12, p = .002, IRR = 1.91, 95% CI [1.27, 2.86]. This IRR value means that in nations with high levels of inequality, for every 1 SD increase in country-level globalization, the number of groups that participants identify as not wanting to have as neighbors would increase by 91% (or $(1.91 - 1) \times 100$; increase because IRR > 1), holding all other variables constant. However, for relatively equal countries (-1 SD inequality), globalization was related to reduced prejudice, $\beta = -.45$, SE = .13, z = -3.60, p < .001, IRR = 0.64, 95% CI [0.50, 0.81]. This IRR value means that in nations with low levels of inequality, for every 1 SD increase in country-level globalization, the number of groups that participants would identify as not wanting to have as neighbors would decrease by 36% (or $(1 - .64) \times 100$; decrease because IRR < 1), holding all other variables constant. There was no relationship between globalization and prejudice at moderate levels of inequality, $\beta = .10$, *SE* = .14, *z* = 0.70, *p* = .49, IRR = 1.10, 95% CI [0.84, 1.45]. These findings are consistent with our hypothesis-globalization predicts less intergroup prejudice when economic resources are distributed relatively equally across people in a country. However, when economic resources are distributed relatively unequally across people in a country, globalization predicts more intergroup prejudice.

Are Facets of Globalization Important for Predicting Prejudice?

The KOF Globalization Index is composed of three interrelated facets—social globalization, economic globalization, and political globalization. Country-level scores for each of these facets can range from 0 to 100. We logtransformed political globalization scores to account for a skew of -1.27. Social globalization and economic globalization are highly correlated, r = .76, p < .001, and social

Model	Estimate (SE)	z	Þ	IRR	95% CI of IRR	N (Nations)
Overall globalization						66,272 (44)
Globalization \times Inequality	.55 (.14)	3.95	<.001	1.73	[1.32, 2.27]	
Globalization	.10 (.14)	0.68	.50	1.10	[0.83, 1.46]	
Inequality	04 (.12)	-0.35	.73	0.96	[0.75, 1.22]	
GDP	20 (.10)	-1.92	.05	0.82	[0.67, 1.00]	
Population density	.38 (.10)	3.83	<.001	1.46	[1.20, 1.78]	
% in poverty	—.03 (.15)	-0.2I	.83	0.97	0.72, 1.30	
Globalization simple slopes						
Low inequality	4 5 (.13)	-3.60	<.001	0.64	[0.50, 0.81]	
Average inequality	.10 (.14)	0.70	.49	1.10	0.84, 1.45	
High inequality	.65 (.21)́	3.12	.002	1.91	[1.27, 2.86]	

Table 1. Overall Globalization Model With Simple Slopes Analyses.

Note. The relationships between globalization and prejudice estimated at low (-1 SD), average, and high (+1 SD) inequality are indented. The total number of participants and nations (in parentheses) included in this analysis is indicated in the far-right column. IRR = incidence rate ratio; CI = confidence interval; GDP = gross domestic product.



Figure 2. Simple slopes of the relationship between globalization and prejudice at different levels of inequality. *Note.* Error bands represent 95% confidence intervals for fixed effects at ± 1 SD inequality. Panel A depicts model with total prejudice as outcome variable, and y-axis represents the number of groups participants indicated they would not want as neighbors. Panel B depicts four models with binary measures of whether that specific group was mentioned as outcome variables, and y-axes represent log odds.

globalization is less strongly correlated with political globalization, r = .45, p < .001. Economic globalization and political globalization are weakly correlated, r = .22, p < .001. Because the overall globalization index is divided into these distinct subtypes, we fit a series of models to test whether the association between each facet of globalization and prejudice was moderated by inequality.

We first fit three separate models to independently test the interactive effect of each facet of globalization and inequality on prejudice. These models revealed a significant interaction

Table 2. Globalization Facet Models With Simple Slopes Analyses.

Model	Estimate (SE)	z	Þ	IRR	95% CI of IRR	N (Nations)
Social globalization						66,272 (44)
Social Globalization $ imes$ Inequality	.67 (.15)	4.55	<.001	1.95	[1.46, 2.61]	
Social globalization	.21 (.15)	1.37	.17	1.23	[0.92, 1.65]	
Inequality	.04 (.12)	0.31	.75	1.04	[0.82, 1.32]	
GDP	24 (.10)	-2.36	.02	0.78	[0.64, 0.96]	
Population density	.38 (.10)	3.79	<.001	1.46	[1.20, 1.78]	
% in poverty	.03 (.15)	0.18	.85	1.03	[0.77, 1.37]	
Globalization simple slopes						
Low inequality	—.46 (.I3)	-3.53	<.001	0.63	[0.49, 0.81]	
Average inequality	.21 (.16)	1.33	.18	1.23	[0.91, 1.67]	
High inequality	.88 (.23)	3.86	<.001	2.40	[1.54, 3.75]	
Economic globalization						66,272 (44)
Economic Globalization $ imes$ Inequality	.41 (.12)	3.35	<.001	1.51	[1.19, 1.92]	
Economic globalization	—.03 (.II)	-0.27	.79	0.97	[0.79, 1.20]	
Inequality	08 (.I3)	-0.66	.51	0.92	[0.72, 1.18]	
GDP	20 (.10)	-1.96	.05	0.82	[0.67, 1.00]	
Population density	.35 (.11)	3.31	<.001	1.42	[1.15, 1.75]	
% in poverty	I3 (.I4)	-0.97	.33	0.88	[0.67, 1.14]	
Globalization simple slopes						
Low inequality	44 (.14)	-3.20	.001	0.64	[0.49, 0.84]	
Average inequality	—.03 (.II)	-0.26	.80	0.97	[0.78, 1.21]	
High inequality	.38 (.18)	2.09	.04	1.47	[1.02, 2.11]	
Political globalization						66,272 (44)
Political Globalization $ imes$ Inequality	.09 (.11)	0.80	.43	1.09	[0.88, 1.35]	
Political globalization	38 (.12)	-3.15	.002	0.68	[0.54, 0.87]	
Inequality	10 (.13)	-0.8I	.42	0.90	[0.70, 1.16]	
GDP	.08 (.11)	0.70	.48	1.08	[0.87, 1.36]	
Population density	.31 (.10)	3.06	.002	1.36	[1.12, 1.66]	
% in poverty	07 (.I3)	-0.57	.57	0.93	[0.72, 1.19]	
Simultaneous analysis						66,272 (44)
Social Globalization $ imes$ Inequality	.52 (.21)	2.44	.01	1.68	[1.11, 2.56]	()
Economic Globalization \times Inequality	.01 (.17)	0.04	.97	1.01	[0.72, 1.41]	
Political Globalization \times Inequality	.01 (.12)	0.05	.96	1.01	[0.80, 1.26]	
Social globalization	.15 (.19)	0.78	.44	1.16	[0.80, 1.70]	
Economic globalization	.08 (.14)	0.57	.57	1.08	[0.82, 1.43]	
Political globalization	—.26 (.I2)	-2.07	.04	0.77	[0.61, 0.99]	
Inequality	001 (.12)	-0.0 I	.99	1.00	[0.78, 1.27]	
GDP	—.06 (.I3)́	-0.46	.65	0.94	[0.73, 1.21]	
Population density	.36 (.10)	3.69	<.001	1.43	[1.18, 1.73]	
% in poverty	.02 (.16)	0.14	.89	1.02	[0.74, 1.41]	

Note. Prejudice is the outcome variable in all models. Bold indicates facet of globalization used as predictor. The relationships between globalization and prejudice estimated at low (-I SD), average, and high (+I SD) inequality are indented. The total number of participants and nations (in parentheses) included in each model is indicated in the far-right column. IRR = incidence rate ratio; CI = confidence interval; GDP = gross domestic product.

between inequality and social, economic, but not political globalization (see Table 2 for full results). As with the measure of overall globalization, social and economic globalization positively predicted prejudice in relatively unequal nations, negatively predicted prejudice in relatively equal nations, and showed no effect in nations with average inequality. These results suggest that both social and economic globalization at the national level should predict higher levels of prejudice when inequality is high and lower levels of prejudice when inequality is low. Political globalization, however, did not interact with inequality to predict prejudice. Unexpectedly, political globalization did have a negative main effect on prejudicial attitudes. This analysis is informative because it helps show which nations are most and least likely to report high levels of prejudice. However, it does not control for the shared variance between different forms of globalization. To address this covariance, we fit a multiple regression that simultaneously estimated the interaction between inequality and all three forms of globalization. This allowed us to estimate which facets of globalization interacted with inequality above and beyond the other facets. Results showed that only the interaction between social globalization and inequality remained significant when controlling for the interactive effects of inequality with other facets of globalization (there was some evidence of multicollinearity in our model, variance inflation

Outcome	Estimate (SE)	Z	Þ	OR	95% CI of OR	N (Nations)
Other race						66,285 (44)
Globalization $ imes$ Inequality	0.71 (.19)	3.65	<.001	2.03	[1.39, 2.96]	
Globalization	0.21 (.20)	1.05	.30	1.23	[0.83, 1.82]	
Inequality	-0.07 (.17)	-0.43	.67	0.93	[0.67, 1.29]	
GDP	-0.32 (.13)	-2.43	.02	0.72	[0.56, 0.94]	
Population density	0.53 (.13)	3.98	<.001	1.69	[1.31, 2.19]	
% in poverty	-0.02 (.21)	- 0 .11	.91	0.98	[0.65, 1.46]	
Globalization simple slopes	· · ·					
Low inequality	-0.50 (.17)	-2.94	.003	0.61	[0.44, 0.85]	
Average inequality	0.21 (.19)	1.09	.28	1.23	0.85, 1.79	
High inequality	0.91 (.32)	2.82	.005	2.49	[1.32, 4.71]	
Immigrant/foreign worker	()					66,285 (44)
$Globalization \times Inequality$	0.74 (.20)	3.80	<.001	2.10	[1.43, 3.08]	
Globalization	0.27 (.20)	1.32	.19	1.30	[0.88, 1.93]	
Inequality	-0.05 (.17)	-0.26	.79	0.96	[0.68, 1.34]	
GDP	-0.18 (.14)	-1.27	.21	0.83	[0.63, 1.10]	
Population density	0.47 (.14)	3.32	<.001	1.59	[1.2], 2.10]	
% in poverty	-0.08 (.21)	-0.37	.72	0.93	[0.6], 1.40]	
Globalization simple slopes					[]	
Low inequality	-0.48 (.17)	-2.74	.006	0.62	[0.44, 0.87]	
Average inequality	0.26 (.20)	1.35	.18	1.30	[0.89, 1.91]	
High inequality	1.01 (.30)	3.35	<.001	2.73	[1.52, 4.92]	
Other religion	()				[,]	66.289 (44)
Globalization \times Inequality	0.75 (.18)	4.22	<.001	2.12	[1,49, 3,00]	
Globalization	-0.02 (.18)	-0.14	.89	0.98	[0.68, 1.40]	
Inequality	-0.04 (.16)	-0.27	.79	0.96	[0.7], [.30]	
GDP	-0.40 (.13)	-3.14	.002	0.67	[0.52, 0.86]	
Population density	0.42 (.13)	3.34	<.001	1.52	[1,19, 1,94]	
% in poverty	-0.07 (.19)	-0.38	.71	0.93	[0.64, 1.36]	
Globalization simple slopes						
Low inequality	-0.77 (.16)	-4.98	<.001	0.46	[0.34, 0.63]	
Average inequality	-0.02 (.18)	-0.14	.89	0.98	[0.69, 1.38]	
High inequality	0.72 (.32)	2.26	.02	2.06	[1.10, 3.87]	
Other language	•••• = (••=)			2.00	[]	66,288 (44)
$Globalization \times Inequality$	0.39 (.16)	2.45	.01	1.47	[1.08, 2.0]]	,
Globalization	-0.09(16)	-0.56	57	0.91	[0.66, 1.26]	
Inequality	0.08(14)	0.56	57	1.08	[0.82 44]	
GDP	-0.09(12)	-0.77	44	0.91	[0.73 15]	
Population density	0.07(.12) 0.42(12)	3.61	< 001	1.52		
% in poverty	-0.13(18)	_0.75	46	0.88	[0.62 24]	
Globalization simple slopes	-0.15 (.10)	-0.75		0.00	[0.02, 1.24]	
Low inequality	-0.48 (.15)	-3.27	.001	0.62	[0.46, 0.83]	
Average inequality	-0.09 (.I7)	-0.53	.60	0.91	[0.65, 1.28]	
High inequality	0.30 (.29)	1.03	.30	1.34	[0.77, 2.36]	

Note. The relationships between globalization and prejudice estimated at low (-1 SD), average, and high (+1 SD) inequality are indented. The number of respondents in each analysis varied slightly because of missing data at the individual level. The total number of participants and nations (in parentheses) included in each model is indicated in the far-right column (Table 3). OR = odds ratio; CI = confidence interval; GDP = gross domestic product.

factors (VIFs) \leq 5.00, so these results should be interpreted with caution; see Table 2 for full results).

Together, these findings are partially consistent with our hypotheses that the social and economic facets of globalization drive the interactive effect of globalization and inequality on prejudice. When we control for the shared variance between the facets of globalization, social globalization is the only facet that significantly interacts with inequality to predict prejudice, and this is likely because the social facet of globalization is most directly related to intergroup contact.

Do Similar Patterns of Prejudice Emerge Across Different Groups?

We next conducted separate analyses for each target group (people of a different race, immigrants/foreign workers, people of a different religion, and people who speak a different language) to test whether overall globalization and inequality predict attitudes toward specific out-groups in the same way as they predict general prejudice. Because responses for each target group were binary—participants either did or did not want someone from the target group as a neighbor—we fit four multilevel logistic regression models. We hypothesized the same moderated pattern of results across all out-groups: For countries with relatively high inequality, we anticipated higher globalization to relate to increased odds of not wanting to be neighbors with a particular out-group, whereas higher globalization would relate to decreased odds of naming any particular out-group in countries with relatively low inequality.

All models showed an interaction between overall globalization and inequality on prejudice toward a given out-group (see Table 3 for interaction results and simple slope analyses as well as exact sample sizes for each analysis). Further, simple slopes analyses revealed a similar pattern for all target groups: In relatively unequal countries, globalization was related to a higher likelihood of prejudice toward each target group. However, in relatively equal countries, globalization was related to a lower likelihood of prejudice toward each target group. These effects are illustrated in Figure 2. We also investigated whether each facet of globalization interacted with inequality to predict prejudice toward each target group. Again, social and economic globalization (but not political globalization) interacted with inequality to predict prejudice toward specific target groups. These results are summarized in detail in the Online Supplemental Materials.

Discussion

Data spanning more than 66,000 respondents from 44 nations around the world suggest that when inequality is relatively low, residents within more globalized nations report less intergroup prejudice. When inequality is relatively high, however, residents within more globalized nations report more intergroup prejudice. Thus, these data suggest that inequality may shape the relationship between globalization and intergroup prejudice.

These findings build from and extend beyond previous findings investigating economic contexts that may shape intergroup prejudice. Previous work suggests that globalization has the potential to result in a variety of out-group attitudes. Some research suggests that globalization may activate multiple social categories simultaneously and may result in more cognitive flexibility and openness and diminish intergroup prejudice (Chiu & Cheng, 2007; Crisp & Turner, 2011; Leung et al., 2008; Maddux & Galinsky, 2009; Paulus & Nijstad, 2003; Shrira, 2019; Shrira & Wisman, 2018). Other research, however, suggests that globalization may exacerbate perceived intergroup differences (Chiu et al., 2009) and increase intergroup prejudice (Kaya & Karakoç, 2012) and also erode trust (Polillo, 2012). The current work extends these findings by proposing a model that accounts for these different potential outcomes of globalization and highlighting the importance of economic inequality in determining the effects of globalization. We integrate intergroup contact theory (Allport, 1954; Pettigrew, 1998) and theory on the social disintegrating effects of economic inequality (Wilkinson & Pickett, 2009, 2017) to

suggest that economic inequality may serve as an indicator of whether optimizing conditions are met for prejudice reducing intergroup contact. The data lend evidence to this integrated view: When inequality is high, suggesting the optimizing conditions for intergroup contact are not met, globalization is associated with more intergroup prejudice. But when inequality is low, suggesting the optimizing conditions for intergroup contact are met, globalization is associated with less intergroup prejudice.

Empirically testing the mechanism of the interactive effect of globalization and inequality on prejudice could help strengthen our understanding of when and why nations may have different levels of intergroup prejudice. Drawing from past research (Allport, 1954; Buttrick & Oishi, 2017; Sommet et al., 2019; Wilkinson & Pickett, 2017), we believe that intergroup competition for scarce resources is likely an important explanatory factor in this relationship and provide preliminary moderated mediation analyses in our Online Supplemental Materials that are aligned with this prediction. These data and analyses are limited, however, due to the cross-sectional nature of the data. Future research could help to broaden the conclusions from the current studies by further exploring the process by which globalization and inequality affect prejudice.

It is important to note the limitations of the current research. First, the relationships reflected in these findings are associational, and we cannot determine causality. Further, there are likely cyclical feedback loops between globalization, inequality, and intergroup prejudice. Thus, measuring globalization, inequality, and intergroup prejudice over time may help illuminate the interplay between these factors. Second, countryspecific nuance in type and expression of intergroup prejudice almost certainly requires an understanding of the cultural and historical contexts within a specific country. Given the global nature of these data, we cannot speak to idiosyncrasies within a given country. Thus, these findings complement rather than replace intergroup prejudice findings specific to one country or culture.

Rapidly increasing globalization is making the world "smaller." We are more interconnected and integrated than ever before. Given this increased interconnectivity between disparate groups of people, research that disambiguates when globalization may result in inclusionary (vs. exclusionary) intergroup behaviors is crucial. Integrating foundational research on intergroup contact and the emerging science of the impact of economic inequality can help determine the conditions under which globalization is related to reduced intergroup prejudice. Our research suggests that when economic resources are distributed relatively equally across individuals in a country, globalization may have the potential to erase the boundaries between "us" and "them."

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Supplemental Material

The supplemental material is available in the online version of the article.

Note

 The World Values Survey sometimes asks different questions to respondents in different nations, and there is also a small amount of missingness at the individual level. This means that the exact number of respondents and nations that go into each analysis varies slightly. The exact number of individual responses and nations that these responses are nested within is specified for each model in Tables 1 and 2 in the main text and in Supplemental Tables S1–S3 in the Supplemental Materials.

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